

## AUDIO VISUAL EDUCATION

### Overview:

This course offered to the Instructor trainees intended to

- a) make the Instructor trainees aware of the importance of different, indigenously available audio visual materials and equipment and
- b) to develop skills for planning, preparation and use of audio visual aids in their teaching-learning situations.

### The Main course objectives are :-

- 1) To comprehend elementary theoretical psychological concepts in relation to the design of instructional materials and use of audio visual aids in the teaching - learning process.
- 2) To create an awareness about the possibilities offered by audio visual aids and media for making learning more effective and efficient.
- 3) To manifest professional skills to design and make simple inexpensive audio visual aids for use in the Instructional process.
- 4) To develop skills in the operation and maintenance of selected audio visual equipment such as film-strip and slide projectors, 16 mm movie projector, overhead projector, opaque projector, tape recorder, record player, duplicating machines, photocopier and electronic scanner.
- 5) To demonstrate professional competence in the use of selected audio visual aids in a meaningful way for specific instructional tasks to improve learning.

GOALS:Module - I. Introduction to Instructional design.

1. To define and distinguish between Instructional Technology, Instructional Goal, Behavioural objectives.
2. To understand the concept of "systems approach to Instructional design".
3. To introduce new concepts:  
interactive instruction, job performance requirements, task analysis, criterion test, achievement test, job aid, validation, follow up data and to explain their purposes and processes, through a flow chart.
4. To relate selection of media and the instructional design model.
5. To define and distinguish between audio visual aids and media and to highlight the importance of media and audio visual aids in the process of learning and teaching.
6. To identify the kinds of audio visual aids and classify them as projected, non-projected and aids with or without sound.
7. To present the three basic characteristics of media production-imitative, adoptive and creative.
8. To introduce to the learner the three categories of Blooms taxonomy of instructional objectives - cognitive, affective and psychomotor domains.
9. To present basic ideas on the taxonomic classifications of Bloom, Krauthwohl, Kibler and Dave.
10. To present the basic communication model of Berlo.
11. To acquaint with the Dales Cone of Experiences and relate it to the Bruner's modes of learning.

12. To present basic ideas of perception, communication and learning theories.
13. To introduce to the stimulus-response pattern learning theories.

Module - II. Non-Projected Visual Aids.

14. To provide basic ideas of visual design and theoretical concepts in designing visuals for instructional use.
15. To familiarise different forms of lettering and use of lettering kits to make graphic aids.
16. To provide information in distinguishing the characteristics of
  - a) graphs
  - b) charts.
  - c) posters
  - d) chalkboards
  - e) bulletin board
  - f) flannel board
  - g) magnetic board and
  - h) models and mockups.
17. To provide adequate learning experiences in making the non-projected visual aids listed above.
18. To indicate the details of construction of
  - a) chalkboard
  - b) bulletin board
  - c) flannel board and
  - d) magnetic board
19. To assist in the development of skills in using chalkboard for instructional process including.
  - a) making chalkboard drawings
  - b) coloured sketches
  - c) using chalkboard instruments and
  - d) providing experience in effective use of chalkboard.

20. To provide information and experience in making

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- a) charts
- b) posters
- c) bulletin board displays
- d) flannel board cutouts
- e) magnetic board materials, and
- f) models.

21. To encourage learners in the use of inexpensive non-projected visual aids in their practice teaching sessions.

22. To show how to present demonstrations using real things, alone or in combination with other available resources.

23. To focus attention on the various forms of self-instructional materials for skill training, using inexpensive non-projected materials.

Module - III.      Projected Aids.

24. To acquaint the learner with basic information on the following projected aids.

- a) filmstrips
- b) slides
- c) overhead transparencies
- d) 16 mm motion films
- e) Television
- f) multi-media, and
- g) multi-imagery.

25. To present information and provide skills to enable the learner to distinguish the advantages and disadvantages of each one of the above projected aids.



26. To provide **capability** to understand the utility of each of the above aids, to enable the learner to choose the right type of aid based on need.
27. To acquaint with the basic principles of pejection of different equipment used to project the above projected aids.
28. To provide skills in identification of the essential operating parts of
  - a) filmstrip projector
  - b) slide projector
  - c) overhead projector
  - d) 16 mm film projector
  - e) opaque projector
  - f) television & VCR.
29. To provide basic ideas to identify the classroom conditions for the lighting, seating and accoustics required to use the projection equipment listed under item (28) above.
30. To provide skills in the operation of the equipment listed under item (28).
31. To encourage the learner to use the projected aids as a source of instructional material in specified instructional tasks.
32. To show the examples of using different audio visual equipment and instructional modes, how multi-media and multi-imagery could be used in learning situations.
33. To suggest and assist the learner to make group-work for playing multi-mode presentations at imitative level, not involving preparation of any original aids.

## Module - IV.

Duplicating Processes

34. To acquaint the learner with the basic principles of the following forms of reproduction processes.
- a) spirit duplication
  - b) stencil duplication
  - c) electronic stencil scanning, and
  - d) photocopying.
35. To familiarise the learner with the important operational parts of
- a) spirit duplicator
  - b) stencil duplicator
  - c) electronic stencil scanner, and
  - d) photo copier.
36. To provide experience in making the following type of copy or duplicating masters, and operation of
- a) spirit duplicating master
  - b) hand written and drawn stencil
  - c) electronically scanned stencil - picture and written matter and
  - d) masters for photo copying.
37. To help the learner to distinguish the characteristics of each of the above duplicating processes in order to use them judiciously for instructional purposes.

Module - V.        Audio Aids

- 38.        To familiarise the learner with different kinds of audio experiences used in instruction.
- 39.        To provide experience in identifying the essential requirements for using audio aids in instructions.
- 40.        To provide skills and knowledge in identifying the essential operational parts of
  - a)        cassette tape recorder
  - b)        tape recorder and tape deck, and
  - c)        record player.
- 41.        To provide experiences to the instructor trainees in the operation of
  - a)        cassette tape recorder
  - b)        tape recorder / tape deck, and
  - c)        record player.
- 42.        To provide necessary experience to use audio as a source for learning skills.

INSTRUCTIONAL OBJECTIVES FOR A COURSE ON AUDIO VISUAL  
EDUCATION.

Module - 1 : Introduction to Instructional Design.

Unit - I. Systems Approach to Instructional Design.

1. Classify by definition the terms :-
  - a) instructional technology
  - b) instructional goal
  - c) behavioural objective.
2. Differentiate between instructional goal and behavioural objectives.
3. Discriminate the statement which best describes the purpose of writing behavioural objectives.
4. Label statements that are instructional goals and behavioural objectives.
5. List three advantages of interactive instruction.
6. Explain the purpose of validation.
7. Describe why interactive instruction is easy to validate.
8. State the three key components of interactive instruction.
9. Classify by definition, 'Systems approach to instructional design'.

Unit - II.      Basic concepts on Instructional Design.

10.    Select the definition of job performance requirements.
11.    Discriminate four types of task analysis, relating to situations.
12.    Classify by definition, a criterion test.
13.    Differentiate the statement which best describes the difference between a criterion test and an achievement test.
14.    Explain the validity of a criterion test in terms of its performance requirement.
15.    Select the statement which best describes the proper function of a lesson plan.
16.    Explain the purpose of job aid.
17.    Explain the two phases of validation.
18.    Describe the value of follow up data.
19.    Arrange the eight components to be followed in instructional design in serial order (in the sequential order).
20.    Determine the factors on which selection of media fit, in the instructional design.
21.    Describe how training requirements are determined.

## Unit - III.

Media and Audio Visual Aids:

22. Differentiate stimulus and response.
23. Classify by definition the process of learning.
24. Define media and audio visual aids.
25. Differentiate between media and audio visual aids.
26. Distinguish between projected and non-projected aids.
27. Categorise teaching aids as aids that can be **heard**, seen, and heard and seen.
28. Identify and sub-classify aids as projected aids, non-projected aids with the addition of sound or without sound.
29. Classify by definition perception and relate it to the design of audio visual aids.
30. List five recognised contribution of audio visual aids to learning.
31. List three levels of audio visual aids production activity.

Unit - IV.            Learning and communication

Unit - V.            Learning and Visual Aids.

32. List the seven components of Berlo's model of communication.
33. Explain how you determine whether learning has taken place.
34. Differentiate between stimuli and response and classify them.
35. State the two categories of learning theories.
36. List the kinds of Learning domains categorised by Bloom.
37. List three human behaviours under each of the following - cognitive domain, affective domain, and psychomotor domain.
38. Discriminate different levels of activity under
  - a) Cognitive domain
  - b) Affective domain
  - c) Psychomotor domain.
39. Compare and relate the three major modes of learning (enactive, iconic & symbolic) with the three kinds of experiences (direct, pictorial and abstract).
40. Write in order the eleven divisions of the Dale's Cone of Experience and classify learning experiences, with Bruner's three modes of learning.
41. List the five senses through which we learn.

Module - II.            NON PROJECTED VISUAL AIDS

Unit - I .            Graphic Design.

42. State three important aspects which assist in producing effective graphic materials.
43. Name the six principles of visual design.
44. Identify the features of each one of the visual design principles.
45. List five visual tools used in graphic design.
46. Relate each of the given visual tools with at-least one function of their application.
47. Apply the principles of visual design for making visuals such as posters, charts and other non projected training aids, later on when completing other units of the module - 2.



Unit - 2.                      Lettering

48. Enumerate the five factors which contribute to good readability in lettering.
49. Determine the minimum letter size for non-projected visual aids to be used in classroom, 10 M deep.
50. Differentiate italic lettering from other types of lettering.
51. Classify different letter styles as
  - a) Gothic
  - b) Textural
  - c) Roman.
52. List three principles to be followed in selecting lettering styles, for a visual.
53. Demonstrate good lettering layout which can contribute for readability in lettering.
54. State the two basic kinds of letter spacing for words.
55. Name the rule to be followed for determining the space between lines of lettering.
56. Write the five principles which will help to bring out contrast between letters and background.
57. Demonstrate ability to write captions using lettering guides and letter stencils, applying the factors contributing to layout, readability, spacing and contrast.

Unit - 3.

Graphs and Charts

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58. Classify by definition Graphs
59. Classify by definition Charts.
60. Differentiate the four types of commonly used graphs.
61. Explain the type of graph suitable for definite instructional purposes.
62. Name the 10 principal categories of charts.
63. Relate these categories with their functions.
64. Prepare four types of graphs for using later in practice teaching sessions, by applying the design principles.
65. Apply principles of visual design to prepare ten types of charts in his trade area to be used later as teaching aids, during practice teaching.

Unit - 4.

Posters and Cartoons.

66. Classify by definition posters.
67. State the four characteristics of posters.
68. Identify four functions for which posters are used for instruction.
69. List the five steps to be followed while using posters for instructional purposes.
70. Classify by definition Cartoons.
71. Prepare posters on safety, applying the principles of design.

72. Identify five types of chalkboards commonly found.
73. State five advantages of chalkboards.
74. Explain two needs of printing letters while writing on chalkboard.
75. Distinguish between progressive, strip and exploded diagrams.
76. List the four qualities of black board summary.
77. Draw diagrams combining horizontal, vertical, angular and curved lines using correct stroke techniques.
78. Identify and use correct techniques used for straight, horizontal, vertical and curved lines.
79. Organise and illustrate a topic with diagrams on chalkboard maintaining speed, legibility and correct layout.
80. State four essential characteristics of chalkboards.
81. Design and draw diagrams using (1) template and (2) pounce methods.
82. Plan a well organised chalk board summary on a topic of the trade using colour and illustrate it on the chalkboard.

Unit - 6.                      Bulletin Board

83.      Classify by definition bulletin board
84.      State the purpose of bulletin boards.
85.      Explain three salient features of bulletin boards.
86.      State six advantages of bulletin boards when used for instruction.
87.      Select the most suitable materials for making bulletin boards.
88.      Explain three important considerations to be given in setting up and location of bulletin boards.
89.      Describe 5 instructional functions of bulletin boards.
90.      Organise a bulletin board layout for display materials reviewing a lesson, and display it for the use of trainees.

91. Classify by definition a Flannel Board.
92. Name the materials used for Flannel Board.
93. Distinguish the materials suitable for Flannel Board cut outs.
94. Explain the features of a magnetic board.
95. Name the materials used for making magnetic boards.
96. List five follow up actions suggested to ensure the value of presentation using.
  - a) Flannel boards
  - b) Magnetic boards.
97. Organise and display a concept on
  - a) Flannel board
  - b) Magnetic board.

## Unit - 8

Enlarging and Reducing Visuals

98. Select the type of projector needed for enlarging
- a) Printed pictures from books and magazines.
  - b) Outline of real objects.
  - c) Pictures from 35 mm slide
  - d) Pictures from a translucent original.
99. Suggest a method for reducing visuals using projectors.
100. Suggest two methods for enlarging visuals without any projection equipment.
101. Explain the three uses of pantograph for reproduction of diagrams/drawings.
102. Enlarge figures using the
- a) Grid method
  - b) Pantograph method
  - c) Opaque projector
  - d) Overhead Projector

103. Reduce figures using the
- a) Pantograph method
  - b) Grid method
  - c) Overhead Projector.
104. Explain how pounce pattern method is used for image transfer.
105. Organise and make a diagram on the chalk board using pounce pattern method.
- Unit - 9. Objects, Models and Mockups.
106. Differentiate between objects and specimens.
107. Identify the kinds of experience that could be provided by real objects.
108. Classify by definition Models.
109. Name three types of models and their functions.
110. Give five suggestions for effective classroom utilisation of models.
111. Differentiate between models and mockup.
112. Classify by definition an instructional kit.

Unit - 1. Kinds of Projected Aids.

113. State two fundamental aspects on which the selection of audio visual material depend.
114. State the two primary functions of instructional media.
115. Distinguish between slides and filmstrips.
116. List two advantages of slides when used in instruction.
117. Enumerate five advantages of filmstrips.
118. Write two disadvantages of filmstrips.
119. Write two disadvantages of slides.
120. State two advantages of Overhead projector.
121. Explain reasons that necessitate the use of motion pictures.
122. List four special features of motion pictures.
123. Write two disadvantages of motion pictures.
124. Illustrate five techniques which can enhance the utility of motion pictures as media.
125. State two advantages of television over motion picture.
126. Point out two specific advantages of television in teacher training programmes.
127. Differentiate between multi-media and multi-inagery presentations.
128. Give reasons for using multi-media presentation.



## Unit - 2.

Projection Systems.

129. Enumerate three common elements in projection systems used for instructional purposes.
130. Identify and name the parts of projection system viz. lenses, lamps of the following projectors.
- a) filmstrip projector
  - b) slide projector
  - c) motion picture projector
  - d) overhead projector
  - e) opaque projector.
131. State the method of placing the projectuals in the following projectors to get the picture without any directional changes:
- a) filmstrip projector
  - b) slide projector
  - c) motion picture projector
  - d) overhead projector, and
  - e) opaque projector.
132. Classify the projectors according to the system of projection as direct, indirect and reflect projection system.
- a) filmstrip projector
  - b) slide projector
  - c) motion picture projector
  - d) overhead projector, and
  - e) opaque projector.

133. State the minimum and maximum viewing distance for projected images by slide, filmstrip, motion picture projectors and television.
134. Differentiate the conditions of lighting required when you use slide, filmstrip, overhead, opaque or motion picture projector.
135. Explain how you can correctly position lamp filament with respect to the screen.
136. List three important points to be considered while replacing lamps.
137. Differentiate the various lenses in a projection system based on their explicit functions.
138. Explain how the size of a projected image can be varied while using projectors.
139. Compare the use of Zoomlens with ordinary lens.
140. Name the two common projection defects and indicate the method for rectification.
141. Differentiate the types of projection screens.

Unit - 3.            Filmstrip Projector

- 142.    Identify the operating parts of a given filmstrip projector.
- 143.    Identify all the components contained in the projection system and name the one responsible for image magnification.
- 144.    State the reason for loading filmstrips in inverted position in filmstrip projector.
- 145.    Differentiate between single and double frame film format.
- 146.    Enumerate the procedure of operating a filmstrip projector in the correct order.
- 147.    Operate the filmstrip projector.

## Unit - 4.

Slides and slide projector

148. Name parts of a common type of slide projector.
149. State the two important points to be considered while loading rotary trays on slide projector.
150. List the three facilities of remote control attachment.
151. Name the four types of slide carriers used.
152. Differentiate rectangular/Circular slide carriers and single/double slide carriers.
153. Relate position of thumb marks on the slides with reference to the position when it is placed in the projector.
154. Differentiate with reference to the position when it is placed in the projector.
155. Name the five types of slides available in addition to the normal photographic slides.
156. State the advantages of slides over filmstrips.
157. Enumerate in the order the sequence of setting up, loading and projecting slides using a slide projector which can take multiple slide trays.
158. Set up, load and operate correctly a slide projector, using slide trays and remote control.

## Unit - 5.

Motion Picture Projection.

159. Classify the types of 16 mm projectors on the basis of sound recording system.
160. Differentiate 16 mm silent and sound film by their speed.
161. Determine the time required for projecting a film reel of standard length.
162. Name the parts of three different systems in a movie projector.
163. Identify the part of a movie projector, which draws the film past the aperture.
164. Give reason for a fluttery image on a screen.
165. State the function of the objective lens.
166. Identify the parts contained in the film transportation system of the movie projector.  
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167. Indicate how a film is placed in the film transportation system.
168. Identify frame, sound track and sprocket holes of a film.
169. Distinguish between different types of sound recordings.

170. Identify the controls contained in the sound system of a 16 mm movie projector.
171. Explain the effect of improperly wound films on the sound roller.
172. Describe the method adopted to avoid sound distortion due to the jerky movement of the film at the gate.
173. Describe the steps in the order to be followed for setting up, threading the film and project a 16 mm movie film projector.
174. Explain the importance of looping the film above and below the film channel.
175. State the two important parts to be cleaned as a part of maintenance.
176. List materials required for joining broken film.
177. Enumerate in order the sequence of setting up, threading, and projecting 16 mm film including packing up.
178. Set, load film and operate a 16 mm movie projector
179. Replace a fused projection lamp of a 16 mm movie projector.
180. Clean lens and aperture gate of a movie projector.
181. Fit the exciter lamp of a movie projector.

## Unit - 6.

Overhead Projector

182. Differentiate overhead projector from other types of projectors.
183. Identify the parts of an overhead projector.
184. Name the part of the overhead projector which helps to adjust the image on the screen.
185. State the maximum and minimum sizes of objects/ transparencies that can be projected with an overhead projector.
186. Demonstrate how transparencies are located on the projection stage.
187. Indicate the kinds or types of objects that can be projected using an overhead projector.
188. Determine the projector distance from the screen to set up the overhead projector.
189. State the important aspects to be looked into when replacing a lamp in an overhead projector.
190. Write the steps to be followed for projecting with an overhead projector, in the order of operations.
191. Operate an overhead projector and project transparencies and non-transparent objects.

## Unit - 7.

Opaque Projector

192. Differentiate the type of material that could be used over opaque and other projectors, as transparent and opaque.
193. Identify the type of projection system applicable to opaque projectors.
194. Identify the parts of an opaque projector.
195. Differentiate the requirement of lighting conditions in the room where opaque projectors and overhead projectors are used.
196. State how the visuals to be projected are placed on the platen of the opaque projector (direction).
197. State the precaution to be observed while projecting metal objects in an opaque projector.
198. Name three types of opaque materials that can be used on a opaque projector.
199. Name the control on the opaque projector which helps to position the image to be projected.
200. Draw how direction of the light rays from the picture (placed) on the opaque projector is reflected by mirrors on the screen.
201. Write the operational sequence for projecting visuals using an opaque projector.
202. Organise, set up and project pictures and opaque objects using an opaque projector.





Unit - 9.                    Multi Image and Multi Media.

- 212.      Classify by definition multi-imagery.
- 213.      Classify by definition multi-media.
- 214.      List four advantages of multi-imagery presentation.
- 215.      State five purposes served by multi-imagery presentation.
- 216.      State three points to be considered for effective presentation of multi imagery.
- 217.      Explain the method adapted for recording narrations and to provide for (manual and automatic) sound slide synchronisation in audio tape.
- 218.      Identify two topics in his own trade area where multimedia approach is applicable.
- 219.      Differentiate between the conventional approach and multi media approach.
- 220.      Organize and present a multi media lesson.

## Unit\_- 10.

Physical facilities and Visuals for  
Projected aids.

221. Determine the minimum letter size for visuals, for different viewing distances for projected aids.
222. Indicate the spacing to be given between letters when writing projectuals.
223. Determine the correct viewing distance based on the screen size for the following
  - a) slides
  - b) overhead projector
  - c) motion picture
  - d) television
224. State the five important considerations for deciding on the viewing distance for projected image.
225. Discriminate letter height of artwork for slides, transparencies and motion picture.
226. Name three surfaces which are acoustically good.
227. State four aspects which can control the sound effects within a class room.
228. State three methods which can help to effectively control light.
229. State three instructional advantages of lighting.

## MODULE - IV.

DUPLICATING PROCESSES

## Unit - 1.

Forms of Reproduction Process

- 230. Explain the duplication process.
- 231. List five methods of duplicating written instructional materials.
- 232. Select proper method for producing copies from original if the number of copies required are:
  - a) Below ten copies.
  - b) More than ten but less than hundred copies.
  - c) More than hundred copies.
- 233. State three methods of preparing stencil for duplication.

## Unit - 2.

Spirit Duplication.

- 234. Identify the parts of the spirit duplicator.
- 235. Prepare an original master copy using duplograph master sheet and hectograph carbon sheet for a given illustration.
- 236. State the procedure for operating the duplicator correctly.
- 237. List at least three precautions to be observed in using the spirit duplicator.
- 238. Arrange in the serial order all the operations for "spirit duplication."
- 239. Operate the "spirit duplicator" and take five copies.

Unit - 3.                      Stencil Duplication.

- 240.      Name the four essential elements for mimeo-graphing.
- 241.      State the basic principle of stencil duplication
- 242.      Name the three methods of preparing stencils
- 243.      State the position of ribbon when stencils are typed.
- 244.      Identify the parts of a Stencil duplicator.
- 245.      Explain that special care to be taken while re-running a stencil to prevent creasing.
- 246.      Prepare a stencil with illustration (by hand).
- 247.      Explain the procedure for operating the "Gestetner 320 stencil duplicator" in the correct order.
- 248.      Mount the stencil on "Gestetner 320 stencil duplicator and take 10 copies.

Unit - 4.      Electronic Stencil Scanning.

- 249.      State the advantages of electronic stencil scanner.
- 250.      Name the type of stencil used in electronic scanner.
- 251.      Identify the parts of an electronic stencil scanner.
- 252.      State the situations in which the speed variations are much in a stencil scanner.
- 253.      Explain the method of producing over head transparency in electronic stencil scanner.
- 254.      Arrange in the serial order the operation for stencil scanning using an "electronic stencil scanner".
- 255.      Operate an "electronic stencil scanner" and scan a drawing to prepare a stencil.

Unit - 5.                    Photo Copying.

256. Name the four types of photo copying process.
257. Describe the situation in which electrostatic copies can be advantageously used.
258. State when a translucent carrier sheet is to be used for electro-static copying.
259. State the precautions to be observed for protecting copy paper.
260. Explain the proportion of toner concentrate and dispersent used for preparing developer.
261. Identify the operating parts of Lennex-200 copier.
262. Arrange in the serial order the performance check list items for operating a "Lennex-200 copier".
263. Operate a "Lennex-200 copier".

MODULE - V.                    AUDIO AIDSUnit - 1.                    Teaching with Audio Aids.

264.        Name the three kinds of audio experiments used for instructional purposes.
265.        State four methods which can be used in teaching for improving listening skills of learners.
266.        List the five steps involved in presenting mediated materials.
267.        State what should be the speed of speech for effective listening.
268.        Indicate the position of verbal communication as indicated in "Dale's Cone of Experience."



Unit - 2.                    Principles of Audio Equipment.

269.    Name the five factors which influence the quality of sound production.
270.    State the range of hearing capacity for normal human ear.
271.    Differentiate between monaural and stereo systems.
272.    Describe the function of tone control in a tape recorder.
273.    State what should be the correct height of placing speakers.
274.    Select the type of microphones suited for picking up sound from different speech directions.
275.    Classify microphones based on the technical classification.
276.    State the three essential characteristics to be considered while replacing microphones.

277. Describe three functions of heads used in tape recorders.
278. State the function of each head of a tape recorder with three heads.
279. Name the two audio modes commonly used for determining the length of tape, for recording.
280. State the speed at which common cassette tape recorders are used.
281. State how playing time is determined in cassette tape recorders.
282. State the effect of speed for the quality of sound reproduction.
283. Distinguish between full track, dual track and quarter track tapes.
284. Describe how accidental erasing of tape is prevented.
285. Explain the method of erasing dual track tape when a bulk head is not used.
286. Explain the method of splicing tape.
287. Describe how tone control is operated when tapes are duplicated.
288. Explain the best method of duplicating tapes under manual conditions.

Unit - 4.                      Sound Recording Principles.

- 289.        State the reason for avoiding taping (recording) near fluorescent light or high voltage power lines.
- 290.        Suggest methods to improve accoustic conditions of a room which is not otherwise accoustically treated.
- 291.        Distinguish between monophonic and stereophonic recording.

Unit - 5.                      Operating Tape Recorders.

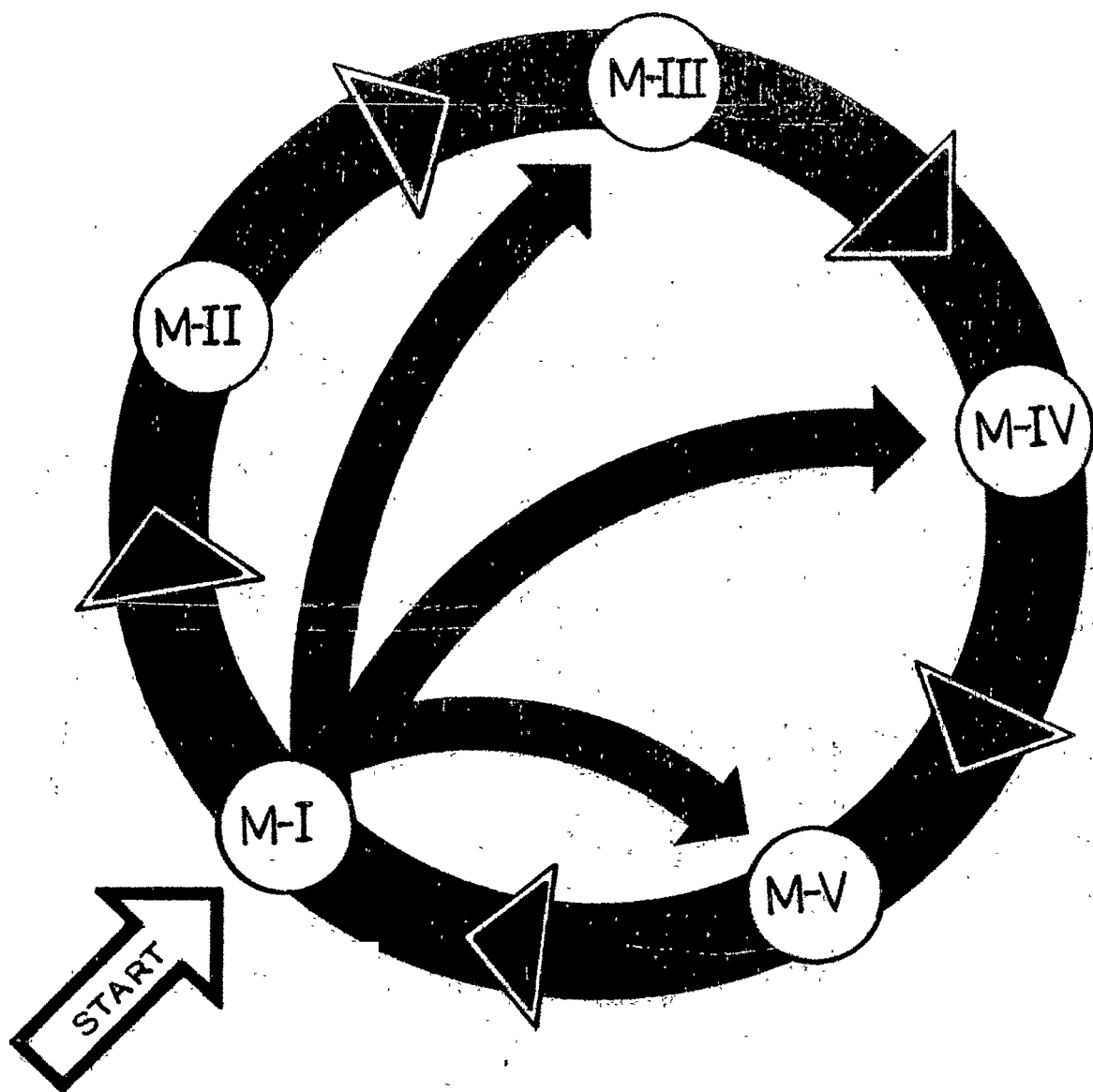
- 292.        Identify the operating controls of a cassette recorder (National Panasonic).
- 293.        Identify the parts and controls of a reel to reel tape deck (Sony).
- 294.        Arrange in the serial order the operations required to operate.
  - a) Stereo cassette recorder (National Panasonic)
  - b) reel to reel tape deck (Sony)
- 295.        Operate a stereo cassette recorder (National Panasonic).
- 296.        Operate a reel to reel stereo deck (Sony).

Unit - 6.                    Record Player.

- 297.        State the commonly used speeds of a record player.
- 298.        Identify the parts of common record player.
- 299.        Arrange in the serial order the operations required to operate HMV Fiesta.
- 300.        Operate a record player (HMV - Fiesta)
- 301.        Record on a stereo reel to reel tape deck music from a stereo recorder - HMV Fiesta to Soni reel to reel tape deck.
- 302.        Identify a monophonic and stereophonic record player.
- 303.        Identify 33rpm, 45rpm and 78 rpm records.

# AUDIO VISUAL EDUCATION

## MODULE -



KRISHNAN.

## AUDIO VISUAL EDUCATION

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Introduction to Instructional Design	Criterion Test
Module I : Unit 1-5	Section 'A' Trades : All
	Time : 30 mts.

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Use separate response sheets provided for Section A and B.  
 Answer Section A first, hand it over to your instructor, then  
 Section B.

DO NOT write anything in this question paper.  
 RETURN the question paper to the instructor.

CIRCLE appropriate letter(s) a, b, c or d on the response sheet  
 for questions on Section A.

-----

1. Which statement best defines the term:

Instructional Technology ?

- a. It is a process to systematically design, instruct and evaluate instruction to bring about more effective instruction.
- b. It is the system of principles and procedure adopted for preparation of instruction using hardware, for technology courses.
- c. It is the technology of principles and procedures for the design and preparation of audio visual materials.
- d. It is the set of principles and procedures for the preparation of instructional objectives in behavioural terms for craftsmen training courses.

2. Which one of the following statements best defines the term:

Instructional goal ?

- a. Instructional goal is a broad and general statement to determine what is to be done or achieved by instruction.
- b. Instructional goal is a statement that describes the instructional career of the instructor.
- c. Instructional goal is a statement that describes the purpose of conducting trade tests for theory subjects for craftsmen training courses.
- d. Instructional goal is a statement of instructional intent required for meeting a need i.e., preparing objective type questions.

3. Which of the following statement best defines the term:

Behavioural Objectives ?

- a. Behavioural Objectives is a broad and general statement to determine what is to be done or achieved by instruction.
  - b. Behavioural objective is a description of the aim of the Educator.
  - c. Behavioural objective is a statement of performance the instruction is to produce, stated in a broad general term or precise behavioural term.
  - d. Behavioural objective is a description of the behaviour the instructor.
4. What is the main difference between instructional goal and behavioural objective ? (Circle the appropriate letter a,b,c, or d)
- a. From needs, behavioural objectives are stated in precise terms, and then the instructional goals are identified.
  - b. Instructional goals are stated in more precise terms than behavioural objectives.
  - c. Instructional goal is stated in general term while the behavioural objective is stated more precisely.
  - d. Instructional goal is a broad statement or "What ought to be " (future need) while behavioural objective is a broad statement of "What are the present need of the instructions. "
5. We write behavioural objectives:  
(Circle appropriate letter a,b,c or d)
- a. To prepare ground work for writing instructional goals.
  - b. To describe behaviour in terms of both trainee and instructor performance.
  - c. To describe behaviour in terms of instructor performance.
  - d. To describe behaviour in terms of trainee performance.
6. Which of the following statements are NOT classified as behavioural objectives ? (Circle the letter a,b,c or d )
- a. The trainee will know filing.
  - b. The trainee will identify the data charts from other charts given to him.
  - c. The trainee will learn to use a slide projector.
  - d. The trainee will write the correct procedure in the order of performance for cleaning a carburettor.

7. What are the three advantages to be gained from interactive instruction ? (Circle the appropriate letter a, b, c or d).
- a. Keep instructor active, tests every objective, validate instruction.
  - b. Keep trainee active, instructor and trainee determine progress at all times, and instructor adopts to trainee's needs.
  - c. Instructor and trainees determine progress, instructor tests sample objectives, trainees judge instructor ability.
  - d. Keep instructor active, instructor determines progress in the final examination, and instructor follows test and available books.
8. The purpose of validation is to:  
(Circle correct response- a, b, c or d )
- a. Make sure our instruction is effective.
  - b. test whether students can understand.
  - c. check continually on the trainee's progress.
  - d. None of the above.
9. Which one of the following statement gives the reason that it is easier to validate interactive instruction ?  
(Circle correct response a, b, c or d).
- a. because interactive instruction is a two way communication.
  - b. we design instruction based on needs of the job.
  - c. we can monitor the trainee's progress continuously, find the deficiencies, correct the trainee and revise instruction.
  - d. we depend on the instructor's capacity to prepare objective questions.
10. What are the three key components of Instructional design ?  
(Circle a, b, c or d for correct answers).
- a. Instructional goals, instructional objectives, instructional needs.
  - b. Instructional goals, instructional objectives, validation.
  - c. Specific objectives, interactive instruction, validation.
  - d. Instructional need, instructional goal and interactive instruction.



11. Which of the following represents the best definition of " Systems Approach to Instructional Design ? "  
(Circle the correct one a,b,c or d)

- a. Systems Approach to Instructional Design is a process which calls for the design of instructional materials for large scale usage in correspondence courses through mass media, as the instructional materials thus developed will not fit for class-room usage.
- b. Systems Approach to Instructional Design is a process which increases the efficiency of the instructional system by designing and evaluating the total process of learning and instruction in terms of instructional goals stated in general terms.
- c. Systems Approach to Instructional Design is a process which calls for the design of audio visual aids required by the instructor in his instruction, according to the text book available with him, no matter what the instructional objectives were.
- d. Systems Approach to Instructional Design is an orderly process of developing instruction to give pre-determined learning experiences based on learner oriented instructional objectives and evaluating the total process; revising it from feedback and continue the cycle until the system attain maximum efficiency to make learning easier, faster and more lasting.

12. By job performance requirements, we mean:  
(Circle correct letter a,b,c or d).

- a. everything the skilled worker must do on the job.
- b. degree requirements of prospective trainees.
- c. job description prepared by administrative personnel.
- d. Stating the method of goal free evaluation of a job

\*\*\* First and foremost in the development of instructional materials is the task analysis. We do task analysis to find the job performance requirement - i.e. the skills and other behaviours exhibit by the worker on the job. There are four types of task analysis. They are:

- a. Stimulated task analysis
- b. content analysis.
- c. observation task analysis
- d. interview analysis.

Four situations are given below

Categorise each of the following as one of the above four types of task analysis. You may repeat the type of task analysis applicable or do not use one type at all.

13. You are an expert electronics technician. From your own experience on the subject, you are analysing certain curricula for testing with different digital and analogue multi metres.
14. You are entrusted with the design of instruction for operating a major photocopier, and you are not an expert. First and foremost in the process you decide to completely go through the instructional manuals and other relevant literature supplied by the manufacturers.
15. A numerical control lathe has been ordered for your institute, and you are given the task of formulating training schemes with that lathe. But you are not an expert in the field. You are not having the relevant literature, nor has any one with whom you can discuss about the issue. You have a worker who can do the job, but he is not conversant with the language. you have decided to .....
16. You do not know anything about optics, and you are required to do task analysis for grading the lenses, by the industry next door who are manufacturers of lenses. You have experts to consult for this task.
17. We determine training requirements:  
(Circle the correct item-a,b,c or d )
  - a. from past experience of instructor.
  - b. from job content description.
  - c. by subtracting trainee's entry level performance from job performance requirements.
  - d. all the above.
18. Which one of the following is the definition of a criterion test? (Circle correct answer a,b,c, or d)
  - a. It is a sample of multiple choice test items for skill training.
  - b. It samples trainee's learning by testing objectives.
  - c. A criterion test is the same as norm referenced test given at the end of the semester.
  - d. A criterion test is the one that is designed to test the objective.

19. Which one of the following differentiates criterion test from achievement test ? (Circle correct response a,b,c or d)
- a. A criterion test is shorter than an achievement test.
  - b. A criterion test covers some of the objectives, while the achievement test covers all the objectives.
  - c. A criterion test covers all of the objectives and the achievement test also tests all the stated objectives.
  - d. While a criterion test, tests every objective, an achievement test, covers only a certain percentage of the items.
20. Explain when the criterion test items are valid ?  
(Circle correct response a,b,c or d )
- a. it measures absolute standards of quality and does not depend upon a relative standard.
  - b. it tests every objectives.
  - c. the criterion test item matches the performance stated in the objectives.
  - d. every trainee gets 100 % in the test.
21. Every-thing in the lesson plan should be evaluated in terms of its usefulness in helping the trainees.  
(Choose a,b,c or d and circle it)
- a. Understand course content.
  - b. Analyse job performance requirements.
  - c. reach course objective.
  - d. score 100 % in the final examination.
22. Which one of the following statement is classified as the 'purpose of a job aid'. (Circle a,b,c or d for correct response)
- a. it eliminates unnecessary training in order to make the trainees more productive in a short span.
  - b. it prevents waste of training time.
  - c. it finds out job classifications.
  - d. it eliminates the presence of instructor from the teaching-learning situation.
23. Which one of the following would you categorise, as developmental testing ? (Circle a,b,c or d for correct response)
- a. test during the design of instruction.
  - b. test at the end of the course.
  - c. test of the validation of course materials.
  - d. test to find out the entry level of the trainees.

24. Which one of the following would you categorise as field testing ? (Circle correct response a,b,c or d)
- a. first real world test of our instruction.
  - b. only critical phase of validation.
  - c. mid-term test of our instruction.
  - d. summative evaluation of the final product
25. Which one of the following reasons gives you the need to have the follow up data: (Circle a,b,c or d for correct response )
- a. to maintain always the effectiveness of the course.
  - b. to indicate whether job requirement has changed.
  - c. to find out whether course needs to be changed.
  - d. to get feed back.
26. Selection of media is dependent on three major factors: which of the following determines the selection of media ? (Circle a,b,c, or d for correct response)
- a. task analysis, task classification and specific objectives.
  - b. specific objectives, content and the method of instruction.
  - c. content, projection equipment and various teaching steps.
  - d. method of instruction, presenting information and testing.
27. Which of the following differentiates stimulus and response ? ( Circle correct response a,b,c or d)
- a. each specific sensation or stimulus is an exact reaction to a specific response.
  - b. each specific sensation or stimulus is the same as each specific reaction or response.
  - c. stimulus is anything that arouses you or evoke reaction, that is to say, elicit response.
  - d. the guiding of learning by verbal material is called response and the teachers questions stimulus.
28. By projected aids, we mean: (Circle correct response a,b,c, or d)
- a. aids prepared by projection
  - b. aids that require projection equipment for use.
  - c. aids that are models, mock ups and other three dimensional aids.
  - d. aids which does not require projection equipment.
29. By non projected aids we mean: (Circle correct response a,b,c or d)
- a. Aids that are used without aid of any projection equipment.
  - b. aids that are prepared only with projection equipment.
  - c. aids that are prepared and used with projection equipment only.
  - d. aids that can be used with or without projection equipment.

30. Which of the following is not the correct definition of perception? (Circle letter a,b,c or d which gives correct definition)
- a. perception is a two way communication between instructor and trainees.
  - b. Perception is a process of recognition by which one apprehends or understands through one of the senses.
  - c. perception is a process in which we do not use our senses, to apprehend or understand objects and events.
  - d. perception is learning theory.
31. We relate perception to the design of audio-visual aids by; (Circle a,b,c or d for correct answer)
- a. providing perceptual experiences in terms of the teachers past experiences, and present situation.
  - b. providing perceptual experiences in terms of learners past experiences, and present environment.
  - c. providing stimulus different from the kind of experience the learner has.
  - d. providing experiences that the best boy in the class has, so that the poorest boy can become equal to him, by using the audio visual aids, so designed.
32. List the three levels of local production of audio visual materials. (Circle a,b,c or d for correct answer)
- a. copying, original preparation and designing.
  - b. mechanical level, creative level and design level.
  - c. individual level, group level and school level
  - d. institutional level, district level and state level.
33. Which of the following statement does not state correctly the process of learning? (Circle correct response a,b,c or d)
- a. Learning takes place only when given knowledge of results.
  - b. Learning takes place when behaviour is modified.
  - c. Learning takes place when an individual has acquired new knowledge.
  - d. Learning takes place when an individual acquired new skill.
34. Which of the following groups give correctly the seven components of BERLO'S MODEL OF COMMUNICATION? (Circle a,b,c or d for correct answer)
- a. Sender, Receiver, Channel, Noise, Feedback, Brain, Senses.
  - b. Source, Encoder, Channel, Decoder, Destination, Noise, Feedback.
  - c. Source, Destination, Message, Channel, Noise, Feedback, Senses.
  - d. Source, Encoder, Message, Nervous system, decoder, Destination, Noise.

35. Which of the following are examples of stimuli ?  
(Circle a,b,c or d for correct answer).
- a. Your answer to this test.
  - b. Lifting a telephone when it rings.
  - c. Content presented to learner like this unit (sound slide)
  - d. stopping at red traffic signal.
36. Which one of the following gives the two major families of learning theories ? (Circle a,b,c or d for correct answer)
- a. behaviourist and connectionist
  - b. Behaviourist and cognitive
  - c. stimulus response and connectionist
  - d. gestalt and cognitive.
37. Which one of the following group gives the three domains of behavioural outcome categorised by BLOOM ?  
(Circle a,b,c or d for correct answer)
- a. attitude, knowledge and skill.
  - b. signal learning, concept learning and rule learning.
  - c. cognitive, affective and psychomotor.
  - d. attitude, value, appreciation.
38. Which of the following statement is NOT a difference between audio visual aids and media ?  
(For correct answer circle a,b,c or d )
- a. an audio visual aid is a device that assists and instructor or teacher whereas media are physical means of conveying instructional inputs.
  - b. an audio visual aid is used by an instructor as part of his instructional strategy or as an individual entity of his own, while media is used as inputs within an instructional design determined by the instructional design requirements.
  - c. audio visual aids are used as supplements to instruction or for enrichment purposes while media are integrated components of a system.
  - d. audio visual aids is an aid used during the instruction by the trainees and the instructor, while media helps only the trainees to do individualised learning without the teacher.

39. Which one of the following is the best way of estimating whether learning has taken place after you are given a course in operating 16 mm motion picture ?  
(Circle a,b,c or d for correct response)
- a. Observing whether you are able to operate the projector correctly, which you were not able to do before the course.
  - b. Assuming that you know to operate the projector, because you have attended the course without being absent.
  - c. Asking you, if you have learned, to operate the projector.
  - d. Asking your classmate if you have learned and can operate the projector.
40. A teacher is to start the first class for his trainees a TV assembling and checking.
- All necessary equipment and tools have been set up for demonstration by the attendant. The instructor has with him teaching tapes, a video programme on the subject, quiz and answer to the quiz and the equipment-TV tube, transistors, IC, and other parts - and tools. Categorise the last item i.e. the equipment and tools as one of the following.
- a. audio stimuli
  - b. visual stimuli
  - c. audio visual stimuli
  - d. visual response.

AFTER HANDING OVER THE RESPONSE SHEET FOR SECTION A, GO TO SECTION

B.

AUDIO VISUAL EDUCATION

RESPONSE SHEET

51

Roll No:  
Trade :  
Date :

Module I  
Unit 1-5  
Section-A.

1	2	3	4	5	6	7	8
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
9	10	11	12	13	14	15	16
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
17	18	19	20	21	22	23	24
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
25	26	27	28	29	30	31	32
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
33	34	35	36	37	38	39	40
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d



Audio Visual Education

Introduction to Instructional Design

Trade: All

Module I : Unit 1-5

Section: 'B'

Time: 40 mts.

USE SEPARATE RESPONSE SHEETS FOR SECTION 'B'  
DO NOT WRITE ANYTHING IN THIS QUESTION PAPER  
RETURN THE QUESTION PAPER TO THE INSTRUCTOR  
WITH RESPONSES.

41. Define Media.
42. Define Audio Visual Aids.
43. Re-arrange the following in the order in which they are to be followed for instructional design. Write against the alphabet a,b,c,d,e,f,g, & h - the re-arranged number according to the order.
- job performance requirements
  - identify training requiremntns
  - define course objectives
  - design instruction
  - construct criterion test.
  - field implementation
  - validate instruction
  - take follow up action.
44. Categorise the following as aids that can be heard, seen and heard and seen. Write in the response sheet against a,b and c.
- taped commentary
  - charts.
  - motion picture
45. Categorise the following as projected aids, non-projected aids, by writing P for projected aid and NP for non-projected aid and add S to those items with sound attached to it. Write in the response sheets against a,b,c .... p.
- |               |                |                          |
|---------------|----------------|--------------------------|
| a. Posters    | f. Chalkboard. | k. mockups               |
| b. Charts     | g. Filmstrips  | l. maps, graphs          |
| c. Radio      | h. Slides.     | m. Overhead transparency |
| d. Models     | i. Television  | n. Flat picture.         |
| e. Recordings | j. Sound slide | o. motion picture        |
|               |                | p. audio tapes.          |

46. List five recognised contributions of audio visual aids to learning.  
(Write the answers in the space provided in the response sheet)
47. List the five senses through which we learn.  
(Write the answers in the space provided in the response sheet)
48. Re-arrange the following in the order in which they are as per Edger Dale starting with no.1 for the item on the base, and 11 item on the apex. (Write against alphabets given in the response sheet the number in the order). You must identify first No.1 and then No. 11.
- Direct purposeful experience
  - dramatised experiences
  - contrived experiences
  - motion picture.
  - verbal symbols
  - radio, recordings and still pictures
  - Chalk-board, charts, maps, diagrams
  - television
  - exhibits
  - field trips
  - demonstrations.
49. Taxonomics or classification systems have been developed by Bloom, Krathwohl, Kibler and Dave for Cognitive, Affective and Psychomotor domains. These classifications have been given below. You should relate each of these to their author, and classify them as cognitive, affective and psychomotor. In the response sheet, you may write against each alphabet, number 1 to denote cognitive domain, No.2 to denote affective domain, no.3 to denote psychomotor domain, letter A to denote the author Bloom, B to denote Krauthwohl, C to denote Kibler and D to denote Dave.
- Imitation, manipulation, precision, articulation and naturalisation.
  - Knowledge, comprehension, application, analysis, synthesis and evaluation.
  - Receiving, responding, valuing, organisation and characterisation.
  - Gross bodily movements, finely co-ordinated movements, non-verbal communication and speech behaviours.

Jerome S. Bruner has related three kinds of experiences three major modes of learning. They are:

<u>three kinds of learning experiences</u>	<u>three modes of learning</u>
A. direct experiences	a. symbolic
B. pictorial experiences	b. iconic
C. highly abstract experiences	c. enactive.

Edgar Dale, in his cone of experience classifies various types of instructional materials according to the relative degree of experiences-direct, pictorial and highly abstract - and the three modes of learning made by Bruner-enactive, iconic and symbolic.

Now in the response sheet, for questions 50-60, write down against the numbers of the items given below i.e. 50-60 representing the eleven range of Dale's Cone of experiences the alphabet in capital letter (A, B or C) indicating the kind of learning experiences and the alphabet in lower case (small letters) (a, b or c) indicating the modes of learning that are related to each of these eleven items.

50. Chalk-board, Charts, Maps, diagrams.

51. Direct purposeful experiences

52. Dramatised experiences

53. Demonstrations

54. Verbal symbols

55. Recording, Radio, Still Pictures.

56. Educational television.

57. Study trips.

58. Contrived experiences

59. Exhibits

60. Motion pictures.

61. Categorise the following as Cognitive, Affective, and Psychomotor. Write against the numbers given in the response sheet C for cognitive, A for affective, and P for psychomotor.

1. shows kindness to animals
2. lifts heavy weight
3. cycles very fast
4. recalls telephone numbers correctly
5. recites geetha without mistakes.
6. always rudely behaves with the teachers.

62. You are going to teach your students on assembling and installing a numerical control lathe. Under which category of activities you would design your institution ?

1. \_\_\_\_\_ .
2. \_\_\_\_\_ .

63. List three categories of human behaviours exhibited by your students, for each of the following aspects.
1. \_\_\_\_\_ Knowledge.
  2. \_\_\_\_\_ Skill.
  3. \_\_\_\_\_ Attitude.
64. Certain performances are listed below. Categorise them as C for cognitive, A for affective and P for Psychomotor. Each item may or may not be classified under more than one or two categories.
- a. Removes thermometer from container by holding non bulb end.
  - b. Wipes thermometer downward from non bulb end with fresh wiper.
  - c. Shakes thermometer down to less than 94°F while holding non bulb end.
  - d. Places thermometer bulb end under patients tongue without disturbing the patient.
  - e. Tells patient not to bite the thermometer.
  - f. Leaves the thermometer in the patients mouth for three minutes.
  - g. Tells patient to open the mouth
  - h. Removes thermometer from patient's mouth by grasping non bulb end.
  - i. Reads temperature to nearest decimal of a degree.
  - j. Records temperature reading on the chart.
  - k. Cleans the thermometer and replaces in container.

Roll No:

Trade :

Date :

## RESPONSE SHEET

Module - I

Unit 1-5

Section B.

41. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

42. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

43. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

e. \_\_\_\_\_ f. \_\_\_\_\_ g. \_\_\_\_\_ h. \_\_\_\_\_

44. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

45. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_

e. \_\_\_\_\_ f. \_\_\_\_\_ g. \_\_\_\_\_ h. \_\_\_\_\_

i. \_\_\_\_\_ j. \_\_\_\_\_ k. \_\_\_\_\_ l. \_\_\_\_\_

m. \_\_\_\_\_ n. \_\_\_\_\_ o. \_\_\_\_\_ p. \_\_\_\_\_

46. a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

e. \_\_\_\_\_

47. a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

d. \_\_\_\_\_

e. \_\_\_\_\_

48. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_  
 d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_  
 g. \_\_\_\_\_ h. \_\_\_\_\_  
 i. \_\_\_\_\_ j. \_\_\_\_\_ k. \_\_\_\_\_

49. a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_  
 d. \_\_\_\_\_

50. \_\_\_\_\_

51. \_\_\_\_\_

52. \_\_\_\_\_

53. \_\_\_\_\_

54. \_\_\_\_\_

55. \_\_\_\_\_

56. \_\_\_\_\_

57. \_\_\_\_\_

58. \_\_\_\_\_

59. \_\_\_\_\_

60. \_\_\_\_\_

61. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

62. 1. \_\_\_\_\_ 2. \_\_\_\_\_

63. (1) \_\_\_\_\_ (2) \_\_\_\_\_ (3) \_\_\_\_\_

64. a) \_\_\_\_\_ b) \_\_\_\_\_ c) \_\_\_\_\_ d) \_\_\_\_\_

e) \_\_\_\_\_ f) \_\_\_\_\_ g) \_\_\_\_\_ h) \_\_\_\_\_

i) \_\_\_\_\_ j) \_\_\_\_\_ k) \_\_\_\_\_

AUDIO VISUAL EDUCATION					MODULE-I		ROLL NO:
RESPONSE SHEET					TRADE :		
PRE TEST				POST TEST			
1	2	3	4	5	6	7	8
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
9	10	11	12	13	14	15	16
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
17	18	19	20	21	22	23	24
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
25	26	27	28	29	30	31	32
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d
33	34	35	36	37	38	39	40
a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d

## Module I

Unit 1-5

## Sec B.

41. Media are direct instructional inputs and essential ingredients in teaching learning process.
42. Audio Visual Aids are instructional devices that are used as aids by a teacher while instructing instruction.
43. a. 1 b. 2 c. 3 d. 5  
e. 4 f. 7 g. 6 h. 8
44. a. Heard b. Seen c. Heard and Seen
45. a. NP b. NP c. NPs d. NP  
e. NPs f. NP g. P h. P  
i. Ps j. Ps k. NP l. NP  
m. P n. NP o. Ps p. NPs
46. a. Make instruction more productive.  
b. Make instruction more individual.  
c. Make learning more immediate.  
d. Make access to instruction more equal for all trainees.  
e. Give instruction a more scientific base.
47. a. Seeing  
b. Hearing  
c. Smelling  
d. Tasting  
e. Touching
48. a. 1 b. 3 c. 2 d. 8  
e. 11 f. 9 g. 10 h. 7  
i. 6 j. 5 k. 4



49. a. 3 D b. 1 A c. 2 B d. 3
50. C a 51. A c 52. A a 53. B b
54. C a 55. B b 56. B b 57. B b
58. A c 59. B b 60. B b
61. 1. A 2. D 3. P 4. C  
5. C 6. A

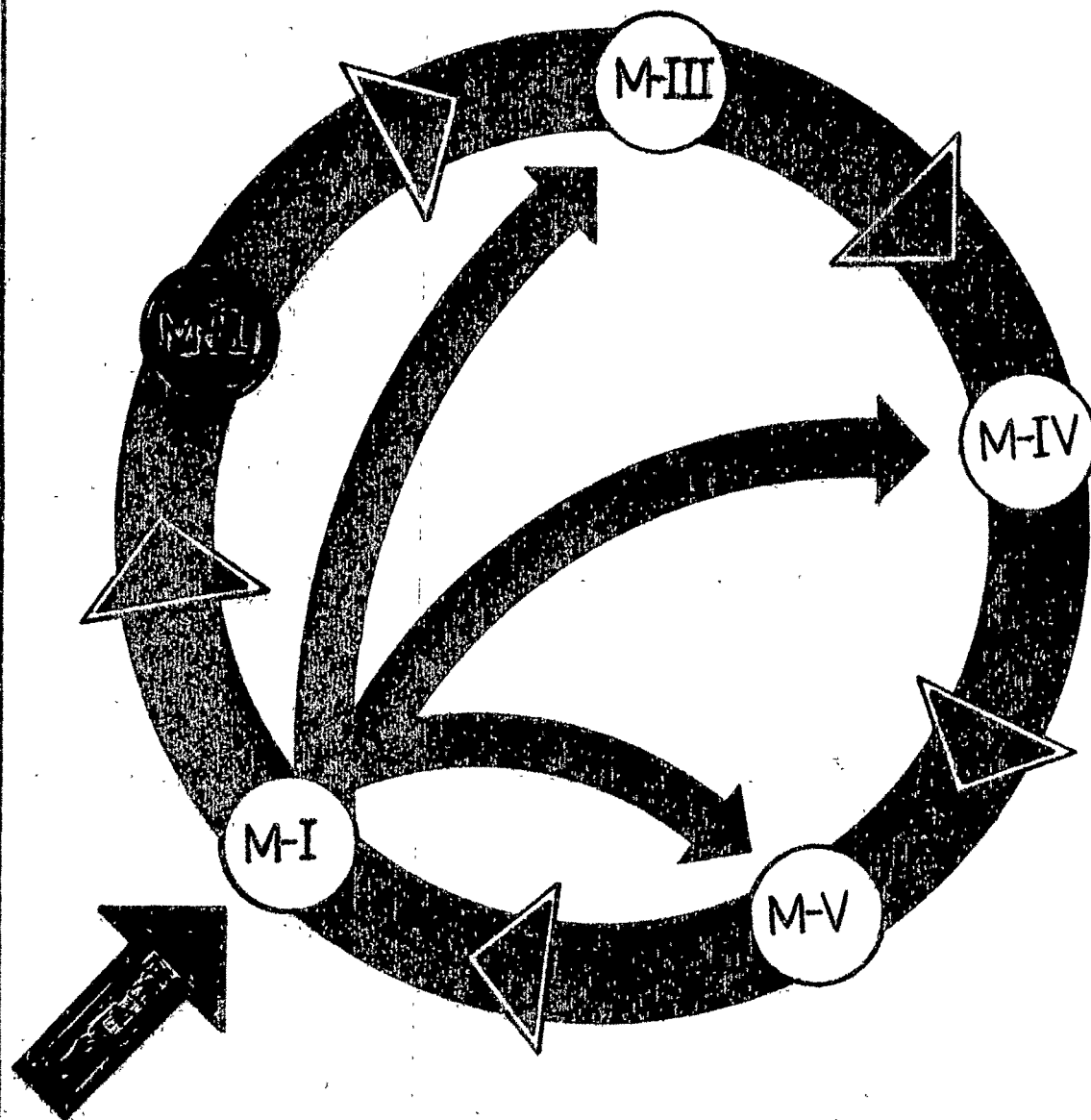
62. Cognitive (knowledge) Psychomotor (skill)

63. a. Cognitive (knowledge)  
b. Affective (Attitude)  
c. Psychomotor (skill)

64. a. P C b. P C c. P C d. P  
e. C f. C g. C h. P C  
i. C j. P C k. P C

# AUDIO VISUAL EDUCATION

## MODULE -



KRISHNAN.

## Module II

## CRITERION TEST

## SECTION-A

Time: 40 mts.

Use separate answer sheets for Section 'A', Section 'B', Section 'C'.  
DO NOT write anything on this question paper.  
RETURN the question paper to the Instructor with the response sheets.

Answer Section 'A' first, hand it over, then Section 'B',  
Answer Section 'C' separately on practical assignment sheets.

CIRCLE appropriate letter(s) a,b,c or d for Section 'A' on the response sheets.

1. According to the principle of design fewer elements in a visual will be more pleasing, this is referred as:
  - a. Dominance
  - b. Balance
  - c. Harmony
  - d. Simplicity
2. When an important idea of a visual is to stand out from rest of the elements this is known as:
  - a. Simplicity
  - b. Harmony
  - c. Dominance
  - d. Balance
3. When the elements of a visual creates an equilibrium without being static it is known as:
  - a. Formal balance
  - b. Unity
  - c. Pattern
  - d. Informal balance
4. The relationship existing among the various elements of a visual when they all function together is known as:
  - a. Unity
  - b. Pattern
  - c. Dominance
  - d. Balance

5. Showing differences through size, relationship, perspective, colour etc., is known as:
  - a. Dominance
  - b. Variation
  - c. Pattern
  - d. Simplicity
6. The principle to be followed while organising the elements in a visual to avoid monotony and to show differences is known as:
  - a. Pattern
  - b. Dominance
  - c. Simplicity
  - d. Harmony.
7. A feature in a visual which collects the elements together and also direct the viewer to study the visual in a specific sequence is a visual tool known as:
  - a. line
  - b. texture
  - c. colour
  - d. space
8. The visual tool that is to emphasise in order to catch attention by differentiation in dimension is known as:
  - a. Space
  - b. Size and shape
  - c. Line
  - d. Texture
9. The visual tool that has definite limits and boundaries for visual design is known as:
  - a. Size and shape
  - b. Line
  - c. Space
  - D. Colour
10. One of the visual tools which can serve as a replace for sense of touch to be depicted while designing a visual is:
  - a. Texture
  - b. Shape
  - c. Colour
  - d. Line

11. Which one of the following visual too, when used indiscriminately while designing visuals will result in poor contrast and lead to repulsion:
  - a. Colour
  - b. Line
  - c. Space
  - d. Shape and size
12. What is the minimum letter size of a visual displayed in front of a class room 10 M deep so that it can be read by a person sitting at the last row:
  - a. 20 mm
  - b. 25 mm
  - c. 50 mm
  - d. 6 mm
13. Which one of the following is the single most important reason, as to why legibility standards must be considered for any visual ?
  - a. So that they can be read easily by audience sitting at an anticipated maximum distance.
  - b. So that they can be read easily by audience sitting in the middle of the class room.
  - c. So that they can be read with ease by students sitting in the front row of the class room.
  - d. None of the above.
14. Letter style when written slant is called:
  - a. Gothic
  - b. Italics
  - c. Textural
  - d. Roman
15. Which one of the following will least help to bring out contrast between letters and background ?
  - a. Black on darker coloured background
  - b. Light coloured letters on dark background
  - c. Dark letters on lighter coloured background
  - d. Light coloured letters with dark shadow.

16. Which type of graph is best suited for the following:  
"Expenditure on audio visual equipment incurred for our college in 1980-81 is:  
Record players: 20%; Tape recorders: 30%; Slide projectors: 15%;  
Opaque Projectors: 10%; Motion Picture Projectors: 25%
- a. bar graph
  - b. pie graph
  - c. line graph
  - d. pictorial graph
17. The type of graph for comparing and contrasting many subjects is:
- a. pie graph
  - b. bar graph
  - c. line graph
  - d. pictorial graph
18. A graph in which a circle is divided into different sectors and each one representing a component part of the whole is:
- a. pie graph
  - b. bar graph
  - c. line graph
  - d. pictorial graph
19. A graph which uses realistic representational figures is known as:
- a. pictograph
  - b. bar graph
  - c. pie graph
  - d. line graph
20. A chart which is used to explain the sequence of events as in the case of a manufacturing process of some articles is:
- a. data chart
  - b. flow chart
  - c. pictorial chart
  - d. phantom view chart
21. A chart which can be used to show the internal details without obliterating the outer surface is:
- a. animated chart
  - b. phantom view chart
  - c. flow chart
  - d. data chart

22. A chart in which the various parts of a component are deployed in the sequence and extended position in which they exist when assembled is:
- a. phantom view chart
  - b. data chart
  - c. flip chart
  - d. exploded chart
23. A sequence of information which would be difficult to be shown on a single chart is to be presented to your students: which one of the following chart will you prepare ?
- a. Strip chart
  - b. flip chart
  - c. schematic chart
  - d. flow chart.
24. The chart displayed in the electrical section indicating the thickness of wires in British standards and equivalent Indian standards wire gauge numbers is called a -
- a. True chart
  - b. Animated chart
  - c. Schematic chart
  - d. Data chart
25. An enlarged photograph of a machine component along with names of various parts is put in the form of a chart. This type of chart is called -
- a. Exploded chart
  - b. Pictorial chart
  - c. Schematic chart
  - d. Animated chart
26. A chart showing an electrical circuit containing outline figure and standard symbolic representation is called a -
- a. Data chart
  - b. Diagramatic chart
  - c. Exploded chart
  - d. Animated chart
27. In a situation where diagramatic outlines and the image representation of the object is to be used for the purpose of explaining the function of the object, which one of the following will you make ?
- a. Exploded chart
  - b. Flow chart
  - c. Animated chart
  - d. Schematic chart

28. In a production process various bye-products are also produced. Select a suitable type of chart which can depict the various bye-products coming out of the main process from following:
- Animated chart
  - Tree chart
  - Phantom view chart
  - Exploded chart
29. For showing the movement of the shutter over the aperture in a 16 mm projector, you are to use a chart. Which one of the following would you use ?
- Tree chart
  - Animated chart
  - Diagrammatic chart
  - Exploded chart
30. A teacher wanted some means to represent the progress made by each student of his class the relative position of individual student with respect of rest of the class. Which one of the following do you consider will best meet the requirement.
- Schematic chart
  - Poster
  - Graph
  - Diagrammatic chart
31. You have to explain to your students about the lathe parts and their functions. Which one of the following will be your choice as a teaching aid.
- Poster
  - Chart
  - Graph
  - Cartoon
32. Eye accidents in your section is increasing at an alarming rate. One of the methods you have decided is to display some graphic visual which can help to instill the habit of using safety goggles while working. Which one of the following do you think can be used to quickly convey the message.
- Poster
  - Graph
  - Chart
  - Exploded chart



33. If you are looking for a graphic material, which has certain amount of humour and good communication input. Which one of the following will be your choice.
- a. Chart
  - b. Real photograph
  - c. Graph
  - d. Cartoon
34. Select the statement among the following, which you consider is not a characteristic of posters.
- a. self contained message
  - b. design and colour
  - c. supported by detailed explanation
  - d. attractiveness
35. Which one of the following is not considered as a requirement of cartoons ?
- a. the symbols must be clear
  - b. simplicity
  - c. should contain detailed explanation
  - d. should meet the experience level of audience.
36. Which one of the following material is not a suitable material for making chalkboard surface ?
- a. ground glass
  - b. smooth polished wooden surface
  - c. canvass
  - d. plain glass
37. You have to paint a newly prepared chalkboard to be used in classroom. Among the following colours available, which one will be your choice.
- a. Black
  - b. Green
  - c. Yellow
  - d. White
38. The visibility of matters written with coloured chalk on chalkboards depend very much on the colour of the board itself. Which one of the following colour boards will be your selection if you are interested in ACTUAL COLOUR visibility.
- a. Green
  - b. Yellow
  - c. Red
  - d. White

39. Students usually like a chalk board work, when it is free of flourishes and letters are not too close. What in your opinion is the reason for this:
- It is easy to write in this manner
  - It is more attractive.
  - It is more legible
  - It can be written faster
40. Chalkboard summary is essential to highlight the important aspects of a lesson. What do you think is the proper way of doing this, if you are the teacher-
- in note form
  - in essay form
  - dictated
  - written before the class assembly
41. For painting a chalkboard, an expensive good glossy enamel paint available was not used by a teacher because
- It is expensive
  - It produces glare
  - Enamel paints cannot produce contrast.
  - Erasing is difficult
42. For drawing horizontal strokes the chalk length should be kept.
- Inclined downwards
  - Horizontal
  - Inclined upwards
  - Inclined sideways
43. When you draw horizontal strokes, the line at the end bends up, because:
- body sway towards back, not given
  - right leg not bent as the line progressed
  - taking body close to chalkboard
44. While writing on chalkboard the chalk piece is rolled to:
- avoid wastage of chalk
  - prevent frequent break of chalk
  - maintain uniform thickness in writing
  - reduce strain on the figure
45. Template and pounce pattern are used for
- prepared diagrams
  - progressive diagrams
  - helping students to draw on sheets
  - none of the above

46. A diagram which is drawn on chalkboard controlling to fit with the rate of presentation is:
- a. strip diagram
  - b. exploded diagram
  - c. progressive diagram
  - d. line diagram
47. The type of diagram in which a series of diagrams each one developing from the previous one, but with distinct features is called:
- a. exploded diagram
  - b. series diagram
  - c. progressive diagram
  - d. strip diagram
48. While preparing for a chalkboard presentation on a series of intricate parts of a component or a machine you are required to explain with a diagram various elements in the assembly and their location. The type of diagram you will prepare and use will be:
- a. line diagram
  - b. strip diagram
  - c. progressive diagram
  - d. exploded diagram.
49. Which one of the following is the definition of the bulletin board -
- a. A bulletin board like a notice board is to paste notices meant for students about their assignments examination dates etc.,
  - b. A bulletin board is to pin various advertisements about availability of sale articles.
  - c. A bulletin board unlike notice board displays instructional informative visuals and kept for fixed short duration.
  - d. A bulletin board unlike notice board displays informative visuals and kept for longer duration to enable everyone to see many times.
50. A purpose of a bulletin board to an instructor is to -
- a. use in place of black board
  - b. replace chalk board activity
  - c. use for follow up of chalk board.
  - d. use in library to exhibit books.

51. Which one of the following is not a salient feature of bulletin board.
- a. A bulletin board is one of the least expensive visual aids.
  - b. It may be used on a class room walls, verandah or hallway.
  - c. It is used to exhibit pictures for individual study only for the trainees.
  - d. It may be used to exhibit pictures, clipping and other materials for both group and independent studies.
52. The best material for making bulletin board is -
- a. Highly polished teak wood
  - b. Any hard plywood
  - c. Frosted glass
  - d. Any soft board
53. Which one of the following is not a point to be considered while setting up and locating bulletin boards used for instructional purposes.
- a. Locate it in a prominent place in or near the staff room.
  - b. Locate it in central place near the class room
  - c. Locate it in a well lighted place
  - d. Provide background with neutral colour.
54. A convenient height for a bulletin board is
- a. 75 cm from floor level
  - b. 200 cm from floor level
  - c. 300 cm from floor level
  - d. 125 cm from floor level
55. Which of the following materials are not suited for making flannel boards.
- a. Flannel
  - b. Felt
  - c. Corduroy
  - d. Terrene
56. The best material for making flannel board cutouts among the items listed below is -
- a. Ply wood
  - b. Sand paper
  - c. Silk cloth
  - d. Plastic coated canvass

57. Which one of the following is not a feature of magnetic board commonly found.
- a. The board is made with a permanent magnet.
  - b. Magnets are attached to the visuals to be presented
  - c. Two or three dimensional flat objects can be displayed
  - d. Visuals can be held in vertical position.
58. The most suitable material for making a magnetic board is -
- a. Copper sheet
  - b. Brass sheet
  - c. Stainless steel sheet
  - d. Galvanized iron sheet.
59. Pictures from books magazines can be directly projected for enlarging using
- a. overhead projector
  - b. pantograph
  - c. slide projector
  - d. opaque projector
60. A method of enlarging outline of real objects is by using:
- a. slide projector
  - b. opaque projector
  - c. pantograph
  - d. photo enlarger
61. You have to make a chart of a Wankel Engine to be used for instructional purpose. If you have decided to enlarge a picture available in a 35 mm transparency, which one of the following will you choose.
- a. Filmstrip projector
  - b. Photo enlarger
  - c. Opaque projector
  - d. Reverse projection
62. A large chart available has to be reduced to make a transparency for O.H.P. Which one of the following is the most suitable method.
- a. Rear screen projection
  - b. Reverse projection
  - c. Opaque projection
  - d. Multi-image projection.

63. While organising for presenting a sound slide system, you have noticed the image projected is larger than the screen itself. If you are to bring the projected image size to fit with in the screen size.
- Move the projector towards the screen.
  - Move the projector away from the screen.
  - Move the screen away from the projector
  - Reset the focussing device.
64. A method of enlarging and reducing drawings by using small squared sections or graph paper is known as -
- Pantograph method.
  - Square method
  - Pounce pattern method
  - Grid method.
65. A method of enlarging and reducing proportional figures which uses four bars containing a series of holes is known as -
- Bar method
  - Grid method
  - Pantograph method
  - Square method.
66. Which one of the following is not a use of pantograph:
- Enlarging drawings
  - Reducing drawings.
  - Proportional deliberate distortion
  - Reproducing drawings of same size.
67. Pounce pattern method is used for -
- Enlarging drawings
  - Reducing drawings
  - Providing horizontal distortion
  - transferring drawings.
68. A cast iron piece used by an Instructor while explaining and demonstrating the properties of cast iron is a
- Model
  - Real object
  - Mockup
  - Specimen.

69. When trainees are given opportunities to handle real object, they receive:
- a. Direct experience
  - b. Contrived experience
  - c. Simulated experience
  - d. Dramatised experience
70. When real things/objects are scaled to represent, they are called as
- a. Mockups
  - b. Models
  - c. Specimens
  - d. Cutouts
71. A Simulated three dimensional device which imitates only a certain aspects of the real thing is -
- a. Model
  - b. A Mockup
  - c. A Sectionised Model
  - d. None of the above
72. A model which shows the internal features of an object is -
- a. Working model
  - b. Solid model
  - c. Cut section model
  - d. Mockup
73. A model used by instructors to show the actual function of various components of a device is a
- a. Sectionised model
  - b. Mockup
  - c. Solid model
  - d. Working model
74. An instructional package means -
- a. Written instructional materials
  - b. Sound slide system
  - c. Everything including objectives, media material learner activities, evaluation.
  - d. Projected equipment properly packed and stored.
75. Which one of the following is not an instructional kit-
- a. Plastic models on solid geometry
  - b. Items for study and student
  - c. Black board
  - d. Transparency set on four stroke cycle.





36	37	38	39	40	41	42
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
43	44	45	46	47	48	49
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
50	51	52	53	54	55	56
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
57	58	59	60	61	62	63
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
64	65	66	67	68	69	70
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
71	72	73	74	75		
a	a	a	a	a		
b	b	b	b	b		
c	c	c	c	c		
d	d	d	d	d		

Section 'B'  
Time: 40 mts.

Use separate answer sheets for Section A, Section-B and Section-C.

DO NOT write anything on this question paper

Return the question paper to the instructor along with the response sheets.

Answer Section-A first, hand over the answers to Instructor, then answer Section-B, hand it over to the Instructor, and thereafter Section-C

USE SEPARATE RESPONSE SHEETS, and answer in the space provided as directed in this question paper.

76. Select the three important aspects for producing quality and effective graphic materials from the following:

- \_\_\_\_\_ a. Preliminary thoughts
- \_\_\_\_\_ b. Emphasis only in layout
- \_\_\_\_\_ c. Careful planning
- \_\_\_\_\_ d. Use as much colour as possible
- \_\_\_\_\_ e. Apply design techniques
- \_\_\_\_\_ f. Copy other materials
- \_\_\_\_\_ g. Verbal explanation

77. Name the five principles of visual design.

78. List the five visual tools used in the graphic design

79. Name the five factors that will contribute to good readability in lettering.

80. Match the following by writing against items in Column-I corresponding numbers of items given under Column-II. Write the answers on the response sheet, against corresponding alphabets a, b, or c.

a. \_\_\_\_\_ Gothic

b. \_\_\_\_\_ Roman

c. \_\_\_\_\_ Textual

1. ABCDEFGJ

2. ABEDEFE

3. ABCDEFGH

81. State the three principles to be followed in selecting lettering styles.
82. Which one of the following is considered as a poor lettering layout ?

a.

NON PROJECTED VISUAL  
AIDS

b.

NON PROJECTED  
VISUAL AIDS ARE  
POSTERSCHARTSETC

c.

NON PROJECTED  
VISUAL  
AIDS

d.

VISUAL  
AIDS

83. Name the two kinds of letter spacing generally adopted for writing words.
84. You are writing a two line caption for a poster using 30 mm upper case letters. What space would you leave between the two lines ?

85. Match the following, by writing against items in column I corresponding numbers of items given under column II, Write the answers on the response sheets, against corresponding alphabets a,b,c or d. 78

Column I

a. \_\_\_\_\_ Bar graph

1.

b. \_\_\_\_\_ Pie graph

2.

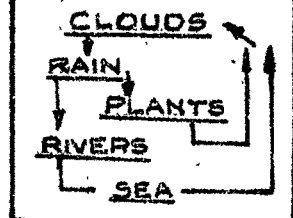
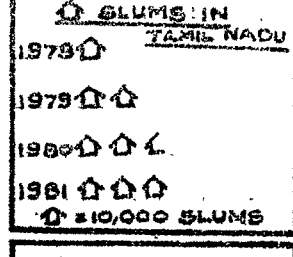
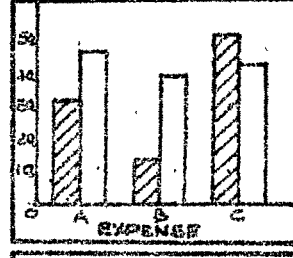
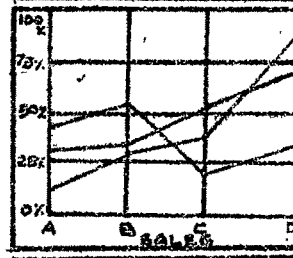
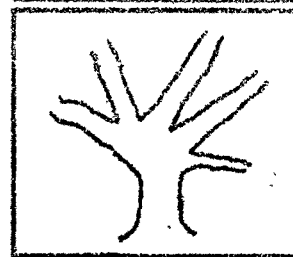
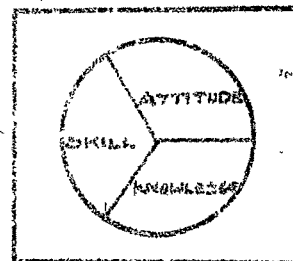
c. \_\_\_\_\_ Picto graph

3.

d. \_\_\_\_\_ Line graph

4.

Column II



5.

6.

86. Name the ten types of charts used for instructional purposes.
87. State, four functions of posters.
88. List the five steps to be followed while posters are used for instructional purposes.
89. Name the five types of chalkboards commonly found.
90. State five advantages of chalkboards.
91. While writing on chalkboard we sometime print letters, name two situations in which you do this.
92. While using chalkboard for teaching, summary of the lesson is given on the board. This summary to be helpful for learners should have certain qualities, State four qualities.
93. State the five advantages of chalkboard.
94. What are the five advantages of bulletin boards over chalk-board ?
95. List five instructional functions of bulletin boards.
96. State what is a flannel board ?
97. List the five follow up actions suggested to ensure the value of presentation with flannel and magnetic boards.
98. List four types of reproducing pictures using grid method.
99. State five suggestions for the effective utilisation of models in classroom.
100. Match the following, by writing against the items in Column I , corresponding numbers on items given under Column II. Write the corresponding numbers of answers on the response sheet against the alphabets a,b,c,d or e.

<u>Column I</u>	<u>Column II</u>
a. Model	1. Sample
b. Instructional Kit	2. Cut section model
c. Specimen	3. Containing materials tools and or instruction.
d. Direct experience	4. Replica of the original
e. Reveal internal features	5. Real objects
	6. Working model
	7. Mockup
	8. Media package

## AUDIO VISUAL EDUCATION

## RESPONSE SHEET

Roll No:

Trade:

Module: II

Unit: 1-9

Section: B

76. \_\_\_\_\_ a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_ g.

77. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

78. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

79. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

80. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

81. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

82. \_\_\_\_\_ a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d.

83. 1. \_\_\_\_\_  
2. \_\_\_\_\_

84. \_\_\_\_\_

85. \_\_\_\_\_ a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d.

86. 1. \_\_\_\_\_ 6. \_\_\_\_\_  
2. \_\_\_\_\_ 7. \_\_\_\_\_  
3. \_\_\_\_\_ 8. \_\_\_\_\_  
4. \_\_\_\_\_ 9. \_\_\_\_\_  
5. \_\_\_\_\_ 10. \_\_\_\_\_

87. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_

88. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

89. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

90. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

91. 1. \_\_\_\_\_  
2. \_\_\_\_\_

92. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

93. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_



94. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_  
6. \_\_\_\_\_
95. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_
96. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
97. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_
98. 1. \_\_\_\_\_ 2. \_\_\_\_\_  
3. \_\_\_\_\_ 4. \_\_\_\_\_
99. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_
100. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_ e. \_\_\_\_\_

## Module II

## CRITERION TEST

## SECTION 'C'

Time: 7 hrs. 30 mts.

-----  
 Use separate answer sheets for Sec.A, Sec.B, and Sec.C.

Do not write anything on this question paper.

RETURN the question paper along with your assignment sheets/  
 responses.

ANSWER Section C after completing Section A and Section B.

-----  
 For Practical Exercises, fill the assignment sheets wherever:  
 asked.  
 -----

101. Write a caption with a minimum of ten letters (upper case Gothic style using duo line letter guide.
102. Write a caption with a minimum of three words (upper case and lower case combined) using planograph lettering stencil.
103. In a class of 40 students, the final evaluation results are as shown.

very good	.. 4 trainees
good	.. 8 trainees
satisfactory	..20 trainees
poor	.. 8 trainees

Prepare a pie graph to show the trainees in each category with respect to the total class

104. For trainees of a section there were ten monthly tests. The performance of one trainee is as shown below.

	Marks %		Marks %
September	55	January	70
October	60	February	65
November	45	March	60
December	75	April	70
		May	75
		June	80

Draw a line graph to show the individual trainee progress.

105. Draw a data chart to show the equivalent decimal value in inches and metric with in decimals upto four places for each measurements from  $1/32''$  to  $1''$  (in steps of  $1/32''$  ).

106. A factory established in the year 1976 had a staff strength of 750 in the beginning and in subsequent years the strength was increased to:

1977	..	800
1978	..	825
1979	..	900
1980	..	950
1981	..	1200

Draw a pictograph to show the comparative staff strength for all the six years. Use stick figures to represent the staff.

107. Draw a bar graph to represent the figures in question 106.
108. Draw a pictorial chart of the given item and indicate various parts.
109. Prepare a schematic chart to show a lighting circuit which contains a 1.5 volts dry cell, a bulb and a switch to control.
110. Draw a diagrammatic chart on the given topic.
111. Prepare an animated chart to show the movement of the reflector of an epidiascope for opaque and transparent projection.
112. Prepare an exploded view chart of the given objects.
113. Prepare a tree chart on the given topic.
114. Prepare a flow chart on the given topic.
115. Prepare a phantom view chart on the given topic.
116. Prepare a folding chart set on the given topic.
117. Prepare a safety poster, depicting an important safety aspect connected with your trade.
118. Using chalkboard instruments, draw a regular cone (150 mm high, 50 mm dia). A line AB cuts the cone at 100 mm on the axis from the base and makes  $45^\circ$  to the base line. Draw the plan from top and also the plan of the cut section (conic section) at a plane parallel to the cut section.
119. Using the given template, draw a hexagon on the chalkboard.
120. Draw freehand sketch of a ballplane hammer, shade it and colour it.

121. Draw an exploded view of a given machine or part of the same on the chalkboard and print the caption.
122. Write three statements with not less than thirty words in all containing both upper and lower case letters, on the chalkboard, number each statement. The depth of the class room is 10 M. Use given sentences.
123. Plan a chalkboard summary on a given lesson topic using coloured chalks also.
124. Prepare a layout for bulletin board display for reviewing a lesson topic and draw it on a sheet.
125. Prepare three flannel board cutout with sand paper backing on a given topic.
126. Prepare three magnetic board presentation materials with GI strip backing on a given topic.
127. Enlarge a given visual by the grid method.
128. Enlarge a given visual by using pantograph.
129. Enlarge a given visual by using opaque projector.
130. Enlarge a given visual by using overhead projector.
131. Reduce the given line drawing using pantograph.
132. Reduce the given visual by the grid method.
133. Reduce the given visual by the reverse projection method.
134. Make a chalkboard line diagram by the dot dusting method (Pounce method).
135. Prepare thermocole cutout letters.
136. Write a chalkboard presentation for a given topic with diagrammatic illustrations.

AUDIO / VIDEO DISCUSSION

ROLL NO:

RESPONSE SHEET FOR PRACTICAL EXERCISES

Trade :

MODULE II

PRE-TEST

SECTION C

READ THE QUESTION PAPER GIVEN FOR QUESTIONS ( )

101 - 136. THESE ARE PRACTICAL EXERCISES.

You have to do these questions yourself.

Tick the questions you can do yourself &amp;

cross the questions you cannot do your-

self. Then hand over this sheet to the

invegilator and attempt those questions

you can do.

101 _____	111 _____	121 _____	131 _____
102 _____	112 _____	122 _____	132 _____
103 _____	113 _____	123 _____	134 _____
104 _____	114 _____	124 _____	135 _____
105 _____	115 _____	125 _____	136 _____
106 _____	116 _____	126 _____	
107 _____	117 _____	127 <sup>(2)</sup> _____	
108 _____	118 _____	128 _____	
109 _____	119 _____	129 _____	
110 _____	120 _____	130 _____	

AUDIO VISUAL EDUCATION						MODULE-2	
KEY						SECTION- A	
1	2	3	4	5	6	7	
a	a	a	a	a	a	a	
b	b	b	b	b	b	b	
c	c	c	c	c	c	c	
d	d	d	d	d	d	d	
8	9	10	11	12	13	14	
a	a	a	a	a	a	a	
b	b	b	b	b	b	b	
c	c	c	c	c	c	c	
d	d	d	d	d	d	d	
15	16	17	18	19	20	21	
a	a	a	a	a	a	a	
b	b	b	b	b	b	b	
c	c	c	c	c	c	c	
d	d	d	d	d	d	d	
22	23	24	25	26	27	28	
a	a	a	a	a	a	a	
b	b	b	b	b	b	b	
c	c	c	c	c	c	c	
d	d	d	d	d	d	d	
29	30	31	32	33	34	35	
a	a	a	a	a	a	a	
b	b	b	b	b	b	b	
c	c	c	c	c	c	c	
d	d	d	d	d	d	d	

36	37	38	39	40	41	42
a b c d	a b c d	a b c d	a b c d	a b c d	a b c d	a b c d
43	44	45	46	47	48	49
a b c d	a b c d	a b c d	a b c d	a b c d	a b c d	a b c d
50	51	52	53	54	55	56
a b c d	a b c d	a b c d	a b c d	a b c d	a b c d	a b c d
57	58	59	60	61	62	63
a b c d	a b c d	a b c d	a b c d	a b c d	a b c d	a b c d
64	65	66	67	68	69	70
a b c d	a b c d	a b c d	a b c d	a b c d	a b c d	a b c d
71	72	73	74	75		
a b c d	a b c d	a b c d	a b c d	a b c d		

AUDIO VISUAL EDUCATION MODULE II

Roll No: Trade: SECTION 13

76. \*\* a. b. \*\* c. d. \*\* e.  
f. g.

77. 1. Dominance  
2. Simplicity  
3. Harmony or Unity  
4. Pattern  
5. Balance

78. 1. Line  
2. Colour  
3. Texture  
4. Shape and size  
5. Space

79. 1. Size  
2. Style  
3. Layout  
4. Spacing  
5. Contrast

80. a. 3 b. 1 c. 2

81. 1. Readability (easily read)  
2. Simplicity (simple style)  
3. Legibility (capital to small)

82. a. \*\* b. c. d.

83. 1. Mechanical 2. Optical

84. 1/3rd the height of letter.

85. 4 a. 1 b. 5 c. 3 d.



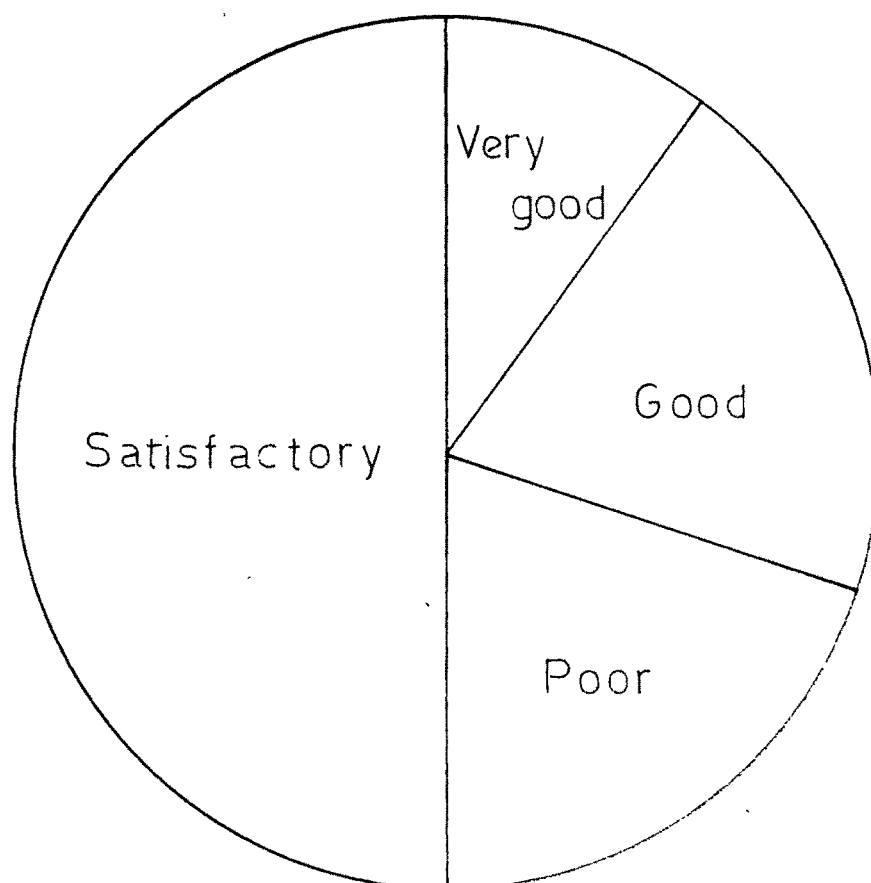
- 86, 1. Data 6. Flow  
 2. Pictorial 7. Animated  
 3. Diagramatic 8. Phantom view  
 4. Schematic 9. Exploded  
 5. Tree 10. Folding (Flip)
- 87, 1. Motivation 3. Atmosphere  
 2. Reminder 4. Creative expression
- 88, 1. Prepare students 4. Examine or test  
 2. Present poster 5. Review  
 3. Application
- 89, 1. Wall board 4. Enamel board  
 2. Glass board 5. Roll up board  
 3. Sliding board
- 90, 1. Build up explanation in logical order.  
 2. Write the students point of view.  
 3. Transfer picture, draw picture.  
 4. Advance preparation outside class using roll up type.  
 5. Trainees can be asked to work problems, drawings etc.
- 91, 1. Caption 2. Emphasis
- 92, 1. Complete in coverage. 4. Well set out.  
 2. Concise 5. Emphasize.  
 3. Well analysed.
- 93, 1. Stick to your style. 4. Size governed by less strength.  
 2. Avoid compress letters. 5. Rotate chalk for uniform thickness.  
 3. Generous in spacing. 6. Write straight across the board.

94. 1. Single copy material can be exhibited.  
 2. Stimulate interest.  
 3. Allows study of subjects not other/<sup>wise</sup>brought up in class.  
 4. Encourage participation.  
 5. Review and reminders.  
 6. Helps trainees learn communicate ideas visually.
95. 1. Helps to communicate.  
 2. Visualise portions of test.  
 3. Provides a medium for and individual responses.  
 4. Make the classroom dynamic relevent and attractive.
96. A flannelboard is a non-projected visual aid which utilise the adhering qualities of certain material to support vertically.
97. 1. Discuss questions on chalk board.  
 2. Determine impressions on trainees.  
 3. Set up group discussion.  
 4. Conduct test to judge results.  
 5. Evaluate your performance. (repeat if needed.)
98. 1. Enlarging. 2. Reducing. 3. Equal size. 4. Distortion.
99. 1. Proper size.  
 2. Don't pass a small model to the class when talking about it.  
 3. Have definite purpose.  
 4. Integrate models.  
 5. Relative size.
100. 4 a. 3 b. 1 c. 5 d. 2 e.

# TELESCOPING-GAUGES

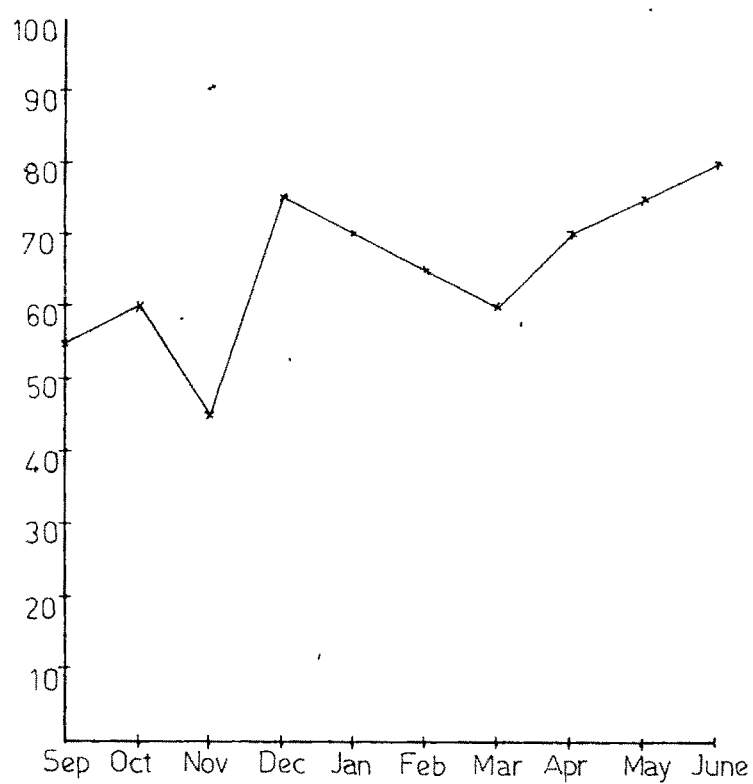
**Drawing  
is a  
Language  
of  
Craftsmen**

# PIE GRAPH



Very good	4 Trainees
Good	8 Trainees
Satisfactory	20 Trainees
Poor	8 Trainees

# LINE GRAPH



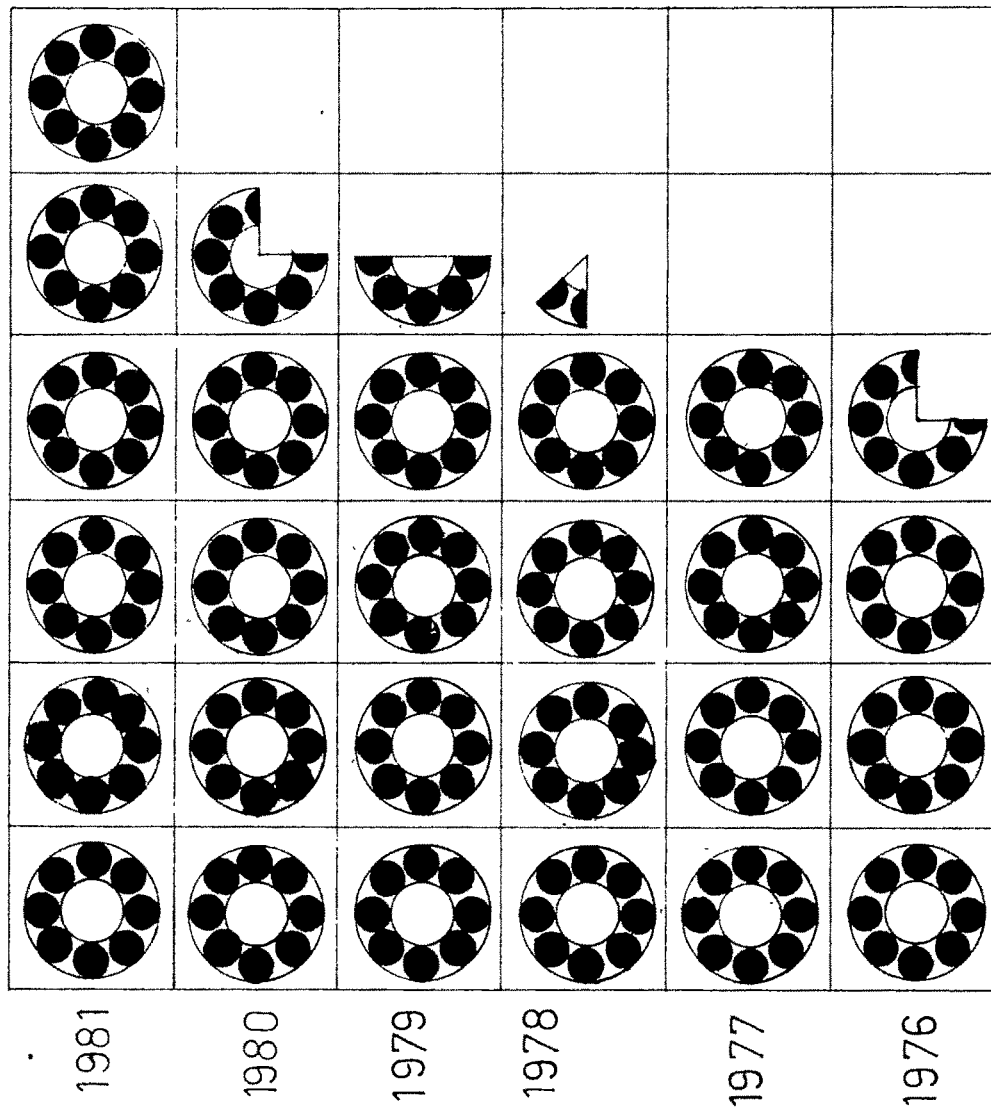
# DATA CHART

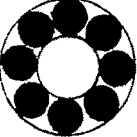
97

## DECIMAL EQUIVALENTS

$\frac{1}{64}$	.015625	$\frac{73}{64}$	.515625
$\frac{2}{64}$	.03125	$\frac{74}{64}$	.53125
$\frac{3}{64}$	.046875	$\frac{75}{64}$	.546875
$\frac{4}{64}$	.0625	$\frac{76}{64}$	.5625
$\frac{5}{64}$	.078125	$\frac{77}{64}$	.578125
$\frac{6}{64}$	.09375	$\frac{78}{64}$	.59375
$\frac{7}{64}$	.109375	$\frac{79}{64}$	.609375
$\frac{8}{64}$	.125	$\frac{80}{64}$	.625
$\frac{9}{64}$	.140625	$\frac{81}{64}$	.640625
$\frac{10}{64}$	.15625	$\frac{82}{64}$	.65625
$\frac{11}{64}$	.171875	$\frac{83}{64}$	.671875
$\frac{12}{64}$	.1875	$\frac{84}{64}$	.6875
$\frac{13}{64}$	.203125	$\frac{85}{64}$	.703125
$\frac{14}{64}$	.21875	$\frac{86}{64}$	.71875
$\frac{15}{64}$	.234375	$\frac{87}{64}$	.734375
$\frac{16}{64}$	.25	$\frac{88}{64}$	.75
$\frac{17}{64}$	.265625	$\frac{89}{64}$	.765625
$\frac{18}{64}$	.28125	$\frac{90}{64}$	.78125
$\frac{19}{64}$	.296875	$\frac{91}{64}$	.796875
$\frac{20}{64}$	.3125	$\frac{92}{64}$	.8125
$\frac{21}{64}$	.328125	$\frac{93}{64}$	.828125
$\frac{22}{64}$	.34375	$\frac{94}{64}$	.84375
$\frac{23}{64}$	.359375	$\frac{95}{64}$	.859375
$\frac{24}{64}$	.375	$\frac{96}{64}$	.875
$\frac{25}{64}$	.390625	$\frac{97}{64}$	.890625
$\frac{26}{64}$	.40625	$\frac{98}{64}$	.90625
$\frac{27}{64}$	.421875	$\frac{99}{64}$	.921875
$\frac{28}{64}$	.4375	$\frac{100}{64}$	.9375
$\frac{29}{64}$	.453125	$\frac{101}{64}$	.953125
$\frac{30}{64}$	.46875	$\frac{102}{64}$	.96875
$\frac{31}{64}$	.484375	$\frac{103}{64}$	.984375
$\frac{32}{64}$	.5	$\frac{104}{64}$	1.0

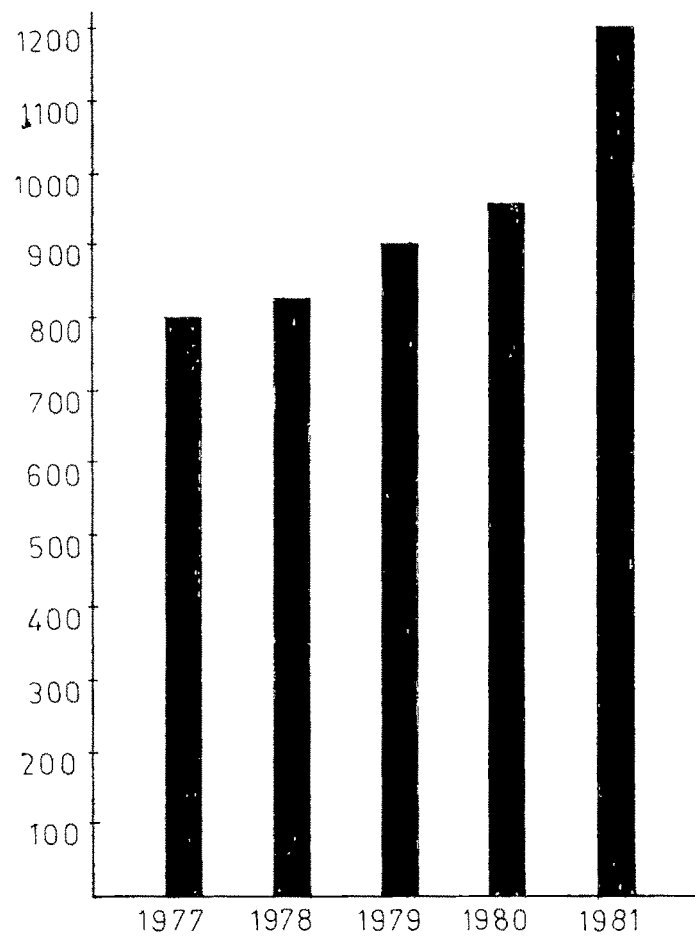
# PICTOGRAPH



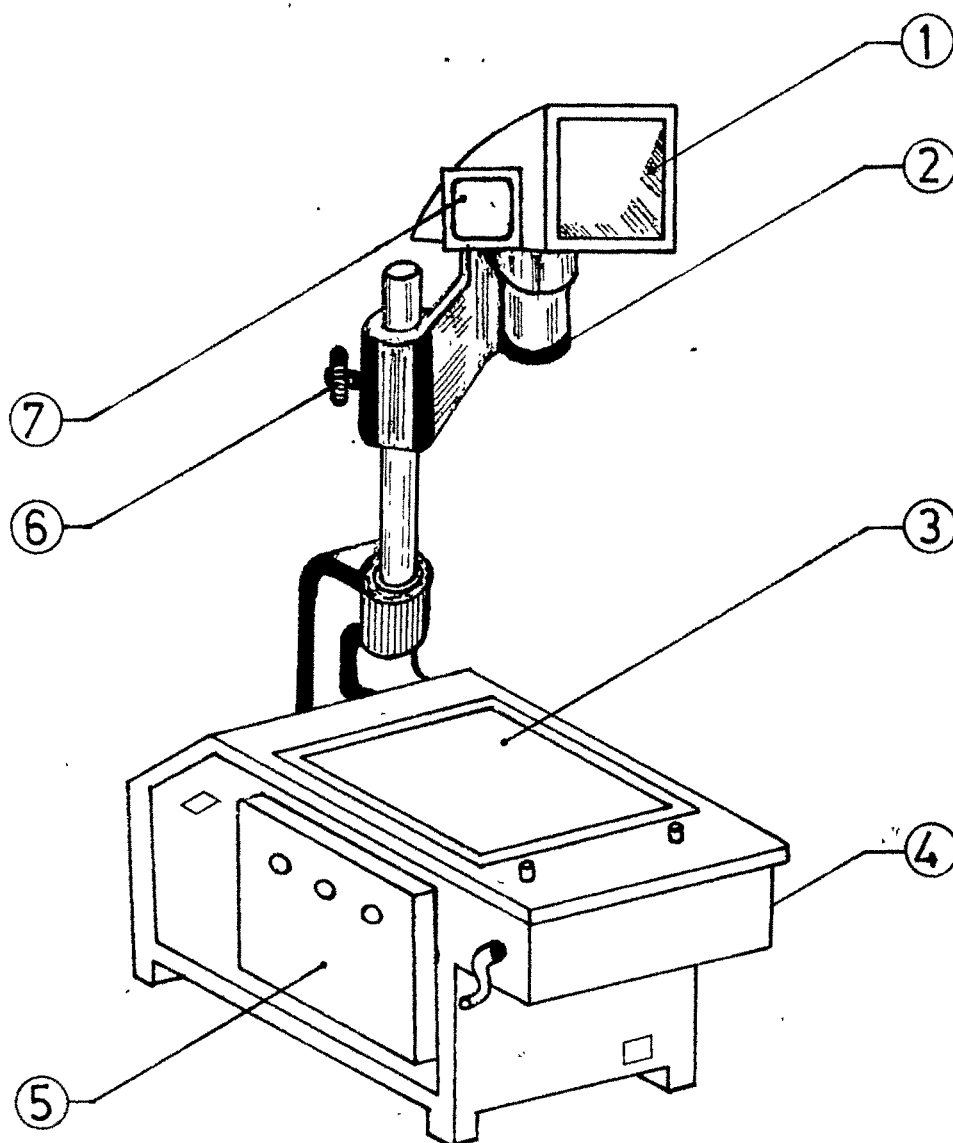
 = 200



# BAR GRAPH



# PICTORIAL CHART



1. FRONT SURFACE MIRROR

2. PROJECTION LENS

3. COVER GLASS

4. BODY OF PROJECTOR

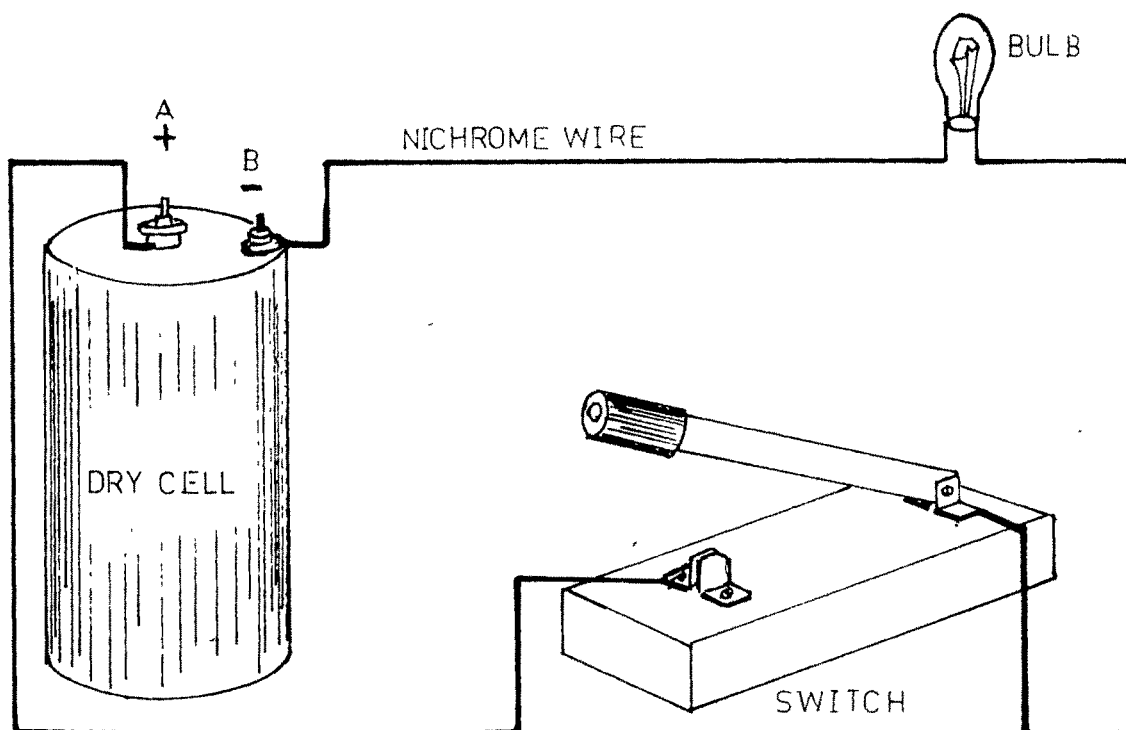
5. SIDE DOOR

6. FOCUSING KNOB

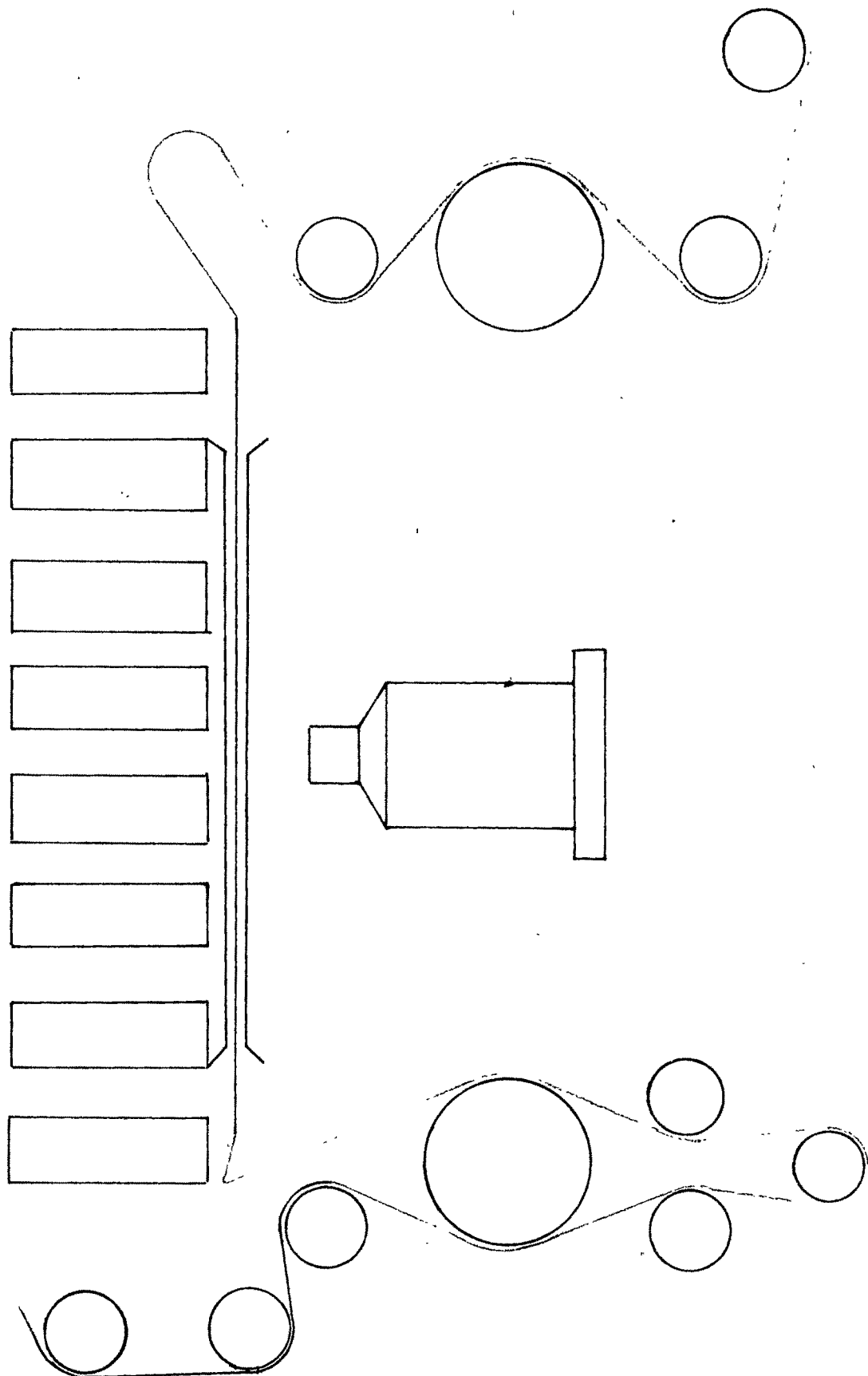
7. FOCUS AID

# SCHEMATIC CHART

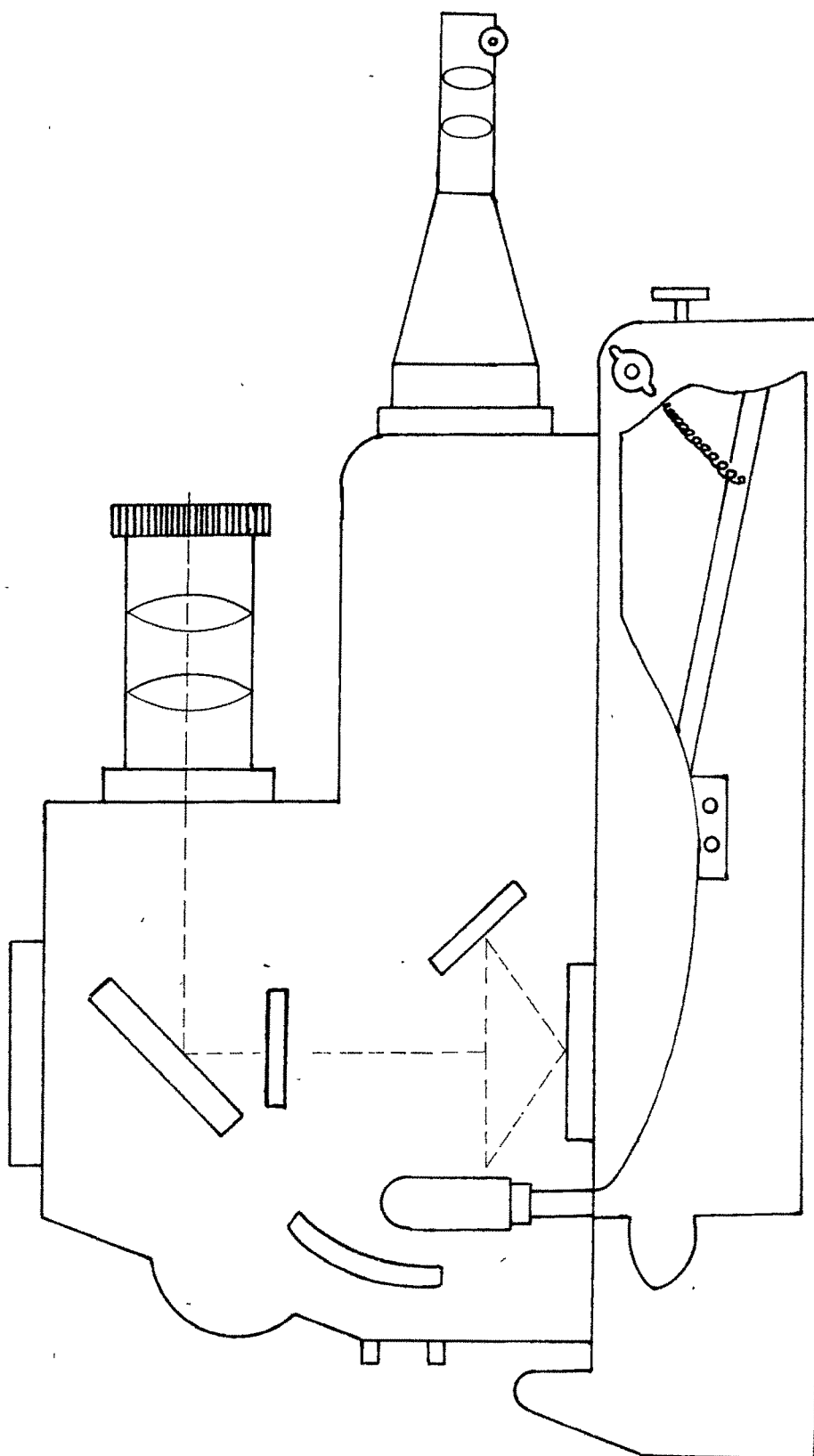
101



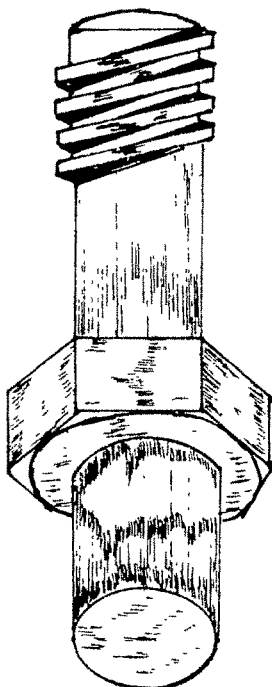
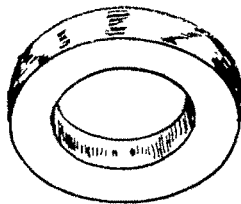
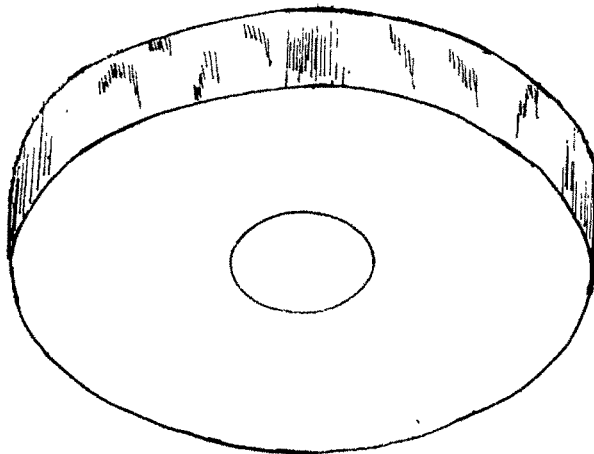
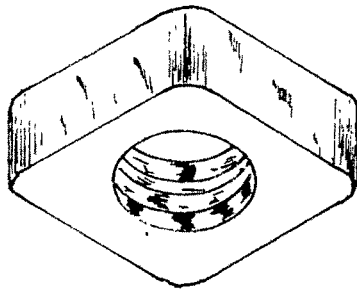
# DIAGRAMATIC CHART 102



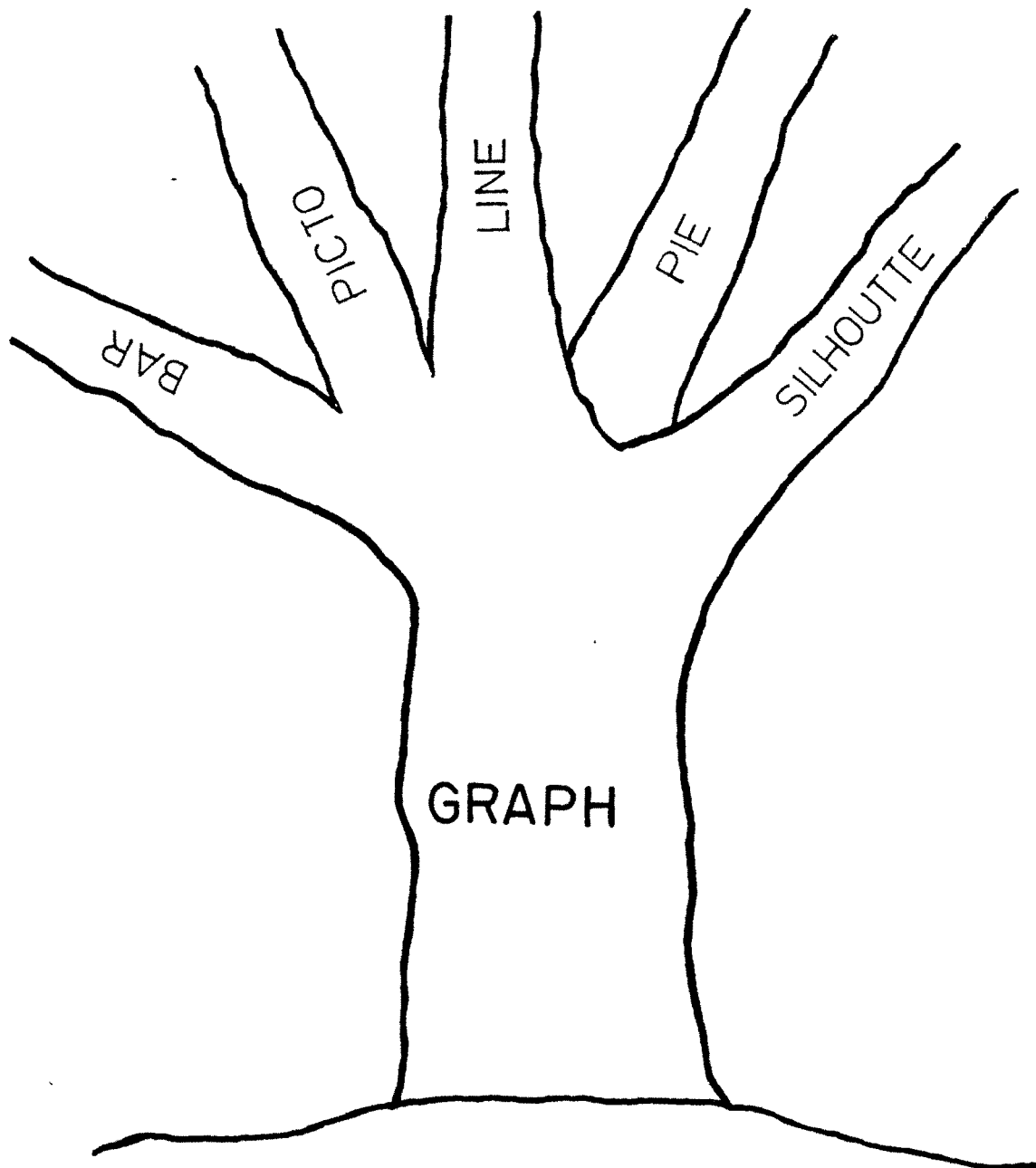
# ANIMATED CHART



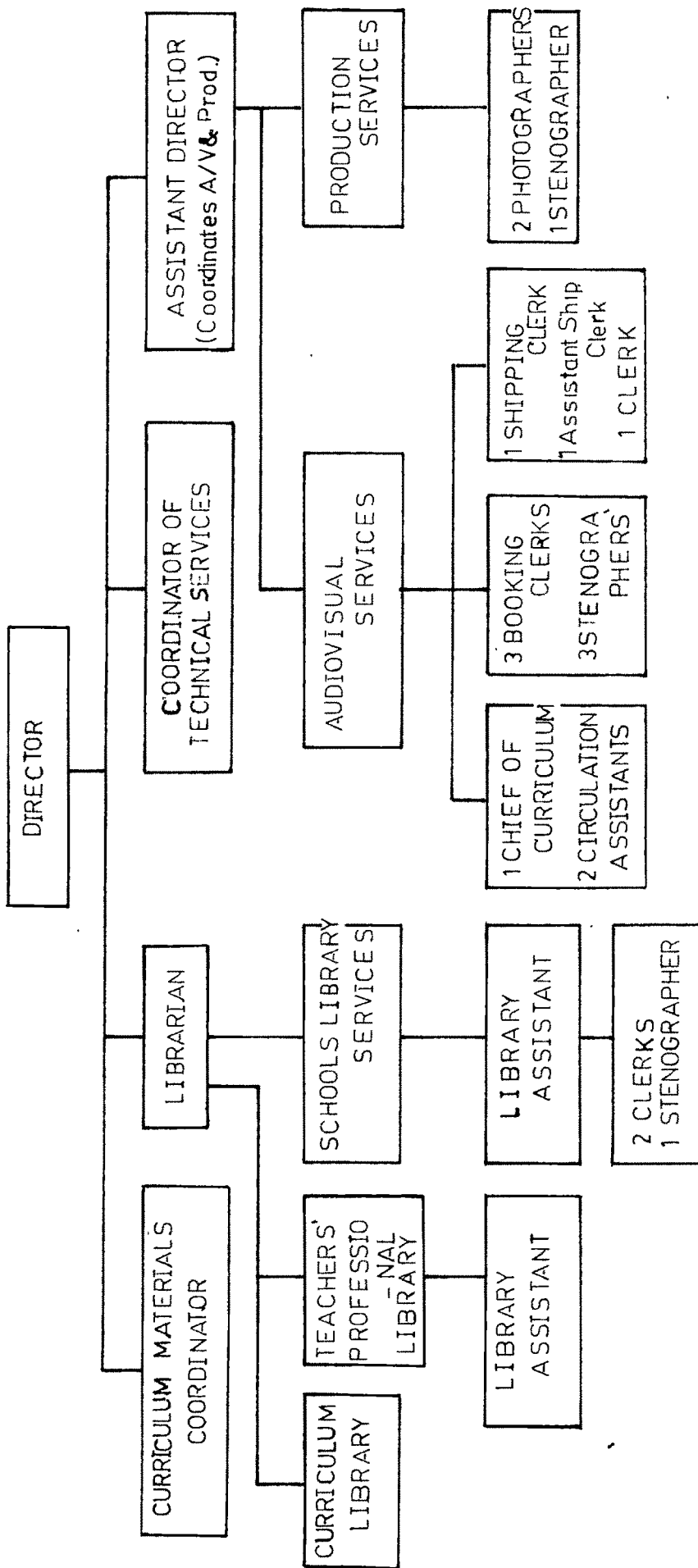
# EXPLODED CHART 104



# TREE CHART

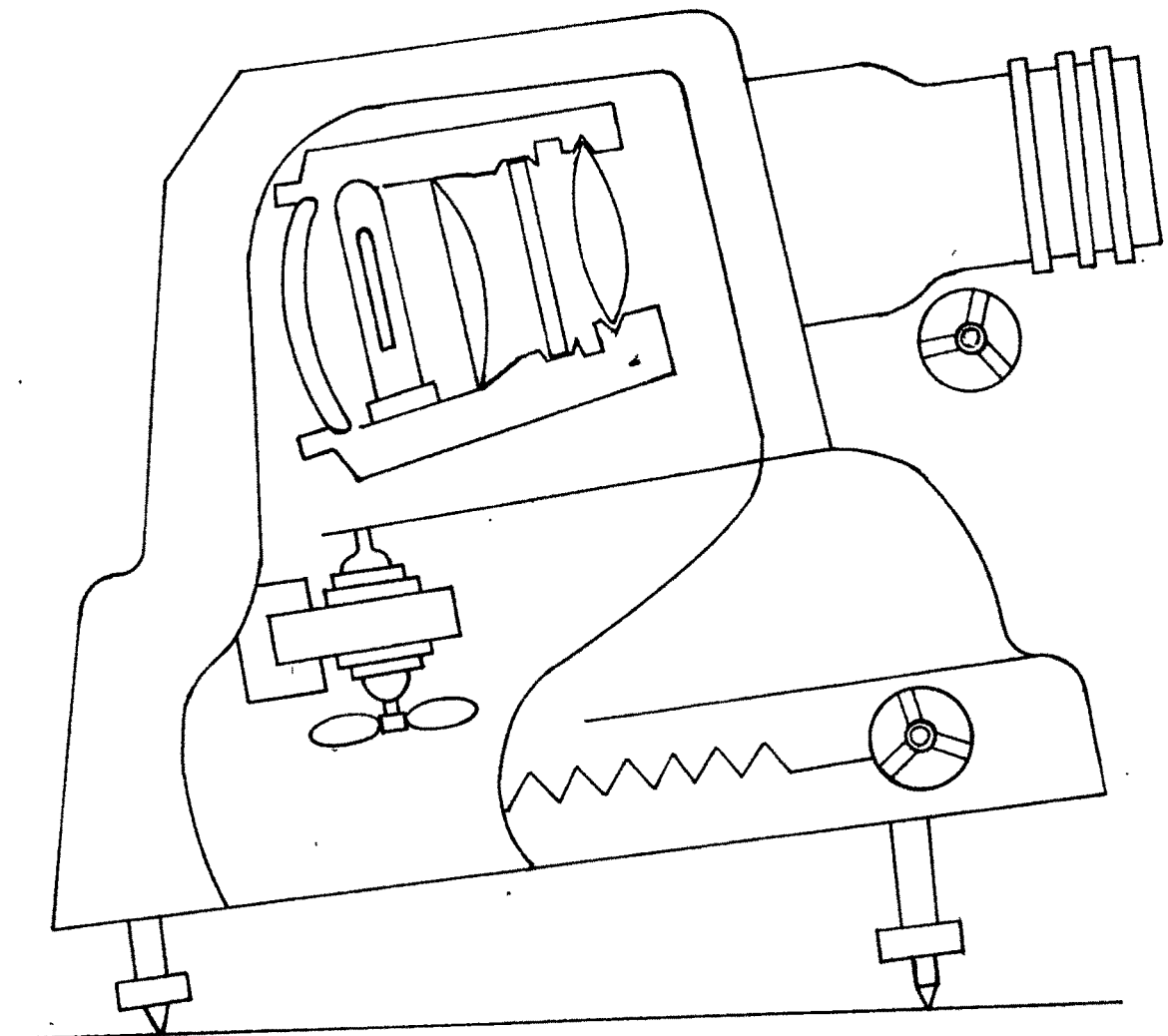


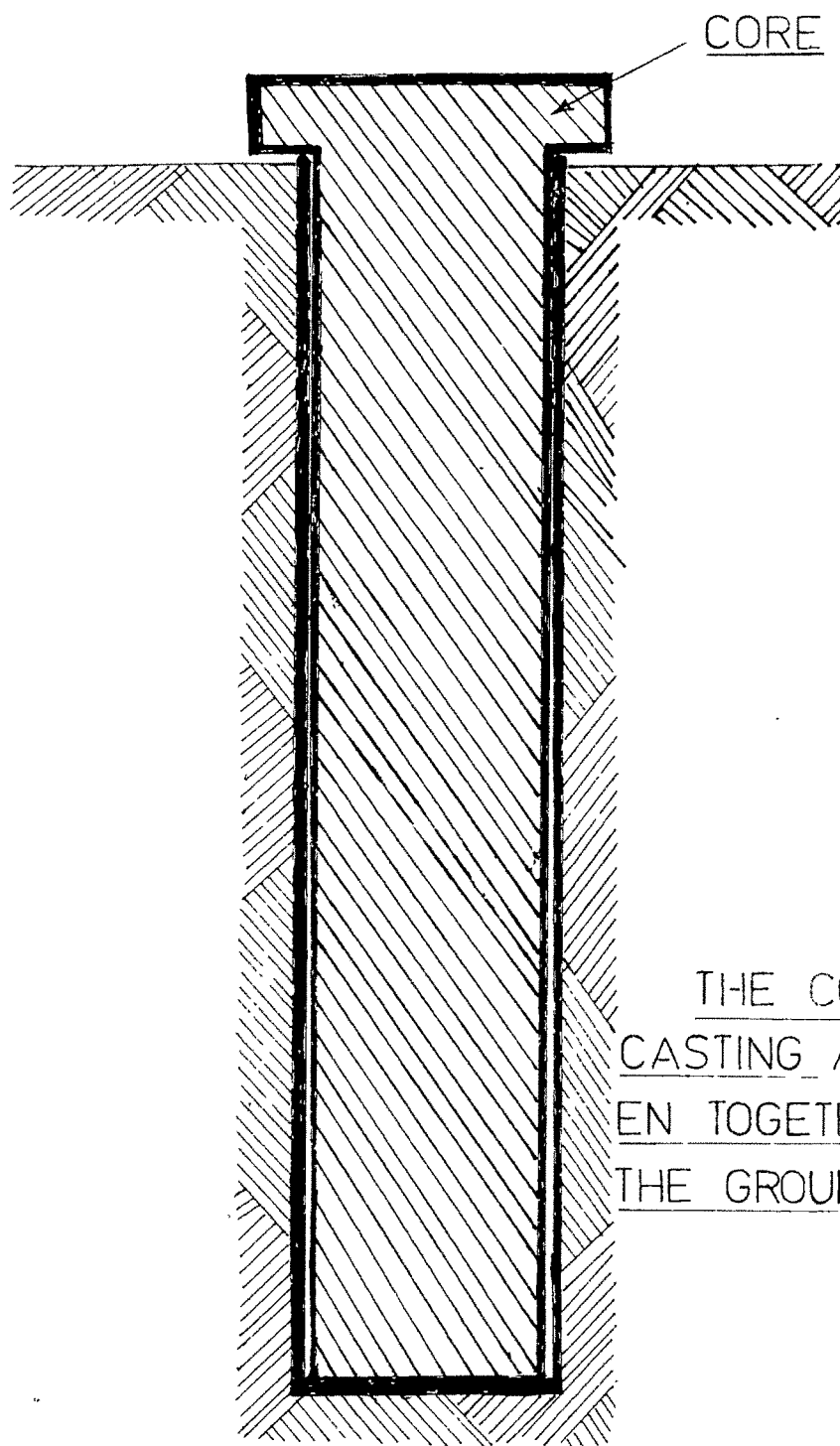
# FLOW CHART



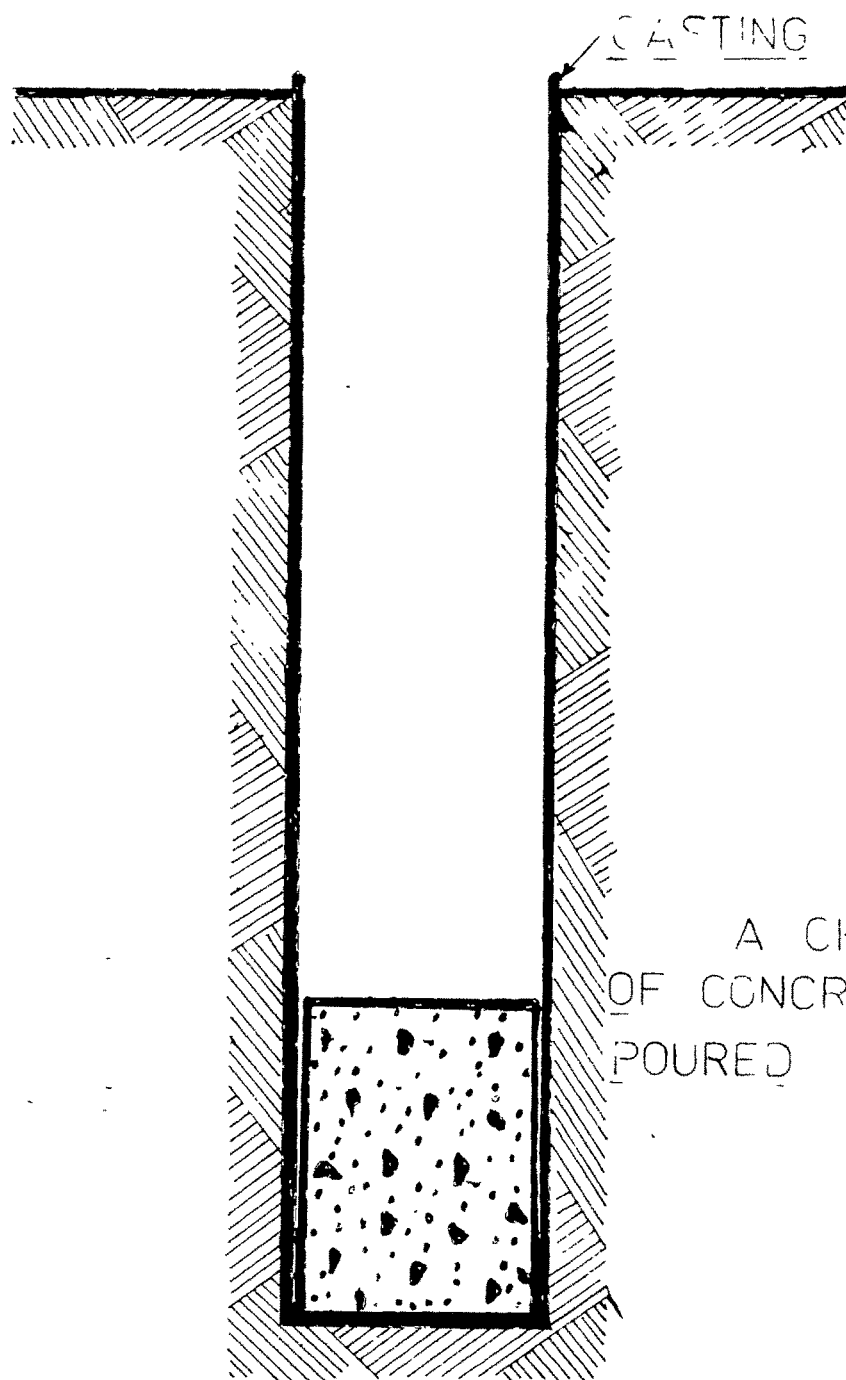


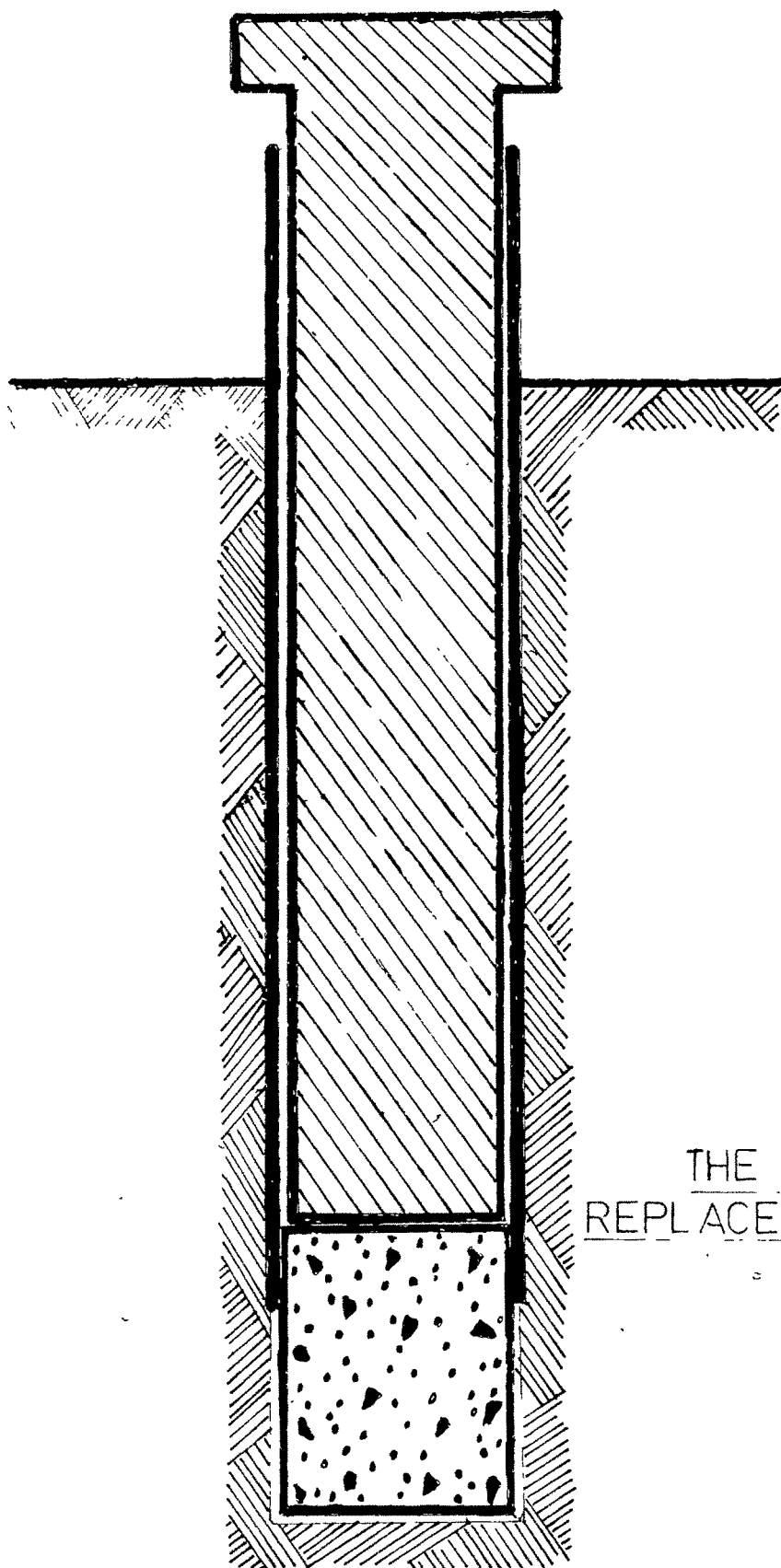
# PHANTOM VIEW CHART<sup>107</sup>



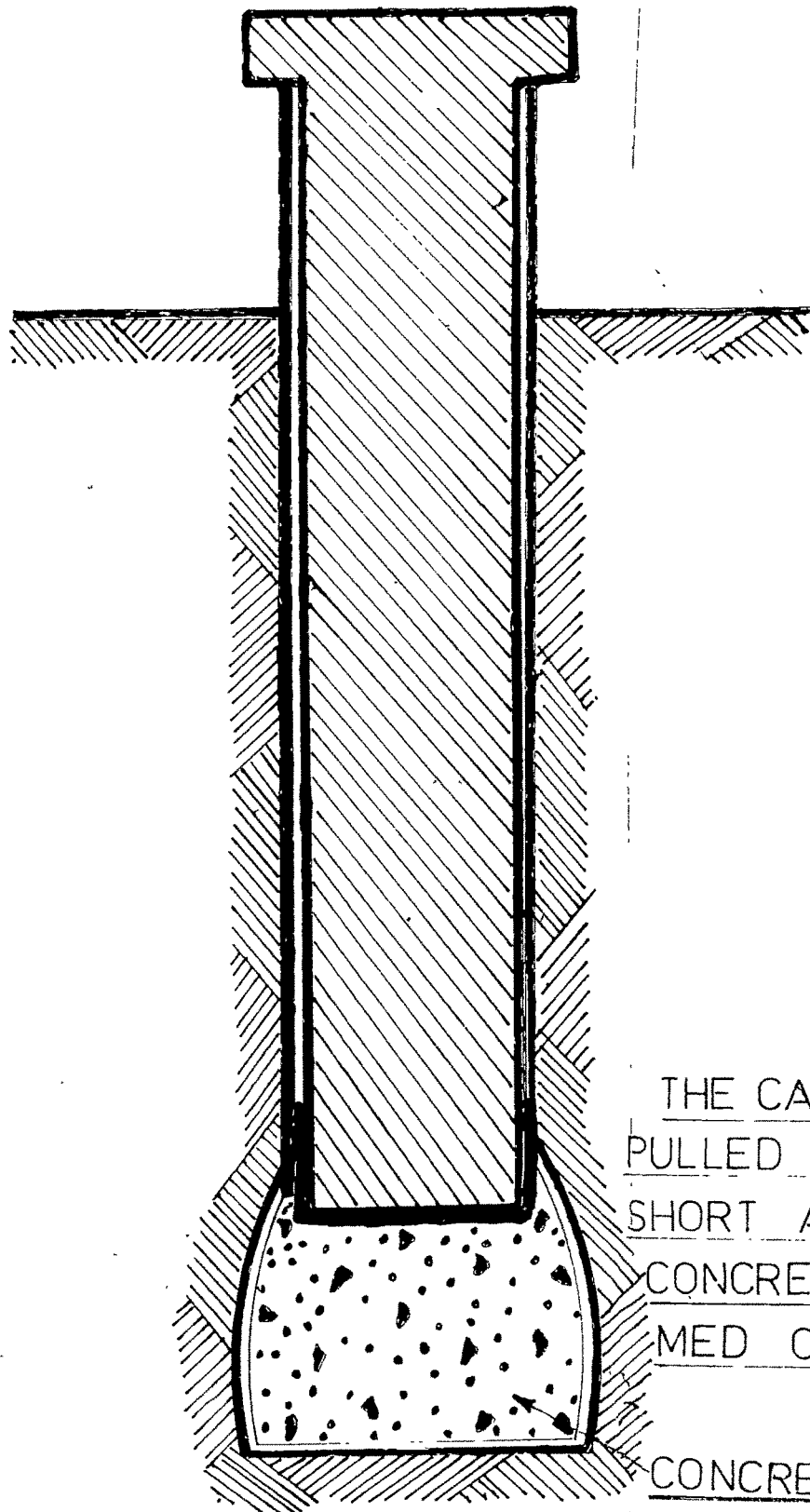


THE CORE AND  
CASTING ARE DRIV  
EN TOGETHER INTO  
THE GROUND TO



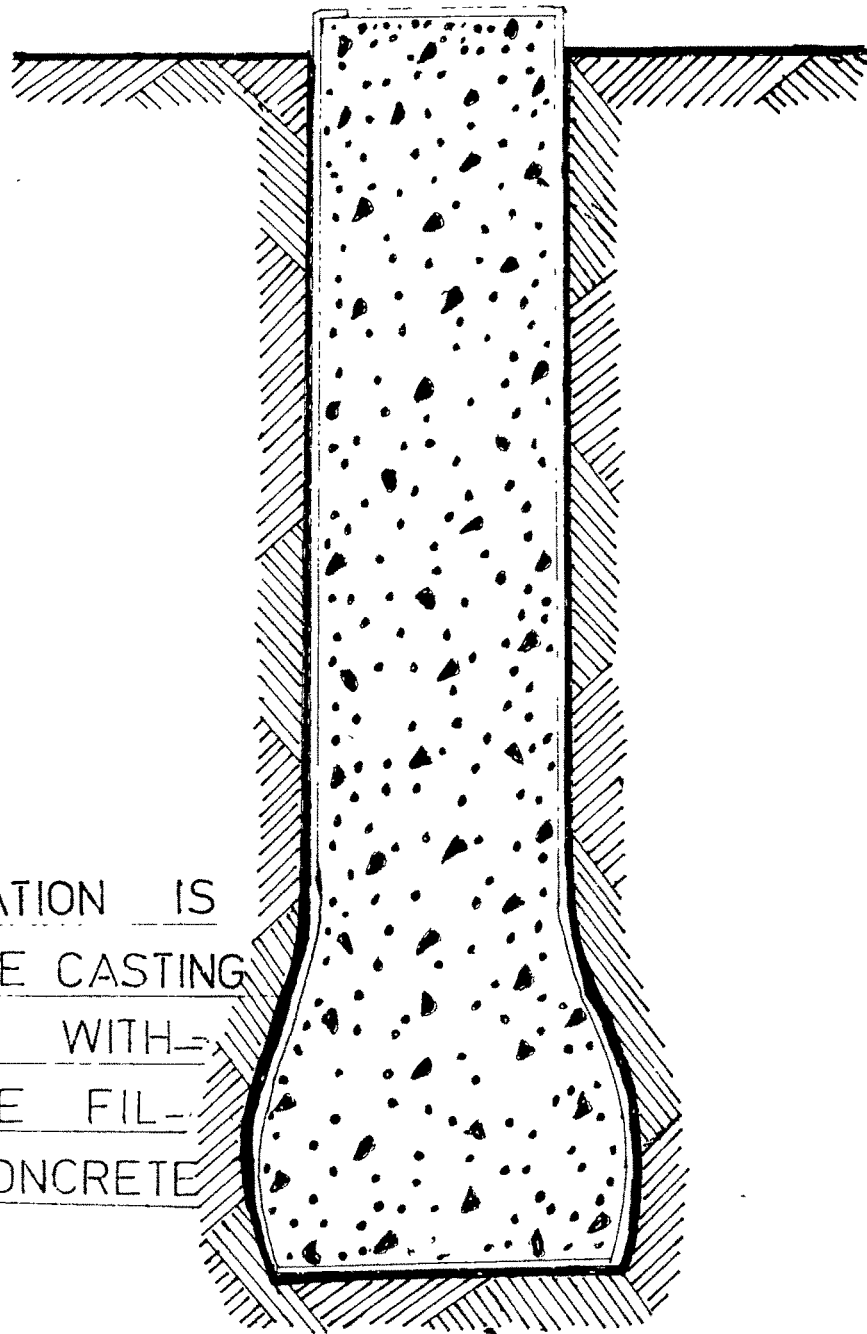


THE CORE  
REPLACED



THE CASTING IS  
PULLED UP A  
SHORT AND THE  
CONCRETE RAM-  
MED OUT.

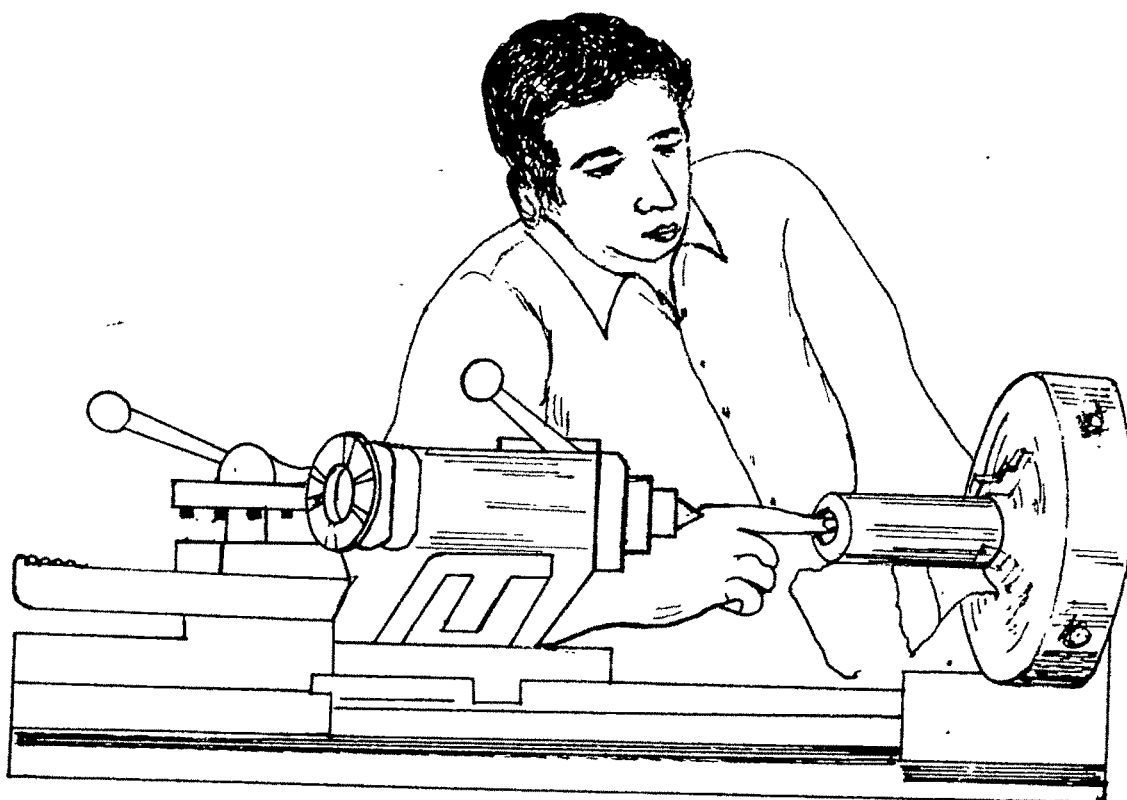
CONCRETE  
PLUG



THE OPERATION IS  
REPEATED, THE CASTING  
IS GRADUALLY WITH-  
DRAWN, WHILE FIL-  
LING WITH CONCRETE

DON'T YOU NEED YOUR  
FINGERS ANY MORE

109

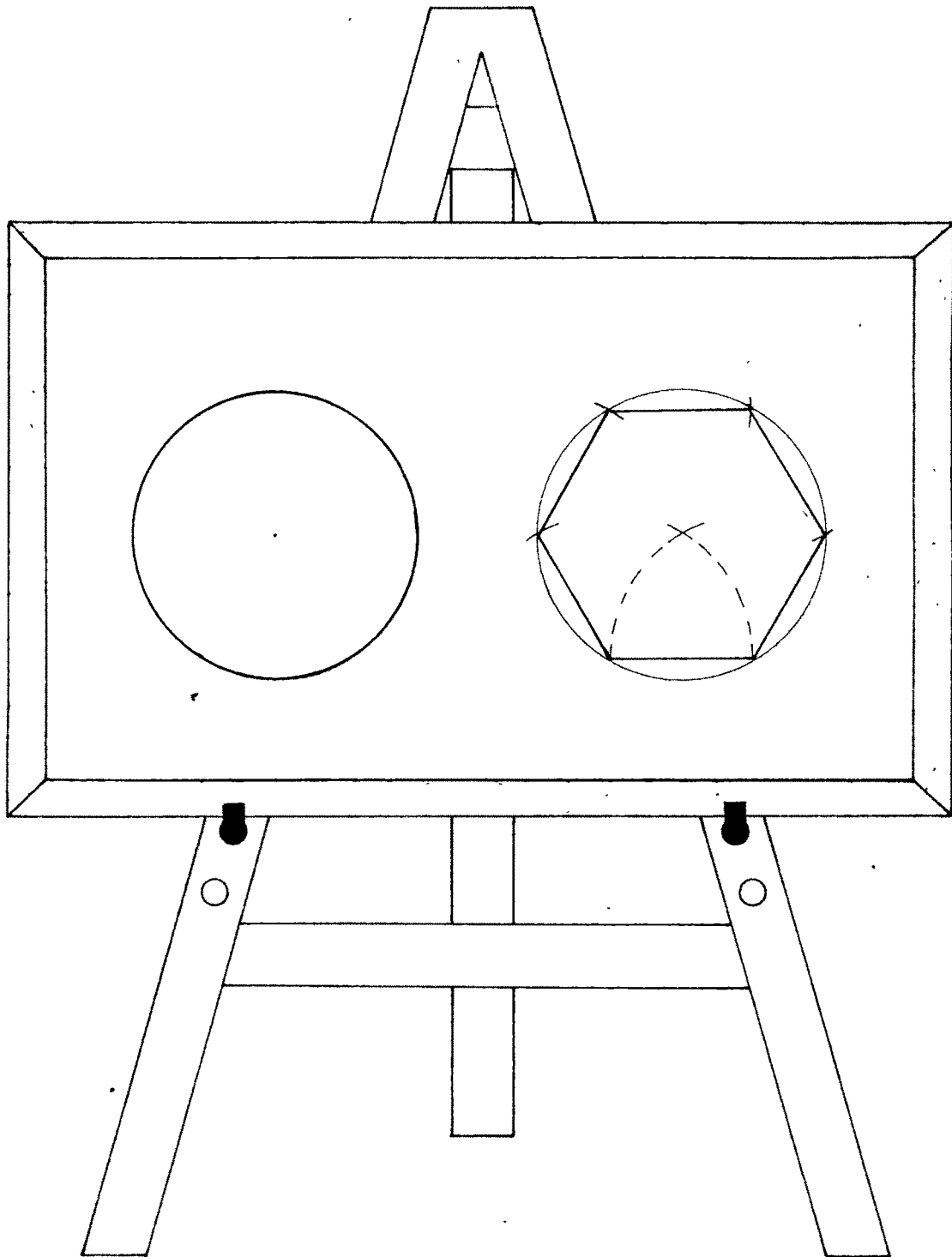


## 110



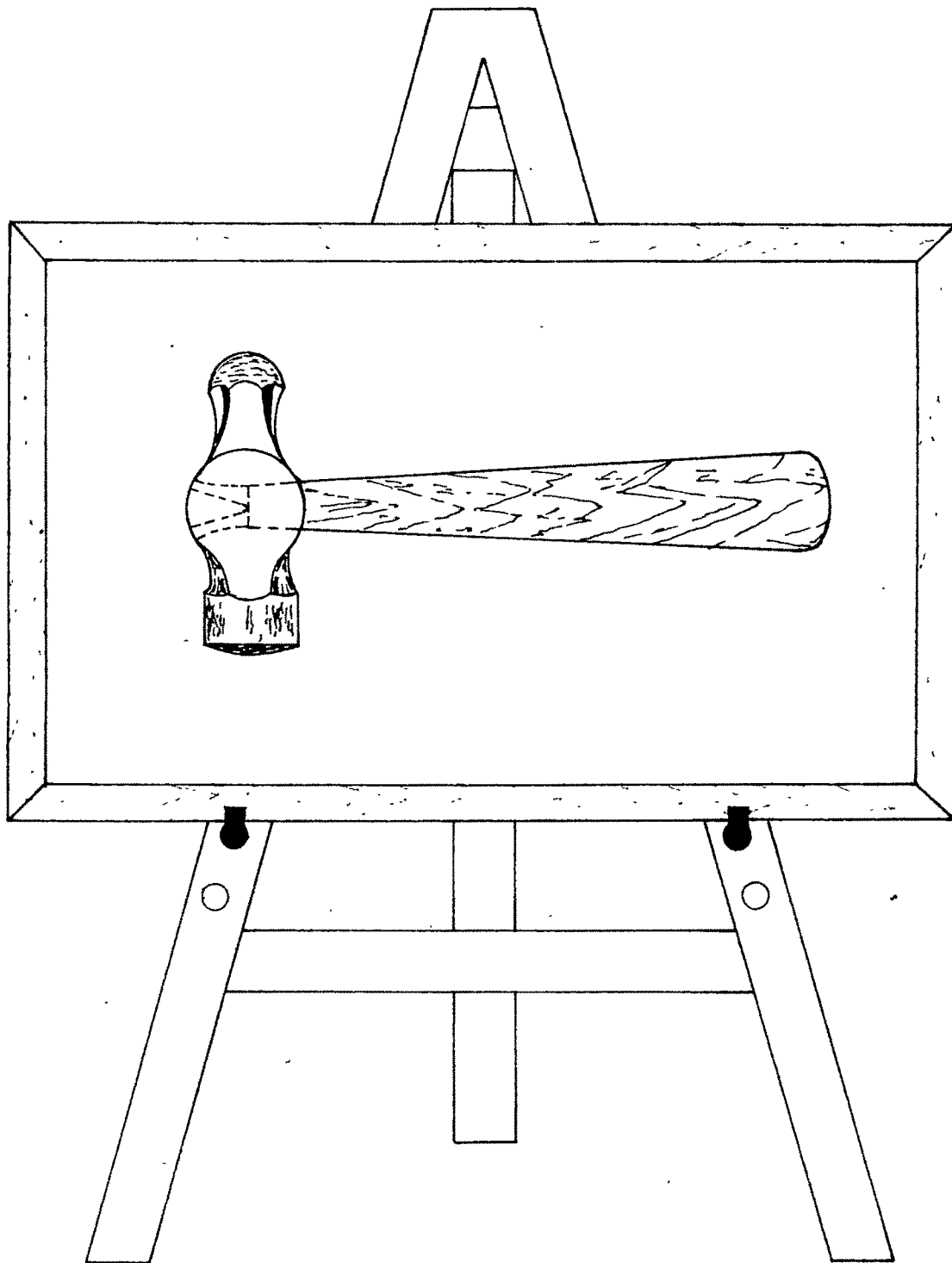


# CHALK BOARD EXERCISE 111



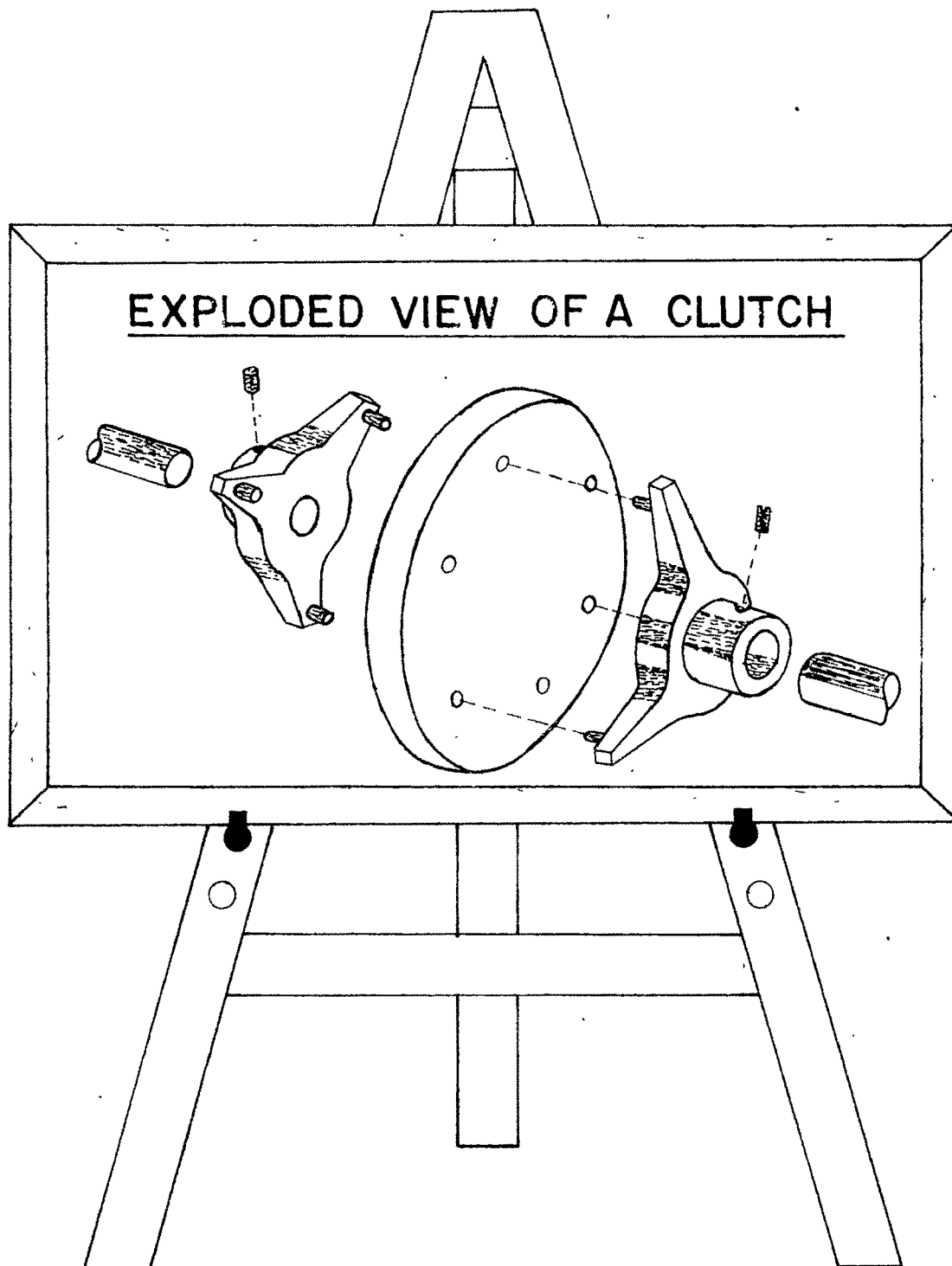
# CHALK BOARD EXERCISE

112



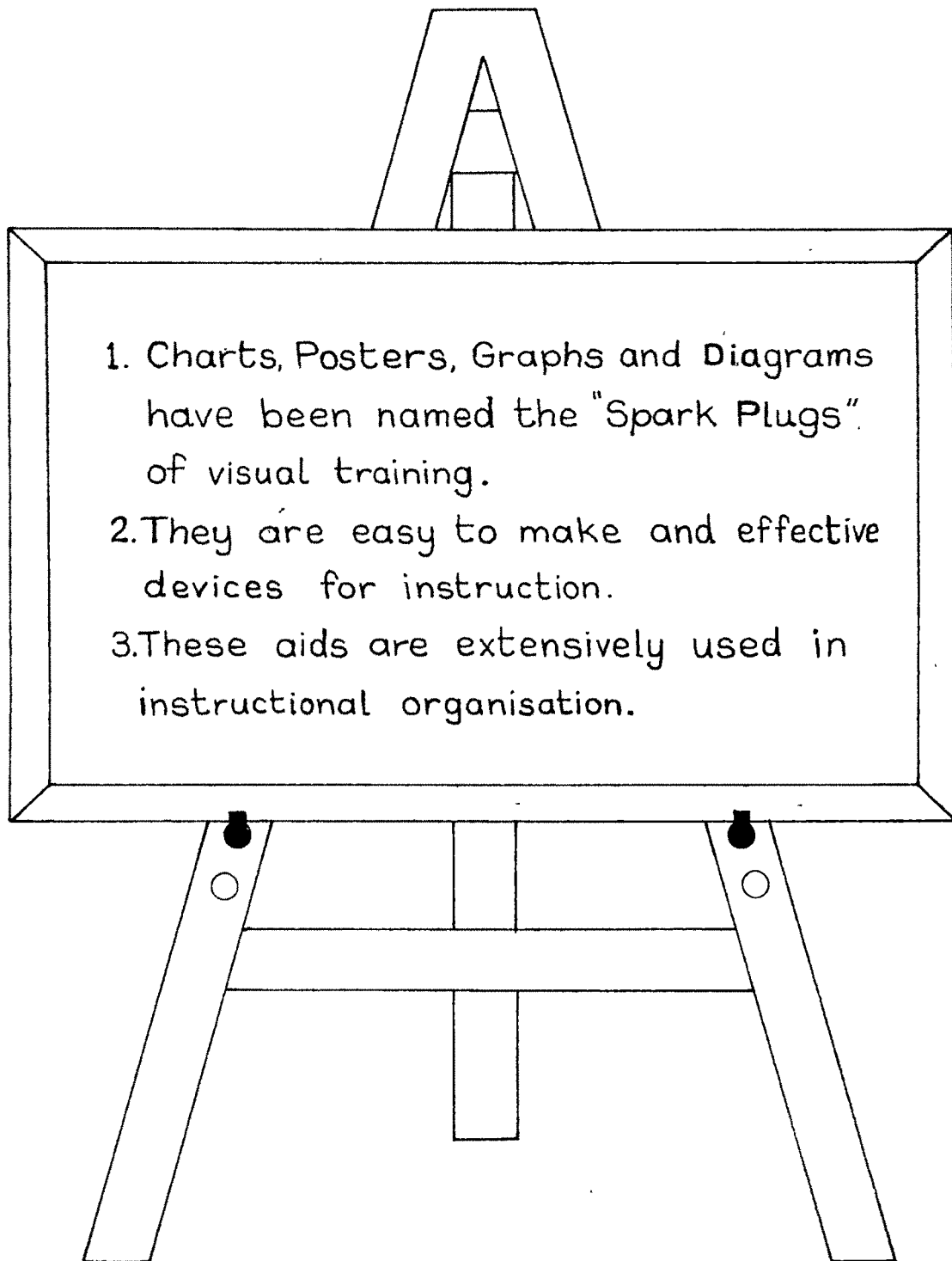
# CHALK BOARD EXERCISE

113



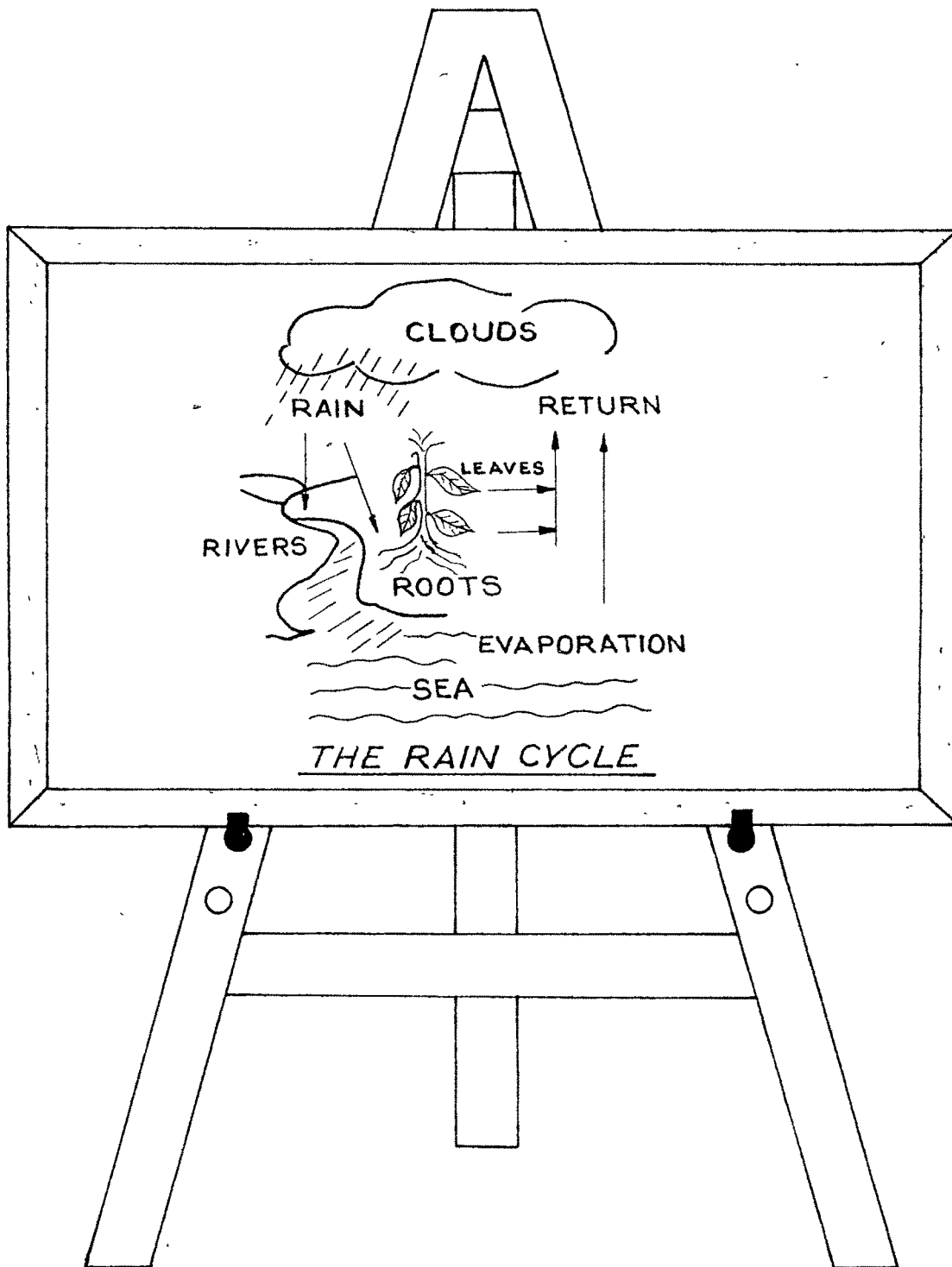
# CHALK BOARD EXERCISE

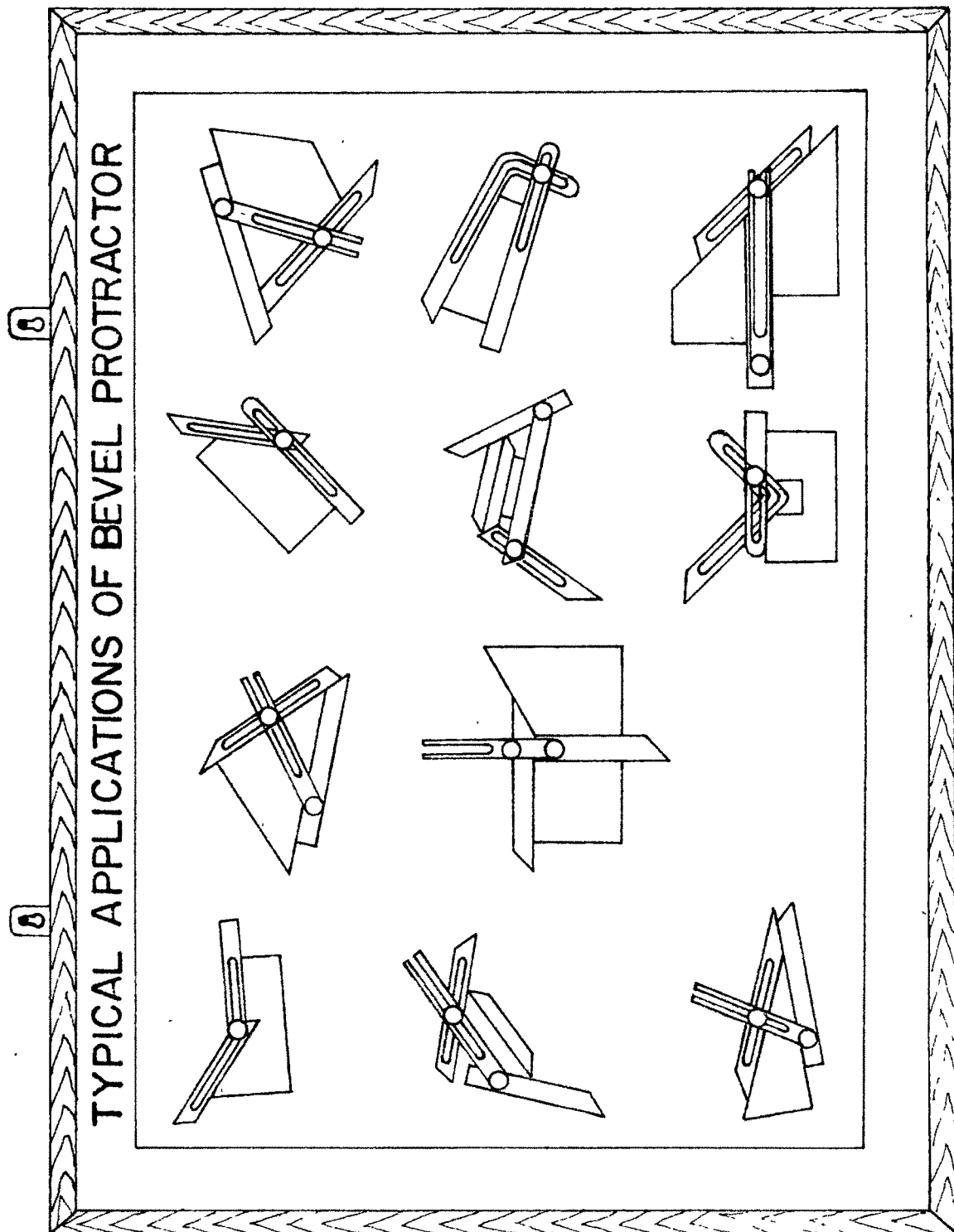
114



# CHALKBOARD EXERCISE

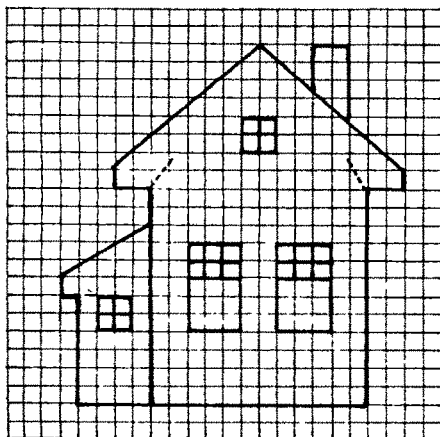
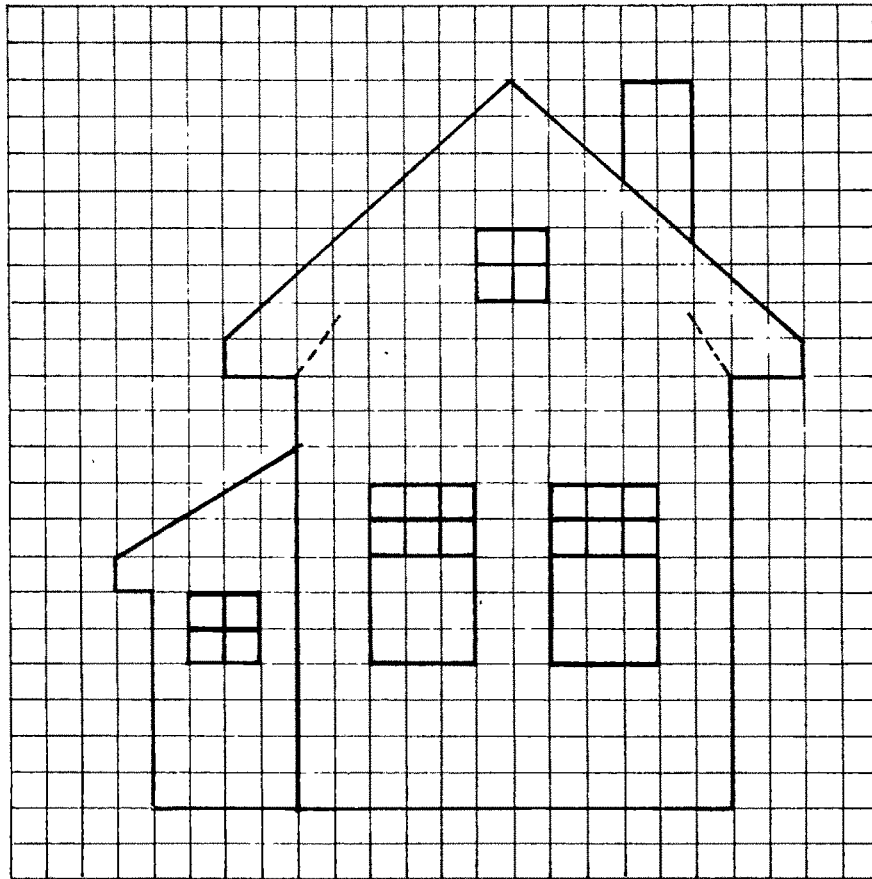
115





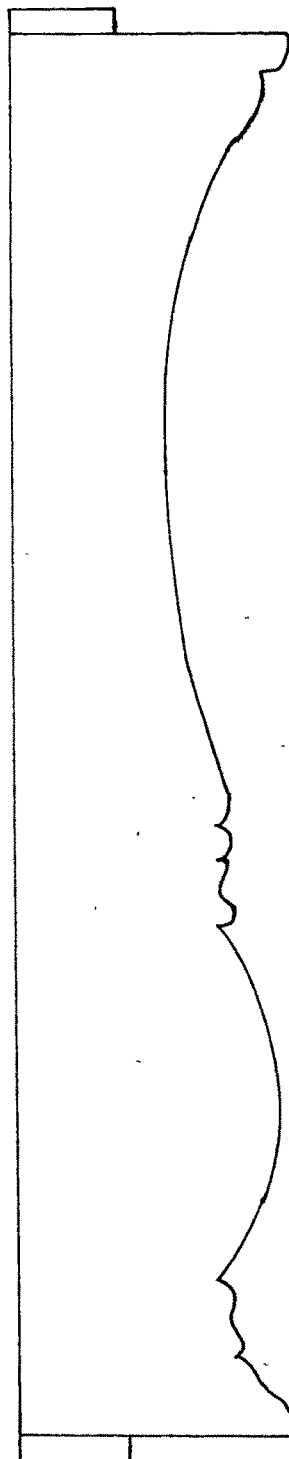
# GRID METHOD

119



# ENLARGING VISUAL ( PANTOGRAPH METHOD)

120



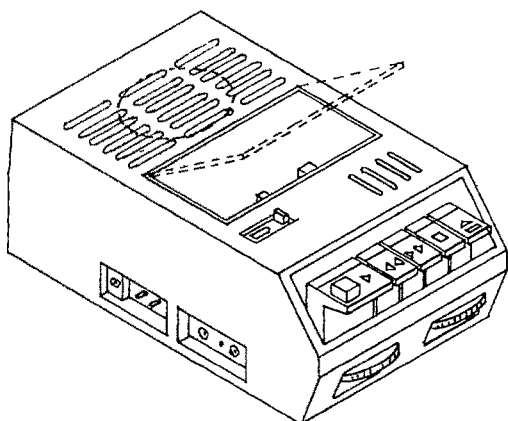
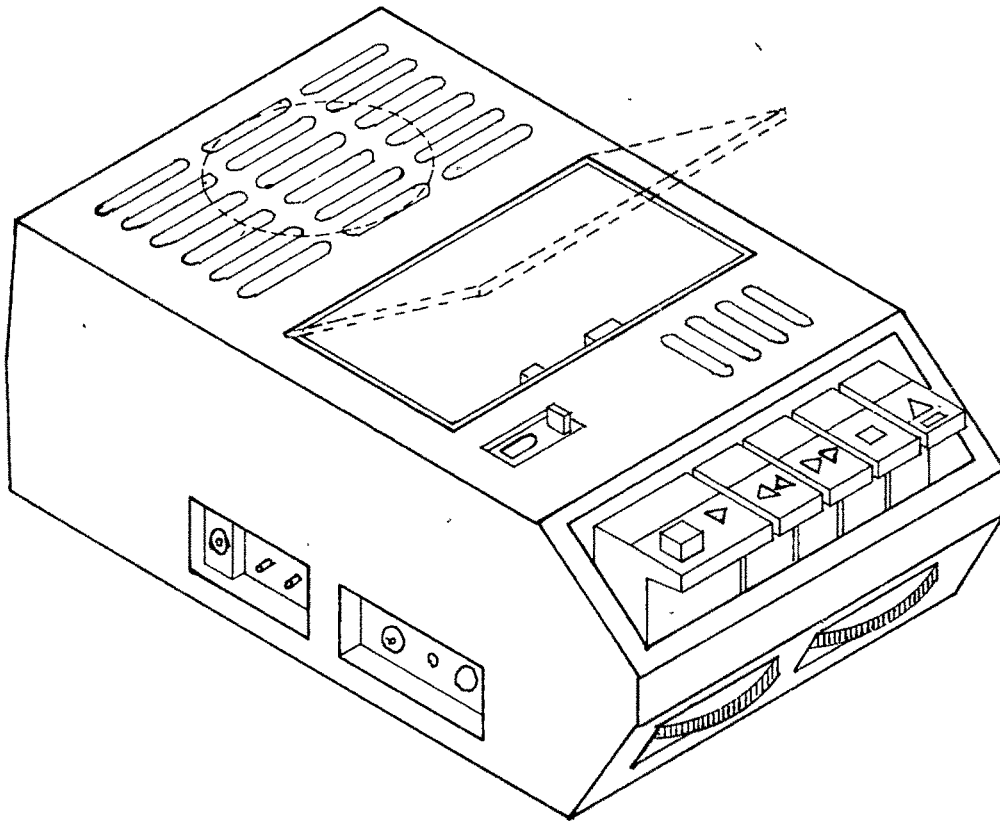
27

128

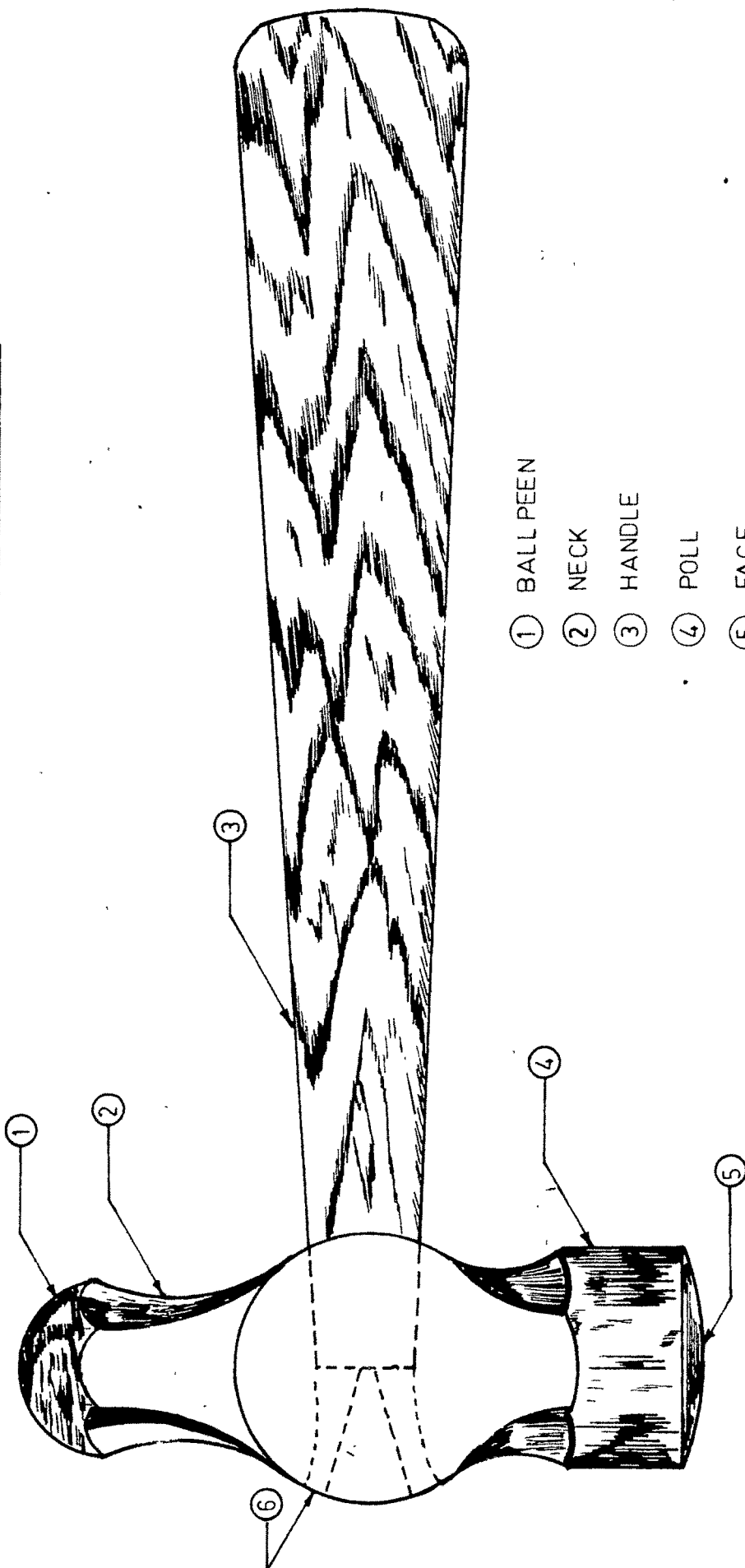


# ENLARGING VISUAL USING OPAQUE PROJECTOR

121



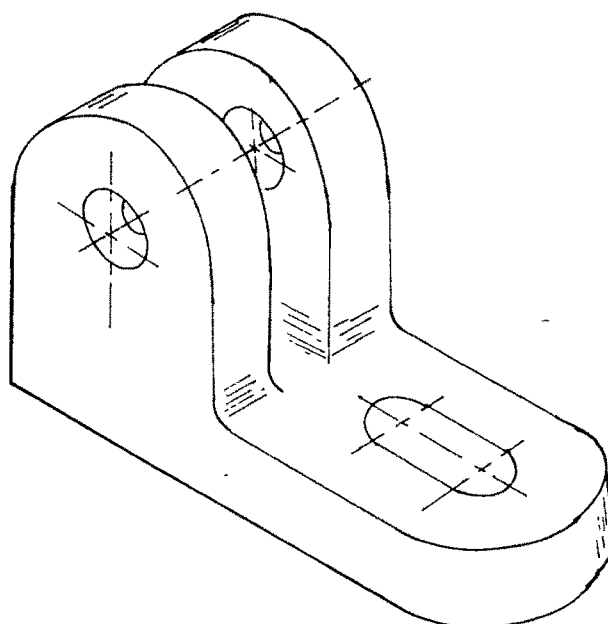
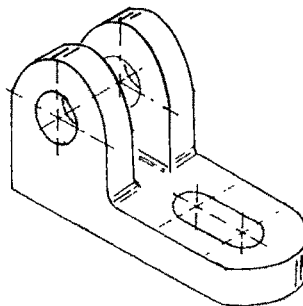
# BALL PEEN HAMMER



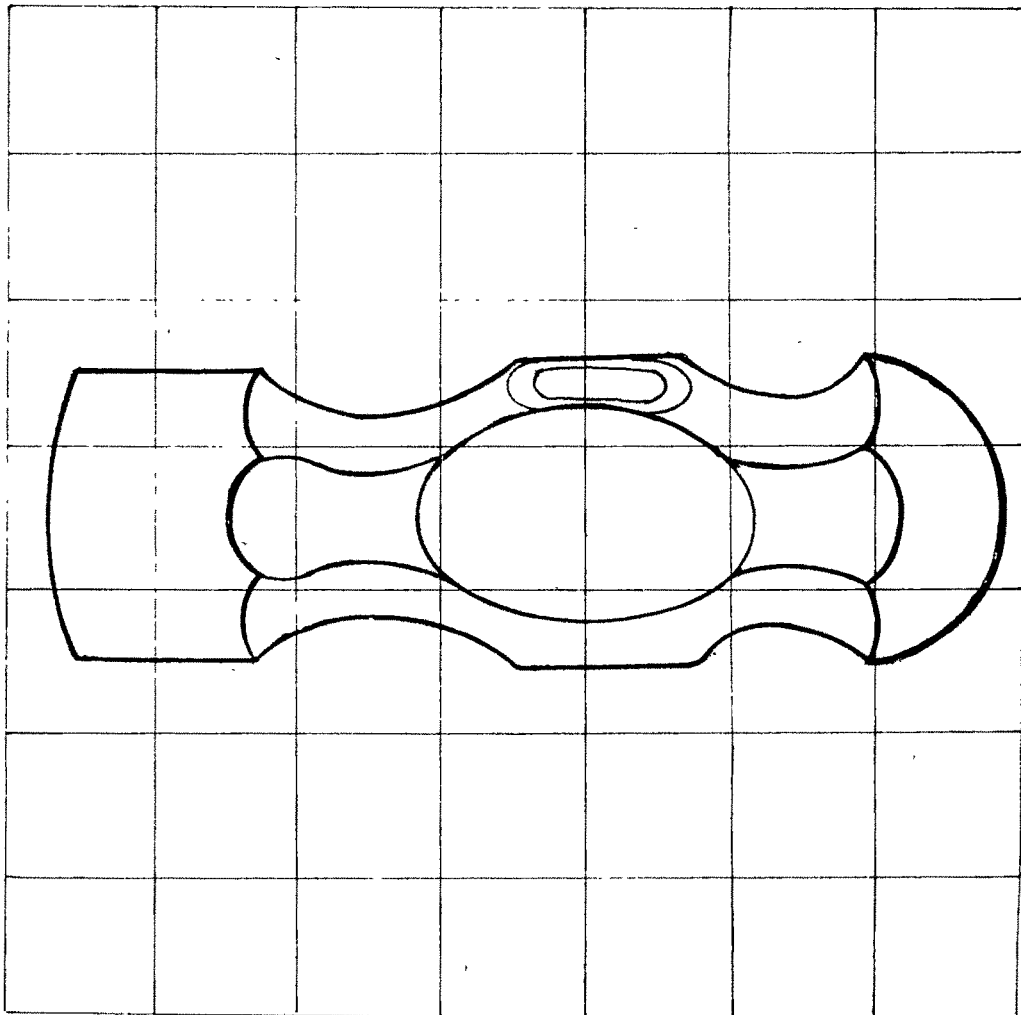
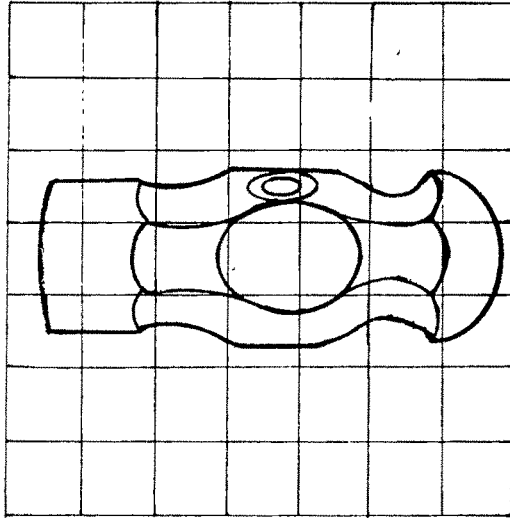
- ① BALL PEEN
- ② NECK
- ③ HANDLE
- ④ POLL
- ⑤ FACE
- ⑥ WEDGE

## REDUCING VISUAL USING PANTOGRAPH

123



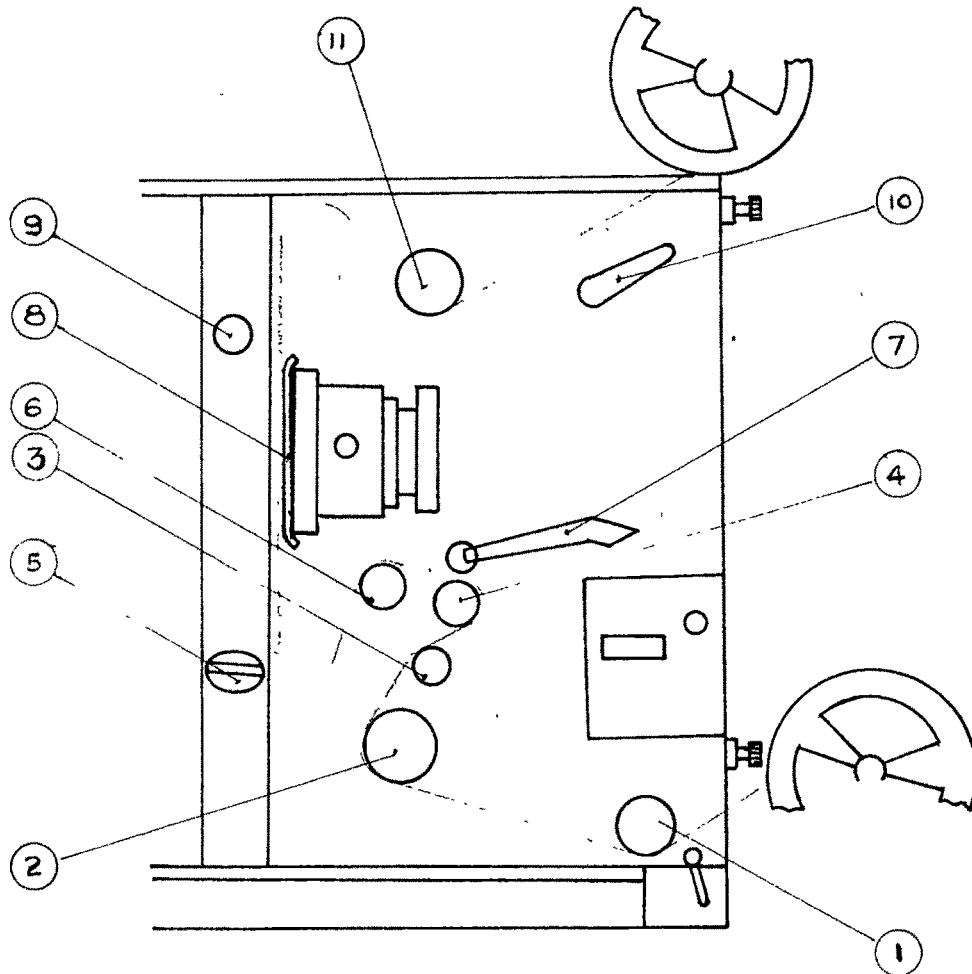
# GRID METHOD 124



# REVERSE PROJECTION

125

## BY O.H.P



(1) SNUBBER

(9) FRAMER

(2) TAKE UP SPROCKET

(10) PROJECT REWIND LEVER

(3) TENSION ROLLER

(11) SUPPLY SPROCKET

(4) SOUND DRUM

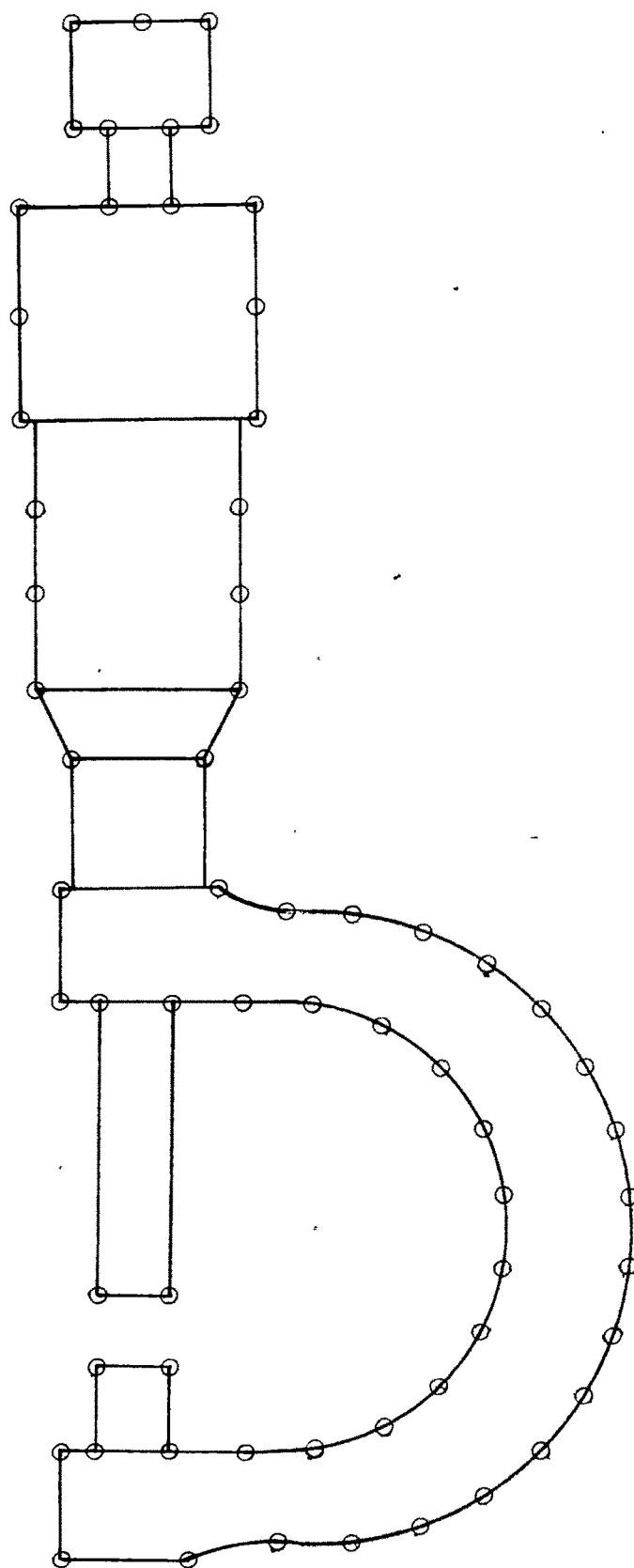
(5) SOUND SILENT SWITCH

(6) GUIDE ROLLER

(7) PRESSURE ROLLER

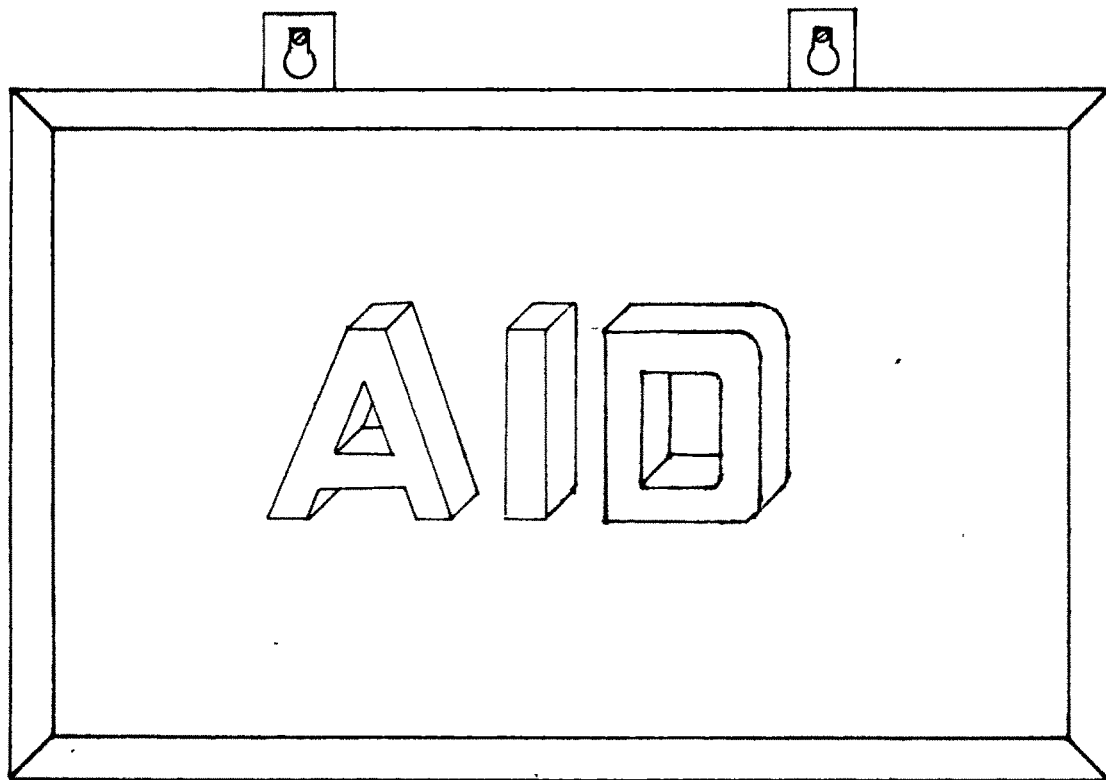
(8) GATE

# DOT DUST PUNCH METHOD

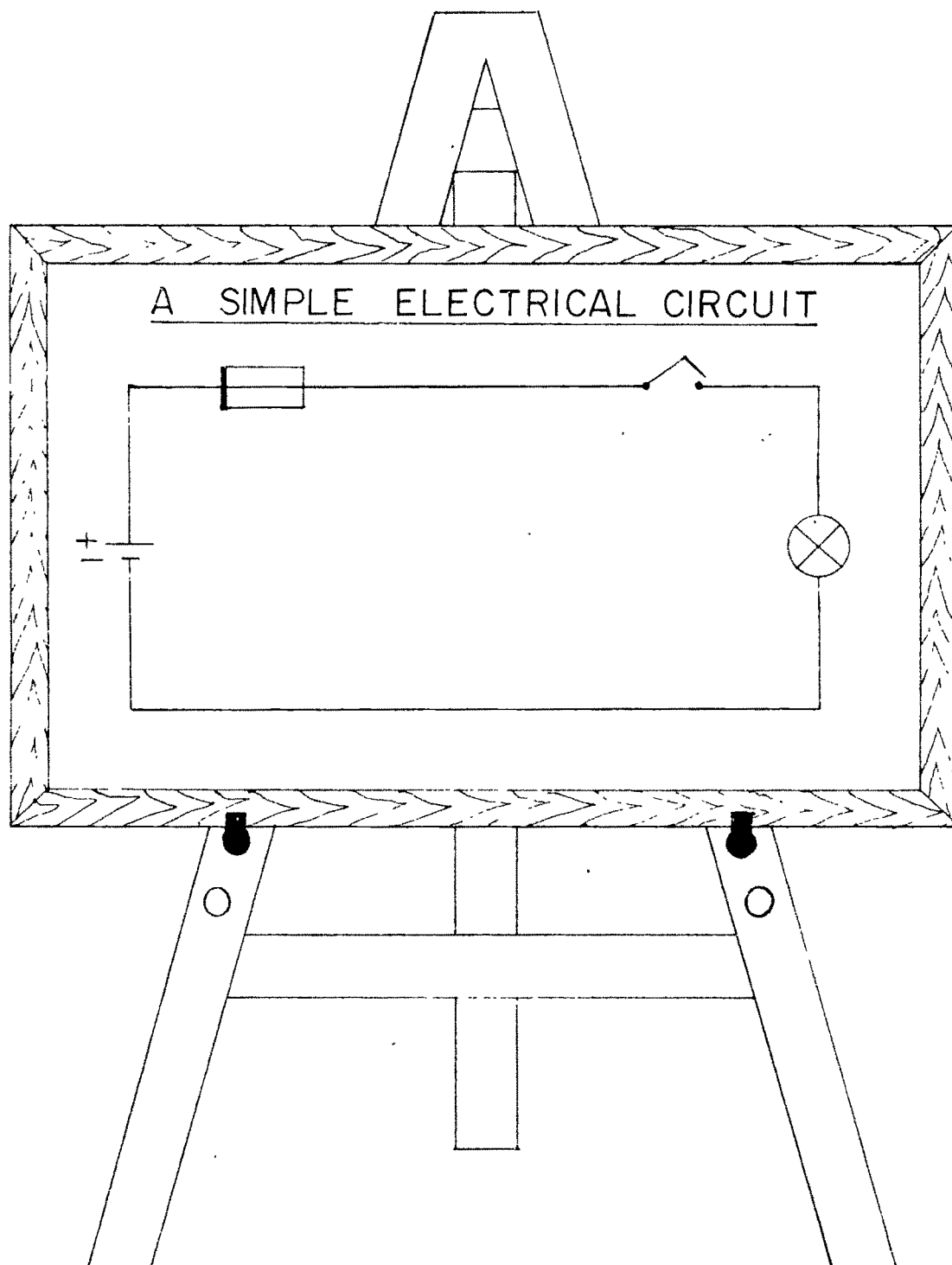


# BULLETIN BOARD EXERCISE

127



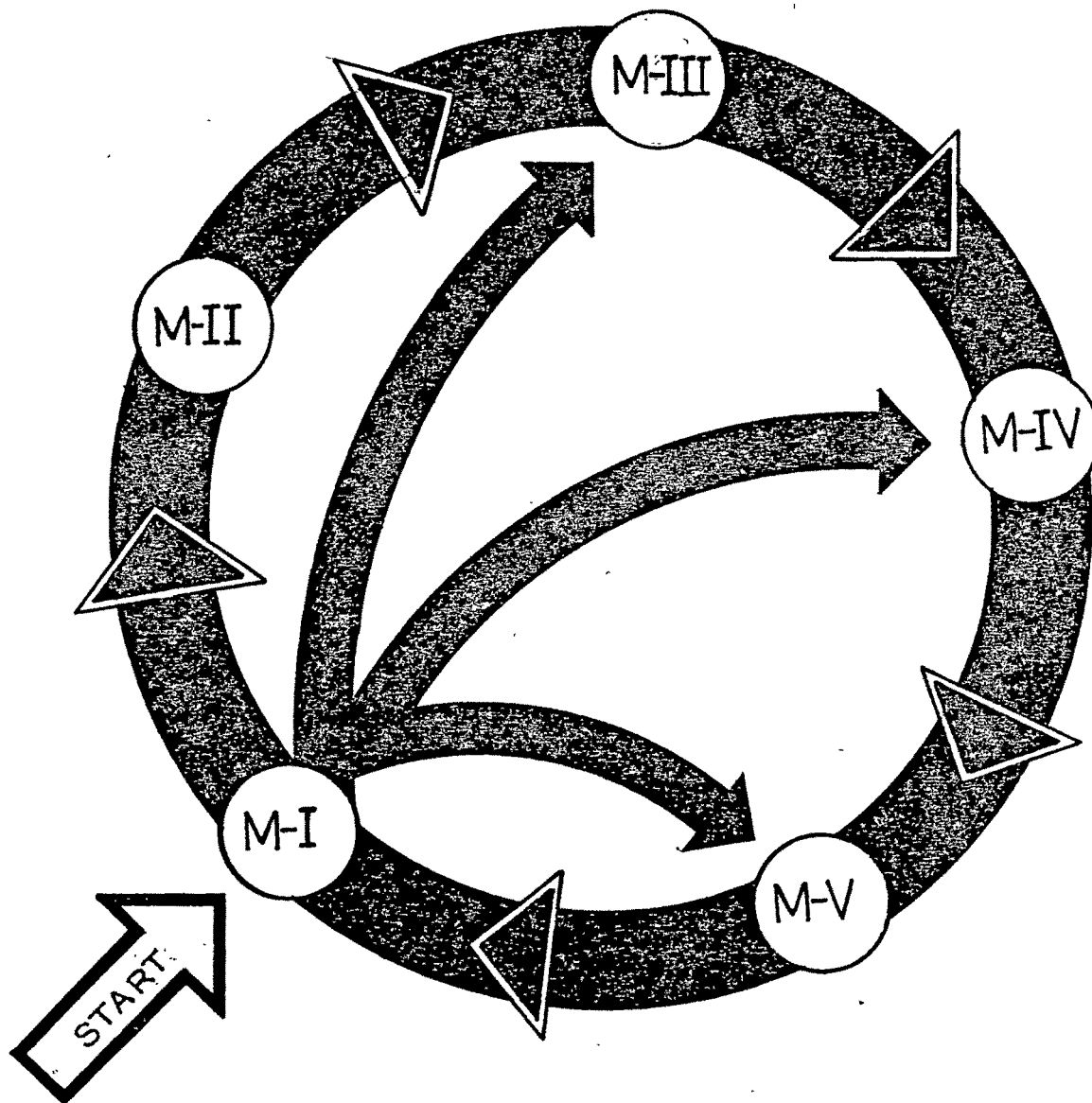
135



DIAGRAMATIC ILLUSTRATION



# AUDIO VISUAL EDUCATION



KRISHNAN.

Module III  
Units 1 to 10

Projected Aids  
CRITERION TEST

Trades: All  
Section A  
Time: 35 mts.

Use separate response sheets provided for Section A, Section B and Section C.

Answer Section A first, hand it over, then section B. Answer Section C last.

DO NOT write anything in the question paper; Return the question paper to your Instructor.

CIRCLE appropriate letter(s) a, b, c or d for Section A on response sheets.

1. Selection of audio visual material mainly depends on
  - a. the hardware and physical facilities.
  - b. the content only
  - c. the objectives only
  - d. the objectives and content.
2. The purpose of using an instructional medium is to:
  - a. communicate the content stimuli not essentially related to the objectives.
  - b. present your skills to your audience, on making audio visual materials.
  - c. elicit proper response that serve the objectives.
  - d. use all the available hardware in your institute or school to satisfy the administrators.
3. A teacher has written a script for producing 35 mm film transparencies on a topic based on his lesson plan. He desires to have these transparencies made in such a way that the sequence cannot be altered. Which one of the following will be best suitable for this.
  - a. a set of films.
  - b. a filmstrip with 30 frames.
  - c. a set of transparencies
  - d. none of the above.
4. A teacher prepares a number of slides on a topic with certain advantages in mind. Among the following which one is a specific advantage of slides.
  - a. Sequence cannot be changed
  - b. Compactness
  - c. Any slide can be revised.
  - d. Can be operated without much training.

5. You do not have facilities for darkening the room. You are given the following projectors to be used in the illuminated room, and you have to use them, facing the class. Which one will you select ?
  - a. epidiascope
  - b. overhead projector
  - c. filmstrip projector
  - d. slide projector
6. You are not having a chalkboard for taking a class, but you are given the following aids and equipment to use them. Select the aid that will permit you to add information on it, while using them.
  - a. 16 mm film
  - b. slide
  - c. transparency
  - d. filmstrip
7. The most important reason for selecting a motion picture for a topic of instruction is:
  - a. it is interesting
  - b. it is considered motion is essential
  - c. it is not possible to show motion by any other means
  - d. none of the above
8. Which one of the following is not an advantage of the Television over the motion picture when you are confronted with the problem of choosing one of them as the medium for your class.
  - a. TV can show motion.
  - b. TV can be used simultaneously for many classrooms at the same time.
  - c. TV can be used for taking remote control pictures where access is not possible as in explosives.
  - d. TV can be used for immediate feedback whereas other aids will take processing time.
9. One specific advantage of multi-image presentation when compared with other projection methods is -
  - a. It helps to compare and contrast objects and events one after the other systematically in a sequence on one screen.
  - b. Horizontal and Vertical format of slides can be projected.
  - c. Viewers can compare and control objects or events at one time from the images seen on more than one screen
  - d. Possibility of keystone effect is completely ruled out.

10. We use a variety of media in teaching because.
  - a. Each medium has different type of instructional capability
  - b. Students are attracted by the use of modern media equipment
  - c. It is easy for the teacher to present lessons with different media.
  - d. It is economical.
11. In which of the following projectors will you place the projection material without turning it upside down ?
  - a. overhead projector
  - b. filmstrip projector
  - c. motion picture projector
  - d. slide projector
12. The direct projection system is not applicable in the case of
  - a. slide projector
  - b. opaque projector
  - c. motion picture projector
  - d. filmstrip projector.
13. The indirect projection system is applicable in the case of
  - a. opaque projector
  - b. overhead projector
  - c. slide projector
  - d. 16 mm motion picture projector
14. The reflected projection system is applicable in the case of
  - a. slide projector
  - b. motion picture projector
  - c. opaque projector
  - d. overhead projector
15. The projection material is placed lying in a horizontal plane in the case of
  - a. slide projector
  - b. motion picture projector
  - c. filmstrip projector
  - d. overhead projector
16. In which of the following projectors no darkening of the room is required ?
  - a. slide projector
  - b. overhead projector
  - c. opaque projector
  - d. motion picture projector

17. The maximum viewing distance for an image projected by slide, filmstrip, or motion picture projector and television are
- six times and two times the width of the screen respectively.
  - sixteen times and six times the width of the screen respectively.
  - sixteen times and eight times the width of the screen respectively.
  - six times and sixteen times the width of the screen respectively.
18. It is necessary to position the filament of lamp in a projector parallel to the screen
- to prevent light dispersing in all directions
  - to avoid too much light emission.
  - to ensure maximum light emission toward the screen.
  - none of the above.
19. Which one of the following is not a salient point to be remembered while replacing the projector lamps?
- the wattage specified by the projector manufacturer should be same.
  - the lamp must be a halogen lamp.
  - the base and contact points must be compatible with the socket.
  - the filament must have an identical structure.
20. In which of the following projectors we do not place the visual inverted and upside down.
- opaque projector
  - filmstrip projector
  - motion picture projector
  - slide projector
21. The projectual is placed upside down in the projectors because:
- the projection lens inverts the image
  - the condensor lens inverts the image.
  - the reflector inverts the image.
  - all the above are true.
22. The lens that is responsible for providing sharpness and clarity of the image on the screen is
- condensor lens
  - projection lens
  - fresnel lens
  - none of the above.

23. The projected image can be made larger or smaller without moving either the projector or the screen by
- a. using powerful lens system
  - b. good condensor lenses
  - c. zoom lens
  - d. providing prism of good quality
24. Which one of the following operations will enable you to get a larger projected image on the screen
- a. moving the projector toward the screen
  - b. moving the screen away from the projector
  - c. moving the screen toward the projector
  - d. all the above.
25. Which one of the following is not a function of the condensor lens system ?
- a. gather light from the lamp
  - b. direct light to the projectual
  - c. focus the image on the screen
  - d. converge the light passing through it.
26. The image projected through a filmstrip projector is kept upside down in the filmstrip projector because -
- a. the condensor lens inverts the image
  - b. the projection lens inverts the image
  - c. the reflector inverts the image.
  - d. the aperture inverts the image.
27. Centering the frame on the screen is done by using the
- a. film advance knob
  - b. focussing knob
  - c. framer
  - d. elevator knob
28. Which one of the following is the correct size of a double frame filmstrip format ?
- a. 35 mm x 35 mm
  - b. 36 mm x 36 mm
  - c. 36 mm x 18 mm
  - d. 36 mm x 24 mm

29. Which one of the following is the correct size of a single frame filmstrip format ?
- a. 24 mm x 18 mm
  - b. 36 mm x 24 mm
  - c. 35 mm x 18 mm
  - d. 18 mm x 18 mm
30. Which one of the following is the speed of the 16 mm sound motion picture projection ?
- a. 24 frames per second.
  - b. 16 frames per second.
  - c. 36 frames per second.
  - d. 24 frames per minute.
31. The time required to run 400 feet of 16 mm sound motion picture film is :
- a. 10 minutes.
  - b. 11 minutes
  - c. 24 minutes
  - d. 36 minutes.
32. Which type of sound recording allows you to record sound on a 16 mm film in your class room or institution ?
- a. magnetic
  - b. variable area optical
  - c. variable density optical
  - d. all the above.
33. The sound in a 16 mm motion picture is recorded
- a. 26 frames ahead of the actual picture frame
  - b. 26 frames behind the actual picture frame
  - c. 25 frames behind the actual picture frame
  - d. 25 frames ahead the actual picture frame.
34. Focussing of the picture is done by moving
- a. condensor lens behind
  - b. objective lens in and out
  - c. screen toward or away from the projector
  - d. raising or lowering the projector

35. Film in a motion picture projector is held in place behind the objective lens between
- film gate and film channel
  - film channel and aperture
  - film channel and pressure plate
  - claw and aperture
36. The film is drawn past the aperture by the
- take up sprocket wheel
  - claw
  - pressure plate
  - film gate.
37. If the film sprocket holes are not engaged by the claw properly the image on the screen will be
- fluttery
  - faint
  - vibrate
  - sound will be distorted.
38. Film must be under tension as it passes around the sound drum, to prevent
- faint sound
  - fluttery image
  - distorted sound
  - none of the above
39. The main advantage of overhead projector over the other projector is that:
- the overhead projector can be placed in front of the class.
  - the overhead transparencies can be stored in a small space.
  - the overhead projector is the smallest projector and hence easily moved from one class room to another.
  - the overhead projector is the cheapest of all projectors.
40. Which one of the following projectors provides you the facility to write on the projectual and thus can be used chalkboard ?
- 16 mm motion picture
  - overhead transparency
  - slide
  - filmstrip



41. Which of the following prepared projectuals allows you to use the technique of overlay, masking and progressive disclosure?
  - a. filmstrip
  - b. slide
  - c. overhead transparency
  - d. 16 mm motion picture projector
42. Which of the following sizes of projectuals can be projected on an overhead projector ?
  - a. opaque pictures 8" x 10"
  - b. opaque objects like a chuck 6" x 12" x 10"
  - c. transparent flat pictures 10" x 18"
  - d. transparent flat objects that are less than 10" x 10"
43. The minimum and maximum size of transparent pictures that could be projected through an overhead projector are :
  - a. 50 x 50 mm and 100 x 100 mm respectively
  - b. 40 x 40 mm and 500 x 500 mm respectively
  - c. 80 x 80 mm and 300 x 250 mm respectively
  - d. 10 x 10 mm and 250 x 250 mm respectively
44. To steady the transparent sheet on the fresnel surface and to prevent it from moving away, we use
  - a. acetate roller knob
  - b. focussing knob
  - c. guide pins in front
  - d. projection mirror
45. Which of the following will give a silhouette when projected with overhead projector.
  - a. any coloured transparency
  - b. any black and white transparency
  - c. transparent objects
  - d. non transparent objects.
46. Which of the following is not necessary to be considered to be relevant when you want to decide on replacement of lamps ?
  - a. voltage
  - b. lamp contact
  - c. condensor lens
  - d. wattage

47. Which one of the following projection systems is applicable to the opaque projector?
- reflected projection system
  - indirect projection system.
  - direct projection system
  - none of the above.
48. Why do we darken a room completely when we use an opaque projector?
- we use the reflected light system, as much light is lost.
  - we use powerful lamps in the projector to avoid dim projection image.
  - we use opaque objects which do not require much light in the room.
  - we use indirect projection system, which do not require any light in the class room for real visibility.
49. We place a visual on the platen of the opaque projector with bottom of visual facing
- The class, right side up
  - The screen, right side up
  - The class, right side down.
  - The screen, right side down.
50. Which one of the following cannot be used for projection in an opaque projector?
- books
  - flat pictures
  - transparent pictures
  - small metal objects.
51. For centering the image on the screen with an opaque projector, you will
- raise or lower elevator knobs.
  - raise or lower elevator knobs and lock it.
  - raise the elevator knobs and lock it in position.
  - lower the elevator knobs and lock it.
52. It is said that television combines other visual media in its programmes. Which of the following media is not usually combined in TV medium.
- 16 mm motion picture
  - 35 mm slides
  - photographs
  - programmed text book.

53. Which one of the following is an advantage attributed to television over motion picture, for instructional purposes.
- a. record the programme
  - b. preserve the programme
  - c. magnification of visuals
  - d. immediate reuse of the programme
54. Voltage stabiliser is provided with television in order to get:
- a. more voltage for bigger pictures
  - b. less voltage for less brighter pictures
  - c. proper voltage for avoiding defects
  - d. reduce inflow of electric current.
55. Occasionally telecast reception will be unsatisfactory though no fault of your television receiver or your operation. Which one of the following faults can you categorise under this heading ?
- a. ghosts
  - b. snow on your TV screen
  - c. R.F. interference
  - d. all the above
56. Which of the following faults in your TV set occurs due to R.F. interference (radio frequency) ?
- a. extraneous electrical signals
  - b. break of antenna cable
  - c. ghosts
  - d. snow effect
57. Ghosts are usually caused by
- a. extraneous electrical signals
  - b. weak signals coming from TV stations
  - c. reflected from obstacles before it comes to your antenna
  - d. break of antenna cable.
58. When you are to plan for a multi-imagery presentation which one of the following statements is not a criteria for planning.
- a. In planning multi-image presentation, relate it to a multi-image magazine layout.
  - b. you need not project images on each one of the three screens continually during a presentation.
  - c. Each separate screen is used to treat its own idea or concept.
  - d. In composition, generally major messages should be on the centre screen.

59. Which one of the following is the best definition of multi-imagery ?
- a. Multi-imagery is a variety of projections simultaneously made on adjacent screens.
  - b. Multi-imagery is a combination of projections essentially made by using different projection equipments.
  - c. Multi-imagery, is a way of showing multiple images on a single screen from a number of projection equipments.
  - d. Multi-imagery is a way of showing 16 mm and 8 mm movies together on the same subject in two adjacent screens, one sound and the other silent.
60. Which one of the following is the best definition of multi-media?
- a. Multi-media is the sequential use of a variety of instructional media including projection systems.
  - b. Multi-media is a combination of different projection systems only.
  - c. Multi-media is a combination of different non-projection systems only.
  - d. Multi-media is a combination of 16mm movie and sound slide presentations which is presented one after another.
61. What minimum letter size you will use for ten metre anticipated maximum viewing distance for projected aids ?
- a. 6 mm
  - b. 12 mm
  - c. 25 mm
  - d. 50 mm
62. The spacing of letters (symbols) for visuals compared to letter height while writing is:
- a.  $\frac{1}{2}$  the height of the letters
  - b.  $1\frac{1}{2}$  times the height of letters
  - c. same height of the letters.
  - d. double the size of letters.
63. Which one of the following pairs is the maximum distance for slides, OH transparencies, and motion pictures and for television.
- a. 6 to 8 times the width of the screen and 16 times the width of TV tube.
  - b. 16 to 18 times the width of screen and 16 times the width of TV tube.
  - c. 8 to 12 times the width of screen and 12 times the width of TV tube.
  - d. 6 to 8 times the width of the screen for both cases.

64. The ratio of letter height of art work for slides, transparencies and motion picture will be:
- a. 1 : 50
  - b. 1 : 25
  - c. 1 : 10
  - d. None of the above.
65. The ratio of letter height of art work for television is:
- a. 1 : 50
  - b. 1 : 100
  - c. 1 : 75
  - d. 1 : 25
66. Which one of the following surfaces will bounce sound and are not acoustically good ?
- a. smooth surface
  - b. uneven surface
  - c. draperies
  - d. venetian blinds
67. Which one of the following is an effective means of controlling lighting of appropriate quality ?
- a. movable lighting fixtures
  - b. switching unwanted lights
  - c. dimmers ~~stats~~ to control the intensity of light
  - d. not using powerful lights.
68. Which one of the following is exclusively an instructional feature of lighting ?
- a. lighting can inspire
  - b. lighting can call to attention the audience
  - c. lighting can emphasise things.
  - d. lighting can give good illumination.
69. Which one is not an effective way of controlling unwanted sound effects ?
- a. irregular wall surface
  - b. draperies
  - c. hard floor surface
  - d. shape of room.
70. Which one of the following is not an important consideration for deciding the viewing distance for a projected image ?
- a. spacing of seats and types of furniture
  - b. normal eye level of the viewer and maximum viewing angle
  - c. height of the image
  - d. brightness of the picture.



## AUDIO VISUAL EDUCATION

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Module III	Projected Aids	Section B
Units 1-10	CRITERION TEST	Time: 90 mts.

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Use separate response sheets provided for Section B. Answer Section A before attempting Section B, and hand over to your Instructor. DO NOT write anything in the space provided for on the response sheets. RETURN the question paper to your Instructor, with response sheets. Answer Section C after completing Section B.

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71. The motion picture combines some of the following special features not available for slides and filmstrips. Against the corresponding numbers given in the response sheet tick the alphabets of correct answer.
- a. Captions with pictures
  - b. animation
  - c. slow motion
  - d. cut sections of diagrams
  - e. magnification
  - f. split frames
  - g. colour
  - h. inserts.
72. What is the most important use of the medium of Television in teacher training programmes? Write your answer in the space provided in the response sheet.
73. List two advantages of slides used in instruction.
74. Enumerate five advantages of filmstrips.
75. State two disadvantages of slides.
76. Write two disadvantages of motion pictures.

77. Name five techniques that enhances the utility of motion pictures as media.
78. Name three most common elements for any projection system.
79. Name three major projection systems that are used in the different projectors-slide, filmstrip, motion picture, overhead and opaque projectors.
80. Mark in the sketch given on the response sheet, the position of the projectual.
81. Name the projectors in which we place the projectual right side up.
82. How is the inversion avoided in the above projectors ?
83. Figures a and b below show the distortions caused in a projected image, what do you call this ?

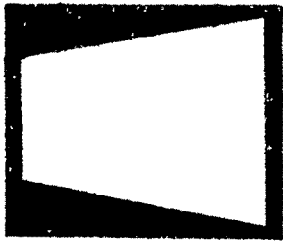


Fig. a

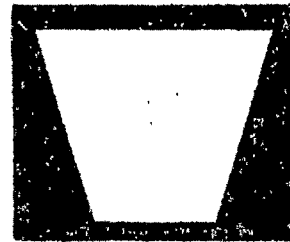
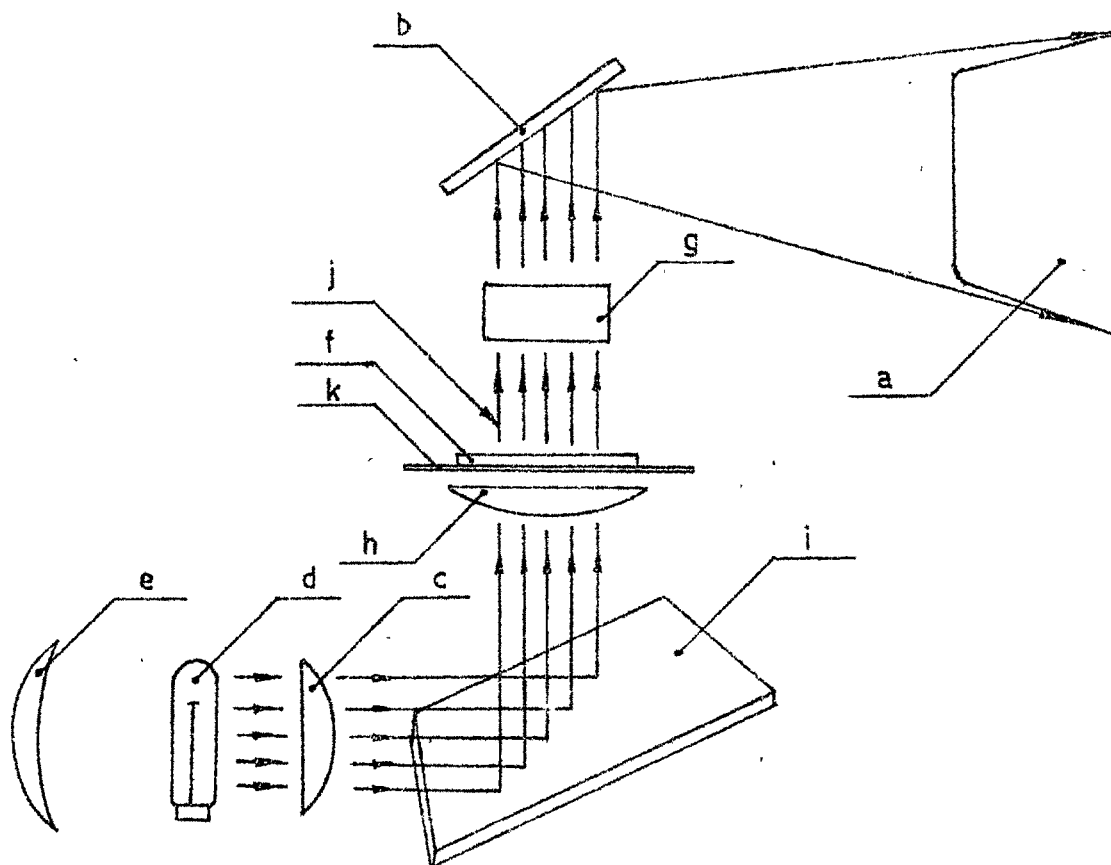


Fig. b

84. For rectifying the defect in figure (a), what kind of adjustment in alignment is necessary.
85. What kind of adjustment in alignment is necessary for rectifying the defect in figure (b).

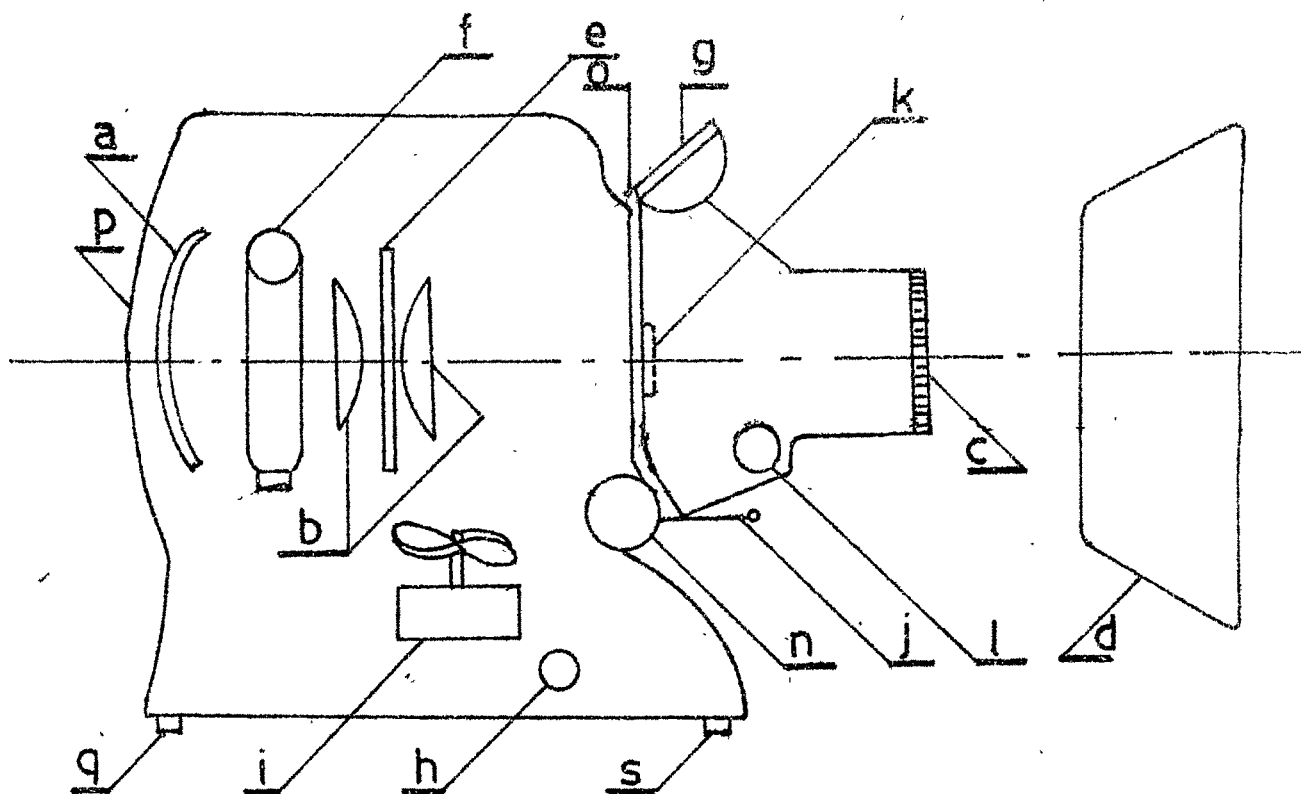


86. Here is a diagram of one of the projection systems. Some of the parts are marked by alphabets a, b, c, d etc.,. On the response sheet against this question, the parts are named. Against each name, in the space provided write the appropriate alphabet given in the sketch. You may need more than one alphabet for some items, or you may not need some alphabets at all.

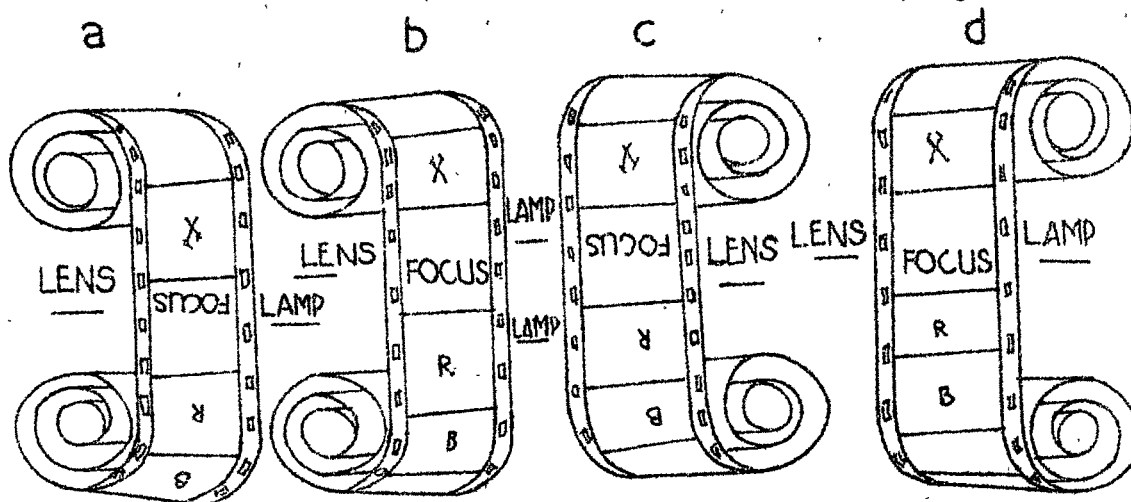


87. Name three types of projection screens available in your Institute.

88. Given below is a picture of filmstrip projector. Parts are marked by alphabets a, b, c, d, e ... s. Given in the response sheet are the names of parts. Write against these names the appropriate alphabet(s) denoting the name.



89. Which one of the following is the correct position of the filmstrip to be inserted into the projector ?



The following projection errors as seen on the screen from a filmstrip projector are to be corrected by adjusting one of the following. Write in the space provided against each figure, the alphabet denoting the adjustment.

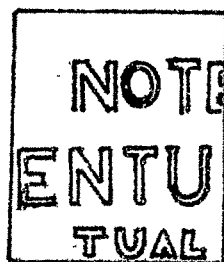
- a. open aperture for double frame.
- b. close aperture for double frame.
- c. close aperture for single frames.
- d. switch on fan.
- e. rotate carrier for double frame.
- f. focussing.

You may use alphabet more than once or do not use some at all.

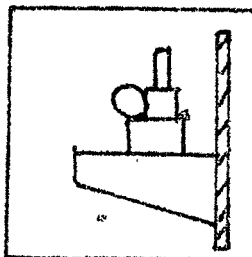
90.



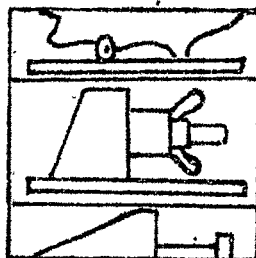
91.



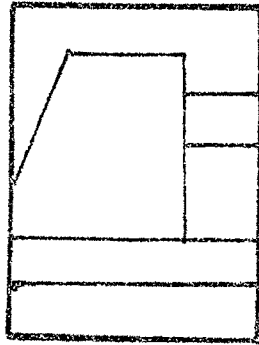
92.



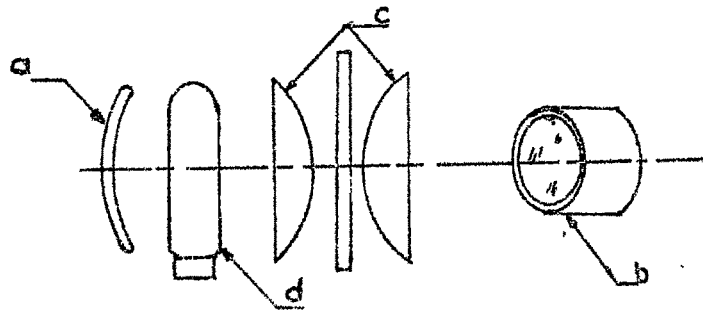
93.



94.

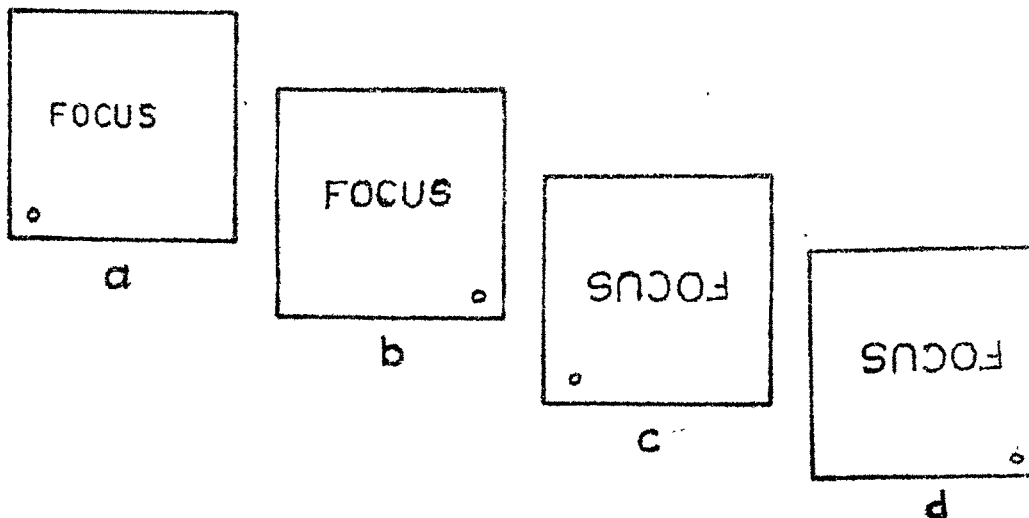


95. Name the five components of the projection system.
96. State the one among these five (qn.95) responsible for image magnification.
97. Marked in the diagram given with alphabets a,b,c and d are certain parts in the projection system of slide projector. Given in your response sheets are names of the parts. Write against the names given, the appropriate alphabet representing the part.



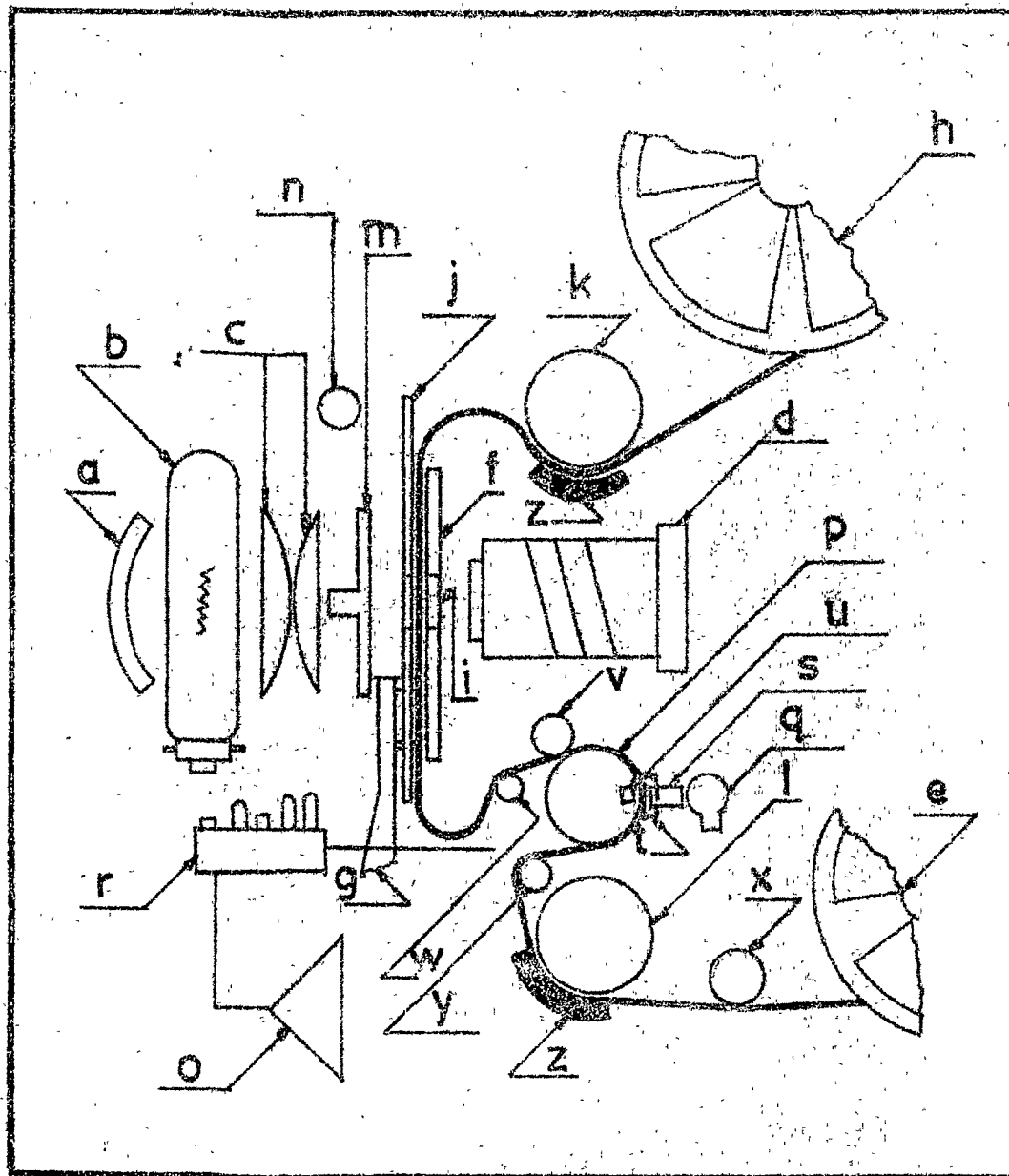
98. State two important points to be considered while loading rotary trays of a slide projector.
99. In a remote control there are three facilities for adjustments which one of the three will you use for the following situations.
- skip ten slides and advance.
  - go back by five slides.
  - image on the screen lacks clarity.
100. Name four types of slide carriers that are commonly used.

101. Which one of the following thumb spots is correct.  
Mark in the response sheet the appropriate alphabet.



102. Name four types of slides other than photographic slides.
103. State one most important advantage of slides over filmstrips.
104. State two advantages of rectangular and circular slide carriers over single/double slide carrier.
105. Name two types of slide formats used.
106. The figure given below gives different parts of a motion picture system.  
Marked on it area, b, c, d, e, f, ..... x, y, z to denote various parts.  
You are required to mark in the response sheet under the following main headings the identification alphabets of corresponding names given there.  
You may or may not use all the alphabets.

106. fig.

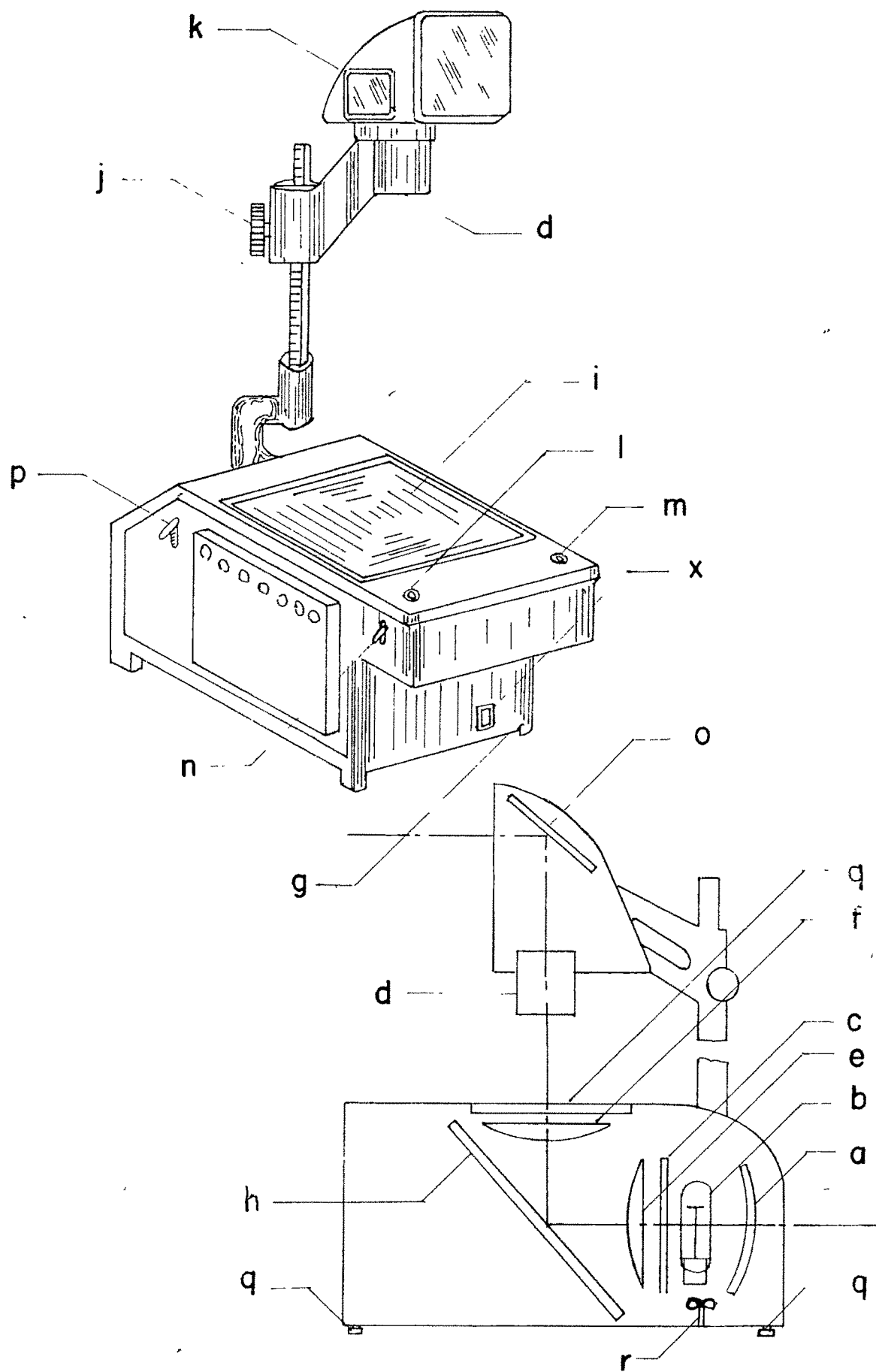


107. Name the two types (kinds) of projectors, classified on the basis of sound recording.

108. While threading film in a movie projector, two loops are provided i.e., the upper and the lower loops. State what do you consider is the function of each loop.

MIII/1-10/CT 20

# OVER HEAD PROJECTOR



- 151
109. Two most important parts to be cleaned as a part of maintenance are:
110. List materials required for joining broken film.
111. How are the position of the image on the screen adjusted or centered in overhead projector ?
112. Marked in the pictures here with alphabets a, b, c, d, the different parts of the overhead projector. Given in your response sheet are the names of different parts. Mark in the space provided against each name, the appropriate alphabet. You may use more than one alphabet for one item, or not use an alphabet at all if there are no matching items.
113. Write in your response sheet against the item numbers under column I, the corresponding alphabet of the name of the material that will be used, i.e., a or b for projection given under column II.

COLUMN I

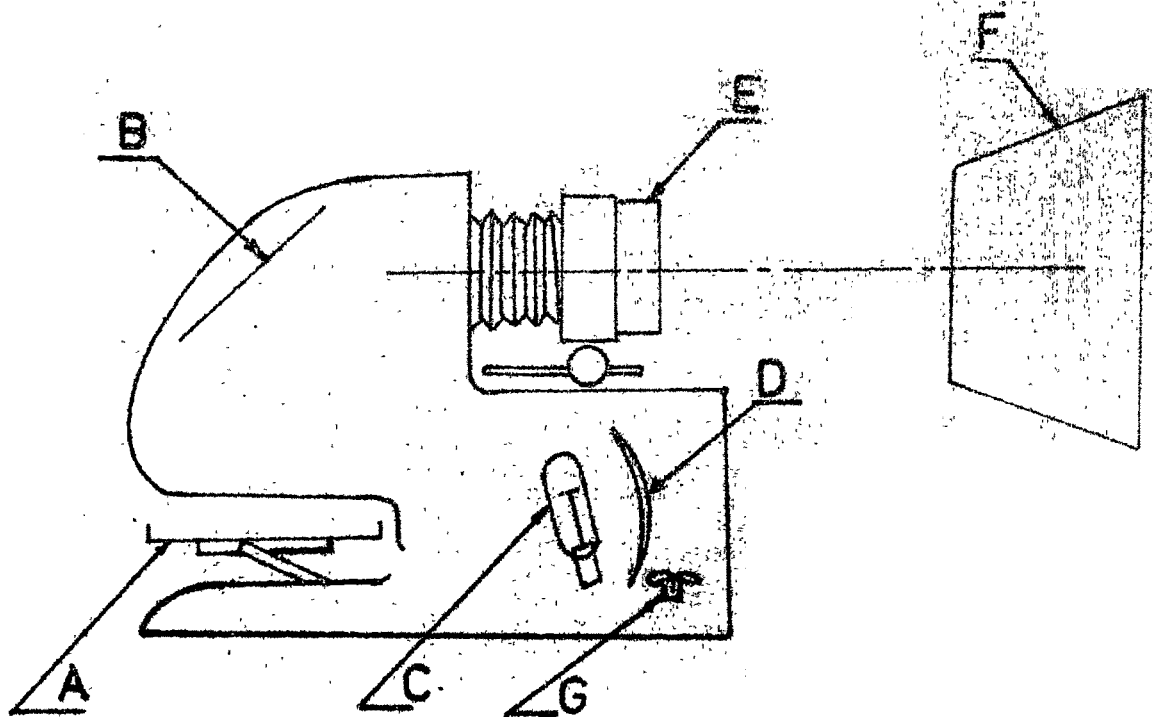
Column II

- |                        |                         |
|------------------------|-------------------------|
| 1. Slide projector     | a. transparent material |
| 2. opaque projector    | b. photographic prints  |
| 3. filmstrip projector |                         |
| 4. 16 mm projector     |                         |
| 5. overhead projector  |                         |

114. Marked in the diagram are the following symbols A, B, C, D, E and F.  
Against each item given on the response sheet, mark the appropriate alphabet in the space provided.

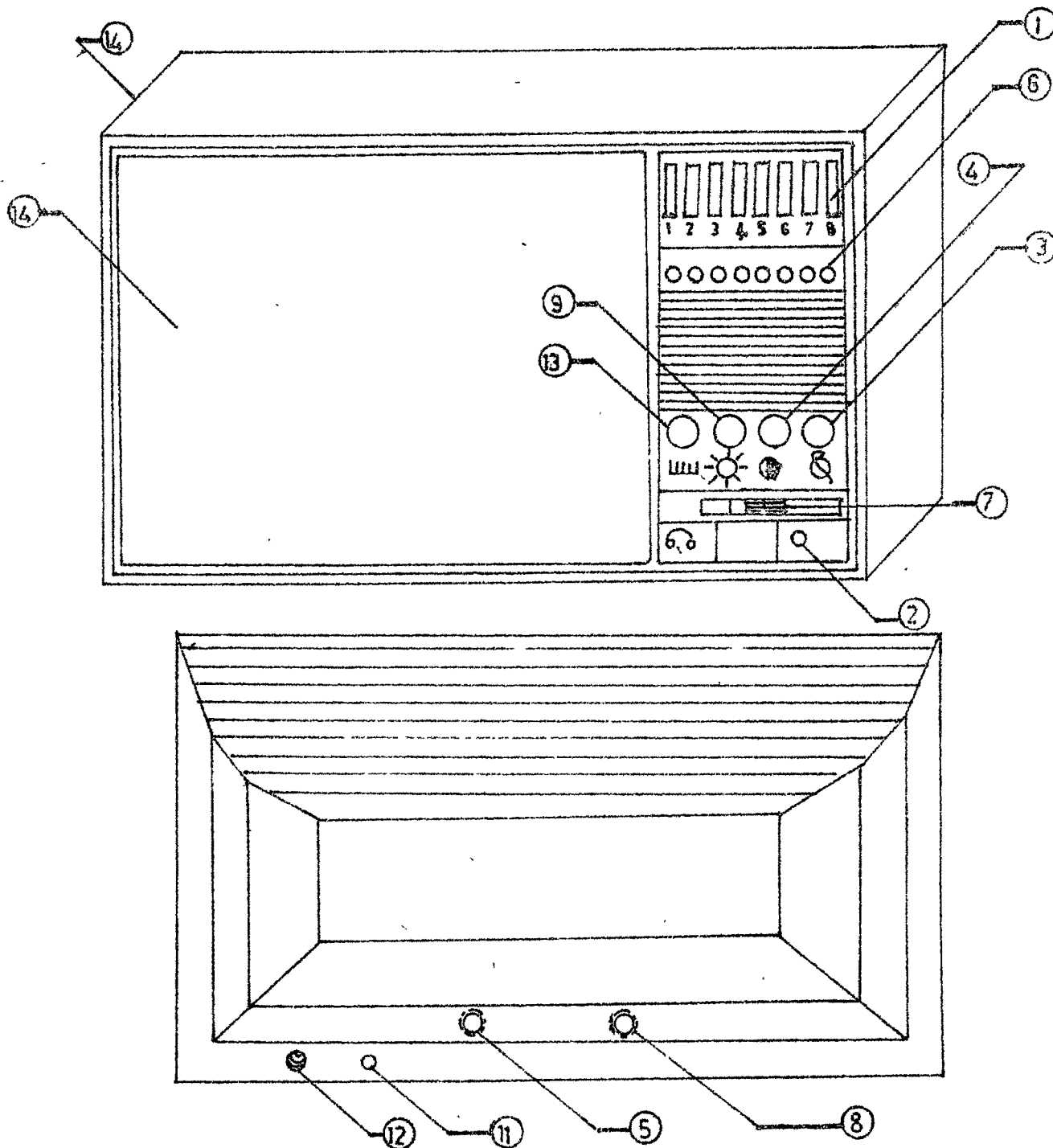


114.



115. Mark the arrows of the rays of light from the projection lamp to the screen, in the diagram given on your response sheet.
116. Why should you be careful, when you use the metal objects for opaque projection ?
117. Name the two systems of television that are used for instructional purpose ?

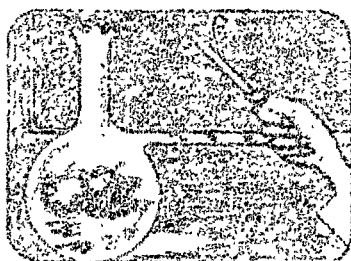
118. Marked in this picture are some of the important parts of a TV receiver with numerals 1, 2, 3 .. 10. Given in your response sheet are the names of items. Corresponding to these names given on the response sheet, write the number 1, 2, 3 etc., appropriate to the item. You may use same number more than once, or need not use a number at all.



119. What are the five important features of the Weston Video Deck?

120. Some common defects in TV are shown below. You will have to operate a knob or control to adjust these defects. These operation controls/knobs are given in the response sheet. Now mark against each of these items given on the response sheet, the alphabets given for each of the defects shown by the picture here.

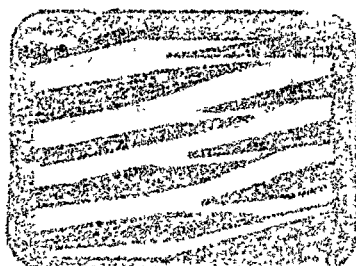
a



b



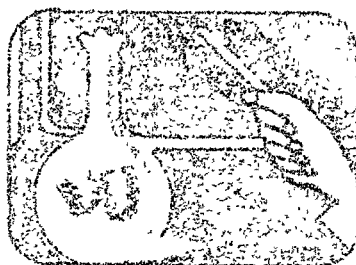
c



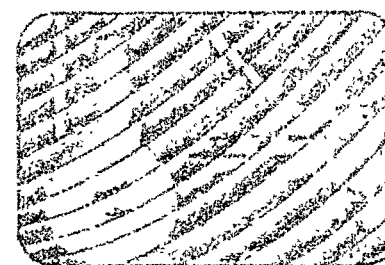
d



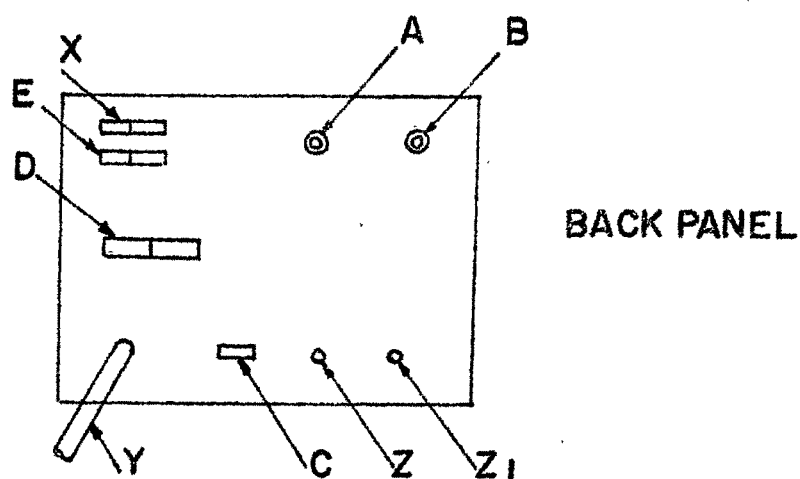
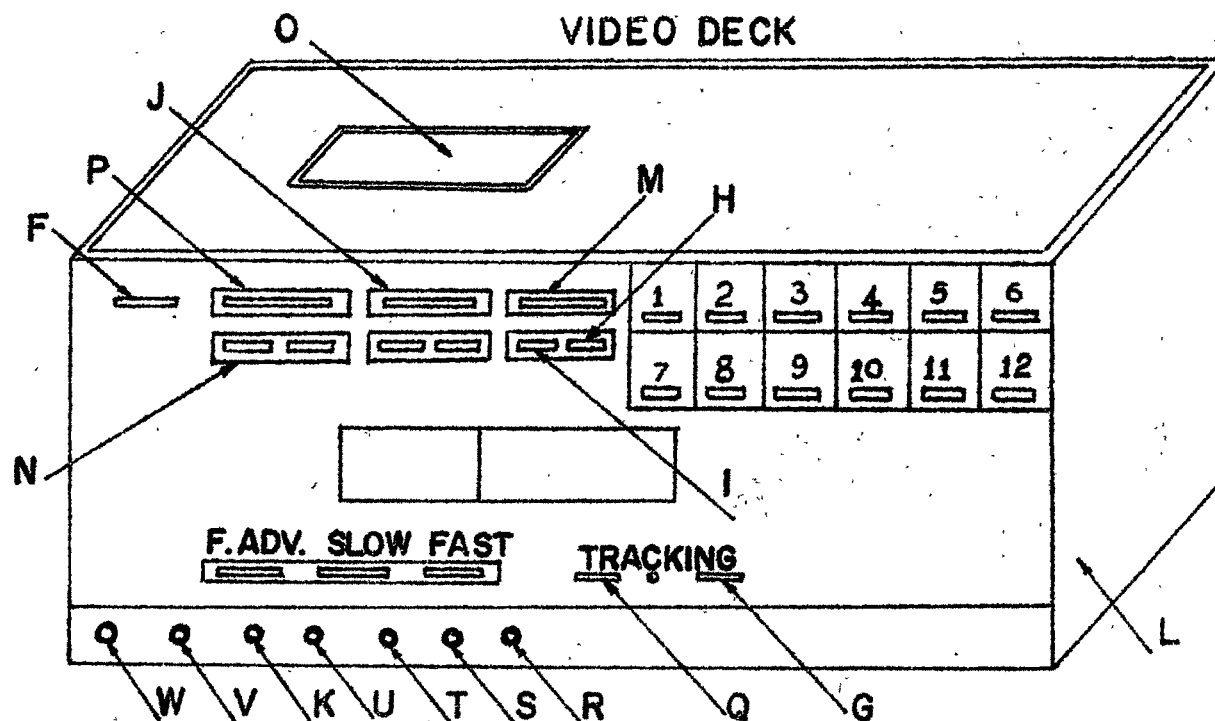
e



f



121. You are given pictures of the video deck. Marked in the pictures are alphabets, representing some of the parts, the names of which are given in your response sheet. You are to mark against the names on the response sheet, the corresponding alphabets representing the name. You may use an alphabet more than once, or not use one at all.



122. Given below are operations to be carried out in order to get picture on the TV screen, when you lay video cassette. The operation below are not given in the correct sequence. Rearranging the correct sequence by placing the alphabet (which denotes the sequence of operation) in the response sheet.
- a. Set OPERATION SWITCH
  - b. Switch mains power switch.
  - c. Set video mode.
  - d. Adjust TV receiver to channel 37.
  - e. Switch on TV switch and connect VCR & TV.
  - f. Press STOP key.
  - g. Set the pre-tuner of VCR.
  - h. Press eject key.
  - i. Push in video cassette, right side up and depress holder down.
  - j. Depress play key, run 30 secs.
  - k. Press eject key.
  - l. Press stop, then rewind key, to rewind.
  - m. Remove cassette and depress holder.
  - n. Switch off all controls.
  - o. Press stop key, when tape is fully rewound.
123. List four advantages of multi-imagery presentation.
124. List any five purposes served by multi-imagery presentation.
125. When you use a stereo system or two track recording how will you record the narration and make necessary arrangements for slide change either manually or automatically ?
126. Suggest two topics in your subject area which you think can be taught using multi-media approach.
127. Differentiate between media for conventional use and multi-media use.

128. Under column I are given some of the aids about which we have been discussing so far. Under column II are given some of the advantages and characteristics. Write on the response sheets against the alphabets representing column I, the numbers of the items given for items under column II, which gives you the specific characteristic advantage for the items under column I. There may be more than one answer for the alphabets and you may not use an item given under column II at all.

<u>COLUMN I</u>	<u>COLUMN II</u>
a. Multi Media	1. Require no equipment for use.
b. Multi imagery	2. Are compact series of projected visuals for use in sequence.
c. O.H.transparency	3. Flexible and adaptable for both group & independent study. Do not require projection.
d. Motion picture	4. Useful for large groups and projected from front of the room.
e. Filmstrips	5. A series of visuals that could be inter-changeable visuals that can be combined with and synchronised with taped narration, usually adopted for large and small groups.
f. Slides	6. Are particularly useful for showing relationships describing motion, and useful for large groups.
g. Recordings	7. Combines different media and offers capability to make analysis of a live action on the spot.
h. Television	8. Combines different media and provides different visuals at the same time with taped commentary and comparison of the situation with possibilities of magnification.
i. Photographs	9. Useful for individual and group study.
j. Programmed Instruction.	10. Combines different media and used in combination with many others both for independent and group study.
	11. Ensures consistency in presentation of all instructional materials.
	12. Recognises that students have different learning styles and alternative ways of studying.

129. Estimate which one of the audio visual aids given under **158** column II best serve the purpose stated in column I. Give against each alphabet under Column I given in the response sheet, the appropriate number of items given under column II. You may have more than one answer, or need not.

<u>Column I</u>	<u>Column II</u>
a. Outline a process	1. Motion pictures
b. Skills involving motion	2. Transparency
c. Repairs of intricate parts of a machine.	3. Slide series
d. Identification of small electronic components.	4. Television
e. ISI symbols	5. Originals
f. Different types of walls	6. Charts
g. Measurement with micrometer	7. Poster
	8. Flannel board
	9. Magnetic board
	10. Bulletin board
	11. Programmed text.

130. You are given the task of selecting appropriate media for specific teaching tasks of a course on operation of a numerical control lathe - a complicated process. Which one of the following method of presentation would you propose of adopting, for the different groups. The groups are given under column I and the methods of presentation under column II. Write against alphabets on the response sheets the appropriate numbers of items given under column II. There can be more than one method of each.

<u>Column I</u>	<u>Column II</u>
a. Individual students	1. books, workbooks, guide and other publications.
b. Small group study	2. Television programme.
c. Large sized group	3. Sound slide presentation.
	4. 16 mm sound film
	5. Lecture with O.H.transparency
	6. Lecture with students responding to verbal questions.
	7. Programmed text.
	8. Lecture -demonstration.
	9. Multi-media and discussion.
	10. Simulators.
	11. Discussions.
	12. Demonstration.

Now hand over the response sheet to your Instructor before going to Section C.

## AUDIO VISUAL EDUCATION

Roll No:	Projected Aids	Module III
Trade :		Unit 1-10
Response Sheet		Section B

71. \_\_\_\_ a. \_\_\_\_ b. \_\_\_\_ c. \_\_\_\_ d. \_\_\_\_ e.  
 \_\_\_\_ f. \_\_\_\_ g. \_\_\_\_ h.

72. - - - - -

73. 1. - - - - -

2. - - - - -

74. 1. - - - - -

2. - - - - -

3. - - - - -

4. - - - - -

5. - - - - -

75. 1. - - - - -

2. - - - - -

76. 1. - - - - -

2. - - - - -

3. - - - - -

77. 1. - - - - - 2. - - - - -

3. - - - - - 4. - - - - -

5. - - - - -

78. 1. - - - - - 2. - - - - -

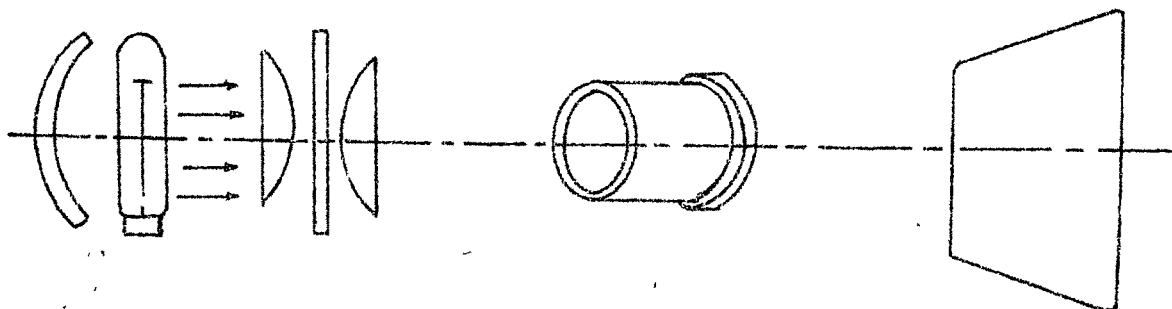
3. - - - - -

79. 1. - - - - - 2. - - - - -

3. - - - - -



80.



81. \_\_\_\_\_

82. \_\_\_\_\_

83. \_\_\_\_\_

84. \_\_\_\_\_

85. \_\_\_\_\_

86. \_\_\_\_\_ Lamp      \_\_\_\_\_ condenser lenses      \_\_\_\_\_ Objective lens  
 \_\_\_\_\_ screen      \_\_\_\_\_ fresnel lens      \_\_\_\_\_ reflector  
 \_\_\_\_\_ mirrors

87. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

88. \_\_\_\_\_ reflector      \_\_\_\_\_ elevator knob      \_\_\_\_\_ fan and motor  
 \_\_\_\_\_ lamp      \_\_\_\_\_ switch      \_\_\_\_\_ Condenser lenses  
 \_\_\_\_\_ heat filter      \_\_\_\_\_ film advance knob      \_\_\_\_\_ objective lens  
 \_\_\_\_\_ filmstrip carrier      \_\_\_\_\_ screen      \_\_\_\_\_ focussing knob  
 \_\_\_\_\_ framer      \_\_\_\_\_ aperture      \_\_\_\_\_ feed slot

89. \_\_\_\_\_ 90. \_\_\_\_\_ 91. \_\_\_\_\_ 92. \_\_\_\_\_ 93. \_\_\_\_\_ 94. \_\_\_\_\_

95. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

4. \_\_\_\_\_ 5. \_\_\_\_\_

96. \_\_\_\_\_

97. \_\_\_\_\_ Projection lamp \_\_\_\_\_ condenser lens  
 \_\_\_\_\_ reflector \_\_\_\_\_ objective lens
98. 1. \_\_\_\_\_  
 2. \_\_\_\_\_
99. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_
100. 1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_
101. 1. \_\_\_\_\_
102. 1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_
103. \_\_\_\_\_
104. 1. \_\_\_\_\_ 2. \_\_\_\_\_
105. 1. \_\_\_\_\_ 2. \_\_\_\_\_
106. A. Projection System:  
 \_\_\_\_\_ objective lens \_\_\_\_\_ condenser lens \_\_\_\_\_ lamp  
 \_\_\_\_\_ reflector.
- B. Transportation System:  
 \_\_\_\_\_ claw \_\_\_\_\_ feed sprocket \_\_\_\_\_ supply reel  
 \_\_\_\_\_ aperture \_\_\_\_\_ take up reel \_\_\_\_\_ shutter  
 \_\_\_\_\_ framer \_\_\_\_\_ pressure plate \_\_\_\_\_ take up  
 \_\_\_\_\_ film channel sprocket  
 \_\_\_\_\_ plate
- C. Sound System:  
 \_\_\_\_\_ speaker \_\_\_\_\_ amplifier \_\_\_\_\_ sound drum  
 \_\_\_\_\_ sound lens \_\_\_\_\_ exciter lamp \_\_\_\_\_ photoelectric  
 \_\_\_\_\_ mirror. cell

## D. Other parts:

\_\_\_\_\_ stabiliser      \_\_\_\_\_ snubber      \_\_\_\_\_ pressure roller  
 \_\_\_\_\_ shoes      \_\_\_\_\_ guide roller

107. 1. \_\_\_\_\_ 2. \_\_\_\_\_

108. 1. \_\_\_\_\_

2. \_\_\_\_\_

109. 1. \_\_\_\_\_ 2. \_\_\_\_\_

110. 1. \_\_\_\_\_ 2. \_\_\_\_\_

111. 1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

112. \_\_\_\_\_ condenser lenses      \_\_\_\_\_ focussing knob  
 \_\_\_\_\_ fresnel lens      \_\_\_\_\_ front surface mirror  
 \_\_\_\_\_ objective lens      \_\_\_\_\_ projection mirror  
 \_\_\_\_\_ heat filter      \_\_\_\_\_ mirror  
 \_\_\_\_\_ reflector      \_\_\_\_\_ transparency guide pins  
 \_\_\_\_\_ projection lamp      \_\_\_\_\_ acetate roller knob

113. 1. Slide projector \_\_\_\_\_ 2. opaque projector \_\_\_\_\_

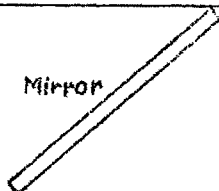
3. filmstrip, projector \_\_\_\_\_ 4. 16 mm projector \_\_\_\_\_

114. \_\_\_\_\_ platen      \_\_\_\_\_ mirror      \_\_\_\_\_ lamp

\_\_\_\_\_ reflector      \_\_\_\_\_ screen      \_\_\_\_\_ objective lens

115.

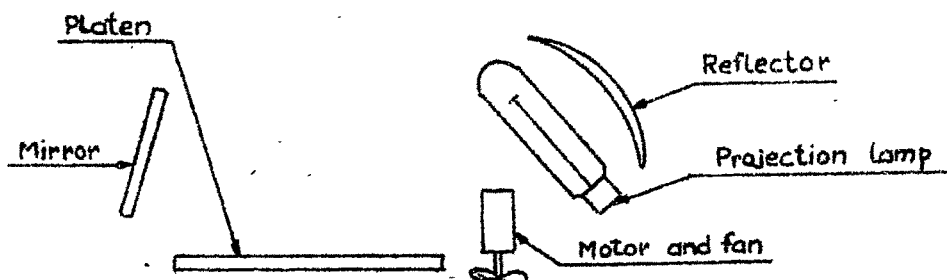
Mirror



Objective lens



163



116. \_\_\_\_\_

117. 1. \_\_\_\_\_ 2. \_\_\_\_\_

118. \_\_\_\_\_ ON/OFF switch \_\_\_\_\_ horizontal hold \_\_\_\_\_ contrast  
 \_\_\_\_\_ fine tuning \_\_\_\_\_ vertical hold \_\_\_\_\_ brightness  
 \_\_\_\_\_ screen \_\_\_\_\_ channel selector \_\_\_\_\_ volume control  
 \_\_\_\_\_ tone control

119. 1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_  
 4. \_\_\_\_\_  
 5. \_\_\_\_\_

120. \_\_\_\_\_ 1. brightness control \_\_\_\_\_ 2. fine tuning  
 \_\_\_\_\_ 3. contrast \_\_\_\_\_ 4. vertical hold  
 \_\_\_\_\_ 5. horizontal hold \_\_\_\_\_ 6. Ghosts  
 \_\_\_\_\_ 7. snow (weak signals) \_\_\_\_\_ 8. Radio frequency

121. \_\_\_\_\_ 1. Aerial \_\_\_\_\_ 6. main switch \_\_\_\_\_ 11. operate switch  
 \_\_\_\_\_ 2. eject \_\_\_\_\_ 7. audio dub \_\_\_\_\_ 12. Video mode switch  
 \_\_\_\_\_ 3. Play \_\_\_\_\_ 8. stop video \_\_\_\_\_ 13. Voltage selector  
 \_\_\_\_\_ 4. pause \_\_\_\_\_ 9. R.F.Out \_\_\_\_\_ 14. channel selector  
 \_\_\_\_\_ 5. Rewind \_\_\_\_\_ 10. Record \_\_\_\_\_ 15. Fast forward  
 \_\_\_\_\_ 16. Cassette holder

122. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_

6. \_\_\_\_\_ 7. \_\_\_\_\_ 8. \_\_\_\_\_ 9. \_\_\_\_\_ 10. \_\_\_\_\_

11. \_\_\_\_\_ 12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_ 15. \_\_\_\_\_

123. 1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

124. 1. \_\_\_\_\_ 2. \_\_\_\_\_

3. \_\_\_\_\_ 4. \_\_\_\_\_

5. \_\_\_\_\_

125. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

126. 1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

127. 1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. \_\_\_\_\_

\_\_\_\_\_

128. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_  
d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_  
g. \_\_\_\_\_ h. \_\_\_\_\_ i. \_\_\_\_\_  
j. \_\_\_\_\_

129. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_  
d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_  
g. \_\_\_\_\_

130. a. \_\_\_\_\_  
b. \_\_\_\_\_  
c. \_\_\_\_\_

## AUDIO VISUAL EDUCATION

CRITERION TEST  
Time: 60 mts.

Module III

Projected Aids

Section C

Use separate answer sheets for Section A, B, and C. DO NOT write anything on this question paper. RETURN this question paper along with your responses.

## C/1. PERFORMANCE CHECK LIST.

30 mts

Performance check list for operating different projected equipments as indicated against the question numbers are given under 3 or 4 headings. Under each heading write the serial number in the sequence of operation. Items in each heading may be considered separate and complete. Collect separate response sheets for questions 131-135.

- 131. Filmstrip projector.
- 132. Slide projector.
- 133. Motion picture projector.
- 134. Overhead projector.
- 135. Opaque projector.

## C/2. PRACTICALS TO BE DONE AFTER COLLECTING CORRECT CHECK LIST.

- 136. Set up, load and operate a filmstrip projector and show five frames correctly. 3 mts.
- 137. Set up, load and operate a slide projector using slide trays and remote control. 2 mts.
- 138. Set up, thread film and operate a 16mm movie projector. 10 mts.
- 139. Fit the projector lamp of a movie projector. 3 mts.
- 140. Clean lens and aperture gate of 16mm movie projector. 2 mts.
- 141. Set up, and operate an overhead projector to project transparencies and non transparent objects. 3 mts.
- 142. Project pictures and opaque objects using an opaque projector. 2 mts.
- 143. Organise a multi-media presentation, given 20 slides and an audio cassette. 5 mts.
- 144. Organise a multi-imagery presentation, given two Kodak Censousel projectors with 120 slides, a dissolve unit and a tape for synchronisation with Philips audio cassette recorder. 10 mts.

## AUDIO VISUAL EDUCATION

Roll No: RESPONSE SHEET FOR PRACTICAL EXERCISES

Trade :

MODULE III

PRE-TEST

SECTION C

READ THE QUESTION PAPER GIVEN FOR QUESTIONS 131 - 144.

THESE ARE PRACTICAL EXERCISES CONSISTING OF EQUIPMENT

OPERATIONS. SAFETY OF EQUIPMENT AND YOURSELF IS

INVOLVED. YOU HAVE TO DO THESE QUESTIONS YOURSELF

WITHOUT ANY ASSISTANCE. PICK THE QUESTIONS YOU CAN DO

YOURSELF AND CROSS THE QUESTIONS YOU CANNOT DO YOUR-

SELF. THEN HAND OVER THIS SHEET TO THE INVIGILATOR

AND ATTEMPT THOSE QUESTIONS YOU CAN DO.

131 \_\_\_\_\_

141 \_\_\_\_\_

132 \_\_\_\_\_

142 \_\_\_\_\_

133 \_\_\_\_\_

143 \_\_\_\_\_

134 \_\_\_\_\_

144 \_\_\_\_\_

135 \_\_\_\_\_

136 \_\_\_\_\_

137 \_\_\_\_\_

138 \_\_\_\_\_

139 \_\_\_\_\_

140 \_\_\_\_\_



## AUDIO VISUAL EDUCATION

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Module III

Projected Aids

Filmstrip Projectors

CRITERION TEST

SECTION C/1

Question 131.  
-----

The Check list given under are not in a sequence. Number 1,2,3 ... against each step in the correct sequence, for A,B, and C separately.

A. SETTING UP

- \_\_\_\_\_ a. Switch motor/lamp.
- \_\_\_\_\_ b. Connect power cord.
- \_\_\_\_\_ c. Focus.
- \_\_\_\_\_ d. Place projector and screen.
- \_\_\_\_\_ e. Center light on screen.

B. OPERATION

- \_\_\_\_\_ a. Place the holder on projector correctly.
- \_\_\_\_\_ b. Properly insert half frame filmstrip into holder.
- \_\_\_\_\_ c. Adjust frame line.
- \_\_\_\_\_ d. Project frame.
- \_\_\_\_\_ e. Focus.
- \_\_\_\_\_ f. Change to double frame filmstrip, lastly.
- \_\_\_\_\_ g. ~~Focus again.~~
- \_\_\_\_\_ h. Back up frame upto two frames.
- \_\_\_\_\_ i. ~~Adjust frame line and project.~~
- \_\_\_\_\_ j. Correct double frame exposure.
- \_\_\_\_\_ k. Skip two frames.

C. PUTTING AWAY

- \_\_\_\_\_ a. Disassemble.
- \_\_\_\_\_ b. Store all cords, filmstrips and projector.
- \_\_\_\_\_ c. Switch off.

Module III

Projected Aids:

Slide Projector.

CRITERION TEST

Section C/2

Question 132

The Check list given under are not in a sequence. Number 1,2,3 .. against each step in the correct sequence, for A,B & C separately.

## A. SETTING UP

- \_\_\_\_\_ a. Connect power cord.
- \_\_\_\_\_ b. Load slide carrier with slides.
- \_\_\_\_\_ c. Install slide carrier.
- \_\_\_\_\_ d. Place projector and screen in position.
- \_\_\_\_\_ e. Connect remote cord.
- \_\_\_\_\_ f. Center light on screen.
- \_\_\_\_\_ g. Adjust image size to full screen.
- \_\_\_\_\_ h. Focus.
- \_\_\_\_\_ i. Turn on lamp.

## B. OPERATION

- \_\_\_\_\_ a. Refocuss if necessary with remote control.
- \_\_\_\_\_ b. Skip one slide.
- \_\_\_\_\_ c. Advance slides.
- \_\_\_\_\_ d. End showing.
- \_\_\_\_\_ e. Go back two slides.

## C. PUTTING AWAY

- \_\_\_\_\_ a. Level machine and retract lens.
- \_\_\_\_\_ b. Disconnect power & control cords.
- \_\_\_\_\_ c. Remove tray, remove slides, store.
- \_\_\_\_\_ d. Turn off lamp.
- \_\_\_\_\_ e. Store accessories and projector.

## Module III

## Projected Aids

## Motion Picture Projector

## CRITERION TEST

## Section C/1

## Question 133.

The Check list given under are not in a sequence. Number 1,2,3 ... against each step in the correct sequence, for A,B,C and D Separately.

A. SETTING UP

- ☐ a. Place projector on stand, open case and plug in power cords.
- ☐ b. Turn on motor/lamp, change lamp if required.
- ☐ c. If there is reverse control, set it for 'forward' position.
- ☐ d. If there is film selector, set it for sound film 24 f.p.s.
- ☐ e. Place the screen, speaker near the screen, attach speaker cable to the projector.
- ☐ f. Turn on amplifier.
- ☐ g. Move the projector toward or away from the screen to fill the screen with desired area of image.
- ☐ h. Elevate the projector to center the image.
- ☐ i. Turn off projector.
- ☐ j. Focus aperture image.
- ☐ k. Check sound system. Adjust volume and tone control.
- ☐ l. Open film channel, and clean all surfaces over which film passes with a brush.
- ☐ m. Check to make sure that film is properly wound on supply reel. (image head down, sound track nearest projector)
- ☐ n. Attach or set reel arms/drive belts.
- ☐ o. Attach or set both reels firmly on to spindle and lock them in position. (Both reels should be of same size, or take up reel shall be bigger than feed reel).

B. THREADING

- ☐ a. Unroll  $1\frac{1}{2}$  metres of film and place film in the feed sprocket.
- ☐ b. Open sprocket shoes.
- ☐ c. Swing open film gate.
- ☐ d. Close sprocket shoe.
- ☐ e. Thread around sound drum and stabiliser.

f. See film is taut or draw the film taut around the sound drum before engaging sprocket holes of sprocket wheel.

g. Check once again, that teeth on each sprocket fits the holes in the film. 171

h. Thread film over feed sprocket and close shoe.

i. Take film and through guide roller, forming a lower loop as per markings on the projector.

j. Leave on upper loop as per markings on the projector, close film gate.

k. Place the film in the film channel.

l. Check if threading is okay by hand operation knob.

m. Established loops must be accurate as per markings.

n. Attach film to the take up film through snubber.

### C. SHOWING FILM

a. Adjust focus when image is visible on screen.

b. Turn off room lights.

c. Set sound volume and tone control at mid points.

d. Turn on lamp.

e. Turn on motor.

f. Correct framing if necessary.

g. Adjust volume and then tone.

h. Shut off projector, when faults are there, that cannot be rectified during showing, e.g., snapping of film, very bad sound.

i. Correct focus and adjust sound whenever necessary during projection.

j. Turn off volume when sound fades and ends.

k. Turn off lamp, when title fades.

### D. REWINDING AND PACKING UP

a. Position operate-rewind lever at REVERSE/REWIND.

b. Attach end of film to the hub of the feed (supply) reel which is empty now.

c. Turn several turns counter clockwise.

d. Unplug speaker cable, wind the cable, and attach to case or speaker as the case may be.

e. After film is rewound, turn control switch to OFF.

f. Lower front of the projector by turning the elevator knob.

g. Push in the drive belts into the interior of the projector case.

h. Push in or remove the arms, attach these at proper position.

i. Unplug power cord and place cord after winding in the space provided.

j. Retract lens mechanism, elevator mechanism and make certain all switches and controls are normal.

k. Close and lock lids firmly, after fitting speaker case over projector (if your projector is so designed).

## AUDIO VISUAL EDUCATION

Module III

Projected Aids

Overhead Projector

CRITERION TEST

Section C/1

Question 134.

The Check List given below are not in a sequence. Number 1,2,3 ... against each step in the correct sequence, for A,B and C separately.

A. SETTING UP

- ☐ a. Connect power cord and switch.
- ☐ b. Set up the projector cord and switch on.
- ☐ c. Adjust image size.
- ☐ d. Put test transparency.
- ☐ e. Adjust top mirror.
- ☐ f. Focus.

B. OPERATION

- ☐ a. Replace test transparency with a set of OH transparency with overlays and manipulate overlays.
- ☐ b. Replace with a transparency containing a number of items. Use progressive disclosure technique.
- ☐ c. Using pencil write on the scroll.
- ☐ d. Attach scroll.

C. PUTTING AWAY

- ☐ a. Pack up power cords.
- ☐ b. Switch off and bring to normal the position of parts.
- ☐ c. Remove and pack up transparency.

## AUDIO VISUAL EDUCATION

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Module III

Projected Aids

Opaque Projector

CRITERION TEST

Section C/1

Question 135.  
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The Check list given under are not in a sequence. Number 1,2,3 .. against each in step in the correct sequence, for A, B, C separately.

A. SETTING UP

- \_\_\_\_\_ a. Place projector and screen, darken room.
- \_\_\_\_\_ b. Adjust focus.
- \_\_\_\_\_ c. Connect power & switch lamp.
- \_\_\_\_\_ d. Insert a flat picture.
- \_\_\_\_\_ e. Elevate & level.

B. OPERATION

- \_\_\_\_\_ f. Show a photograph.
- \_\_\_\_\_ g. Show book pages.
- \_\_\_\_\_ h. Show small metal objects.

C. PUTTING AWAY

- \_\_\_\_\_ i. Remove materials
- \_\_\_\_\_ j. Place cover.
- \_\_\_\_\_ k. Retract lens.
- \_\_\_\_\_ l. Remove power cords and store.

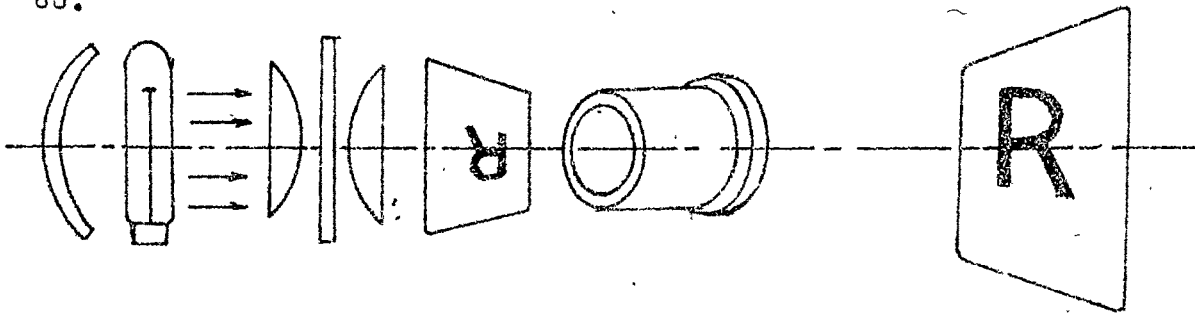
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KEY TO  
CRITERION TEST

- | Module III   | Projected Aids  | Section B |
|--|---|-----------|
| 71. _____ a.      ** b.      ** c.      _____ d.      _____ e.<br>f.      _____ g.      _____ h.   |   |           |
| 72. <u>Immediate feed back and analysis of performance.</u>  |   |           |
| 73. 1. <u>They are flexible and can replace missing or broken ones.</u><br>2. <u>Content can be changed without much extra cost.</u>   |   |           |
| 74. 1. <u>Compact and always in proper sequence.</u><br>2. <u>Useful for group and individual study.</u><br>3. <u>Are inexpensive compared to quality of production.</u><br>4. <u>Equipment operation is simple.</u><br>5. <u>Can be supplemented with captions.</u> |   |           |
| 75. 1. <u>Can get out of sequence.</u><br>2. <u>Causes problems of placement at times.</u>   |   |           |
| 76. 1. <u>Expensive in terms of time, equipment, material and service.</u><br>2. <u>Very difficult to get ready made films to suit objectives.</u><br>3. <u>Requires careful planning, production, skill &amp; equipment.</u>  |   |           |
| 77. 1. <u>Animation</u><br>3. <u>Magnification</u><br>5. <u>Inserts</u>  | 2. <u>Slow motion</u><br>4. <u>Showing split frames</u> |           |
| 78. 1. <u>A light source</u><br>3. <u>A lens system</u>  | 2. <u>A screen (Projection surface)</u>                 |           |
| 79. 1. <u>Direct projection system .</u><br>2. <u>Indirect projection system.</u><br>3. <u>Projection by reflection.</u>   |   |           |



80.

81. Overhead projection = opaque projector.82. Use of mirrors.83. Keystone effect.84. Horizontally.85. Vertically.

86. d lamp      c,h condenser lenses           objective lens  
a screen      f fresnel lens           reflector  
b,i mirrors

87. 1. Portable screen    2. Wall mounted    3. Projection area on wall

88. a reflector      h elevator knob      i fan and motor  
f lamp      m switch      b condenser lenses  
e heat filter      n film advance knob      c objective lens  
g filmstrip carrier      d screen      l focussing lens  
o framer      k aperture      j feed slot

89. c    90. c    91. a    92. e    93. c    94. a

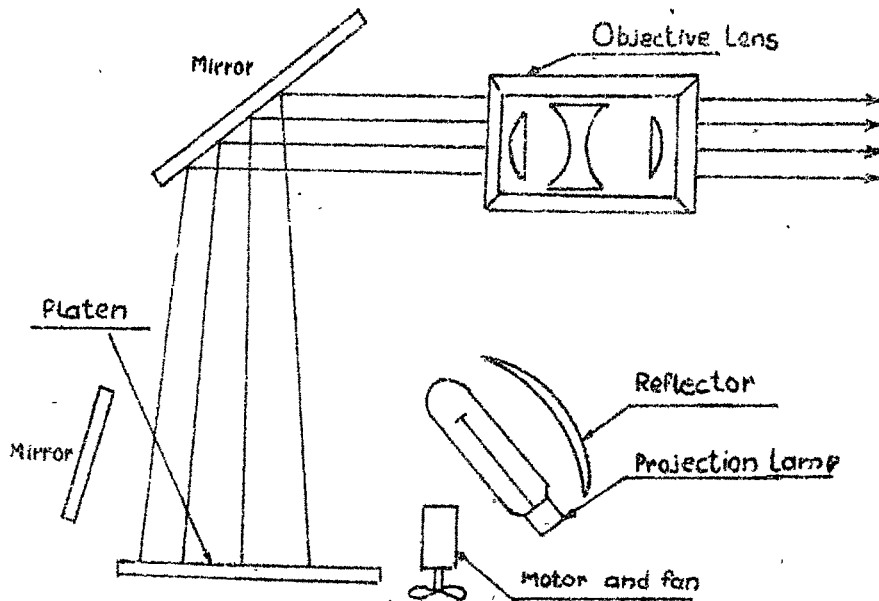
95. 1. objective lens    2. condenser lens    3. lamp  
4. reflector    5. heat filter

96. Objective lens





115.



173

116. Will get heated quickly.

117. 1. Telecast.

2. C.C.T.V.

118. 2 ON/OFF switch    8 horizontal hold    4 contrast  
6 fine tuning    5 vertical hold    9 brightness  
14 screen    1 channel selector    7 volume control  
3 tone control

119. 1. Video deck can record, simultaneously, TV can receive telecast.  
2. Pre-recorded video tape can be played to receive TV picture.  
3. Still frame and frame by frame picture can be viewed.  
4. Pre-recorded programmes can be seen upto 3 hours continuously.  
5. compact and light.

120. a 1. brightness control    b 2. fine tuning    a 3. Contrast  
d 4. vertical hold    c 5. horizontal hold    - 6. ghosts  
- 7. Snow    f 8. Radio frequency.

121. A 1. Aerial    D 6. main switch    F 11. operate switch  
G 2. eject    K 7. audio dub    X 12. video mode switch  
J 3. play    M 8. stop video    C 13. voltage selector  
N 4. Pause    B 9. R.F.out    L 14. Channel selector  
I 5. Rewind    P 10. Record    H 15. Fast forward.  
O 16. Cassette holder

122. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_  
 6. \_\_\_\_\_ 7. \_\_\_\_\_ 8. \_\_\_\_\_ 9. \_\_\_\_\_ 10. \_\_\_\_\_  
 11. \_\_\_\_\_ 12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_ 15. \_\_\_\_\_

123. 1. Can use different projected aids.  
 2. Exciting experience.  
 3. Better/efficient means of communication.  
 4. Large amounts of information can be processed.

124. 1. Wider view 2. shows subject from different  
 3. Compares & contrasts. angles.  
 4. Illustrates relationship 5. Develops concept  
aesthetically.

125. Record narrations on first track and use the second track  
for cueing signals - either by voice for manual or an  
in-audible pulse for auto-synchronisation.

- 126 1. See individual suggestions & appropriateness.

2. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- \*27. 1. Conventional media is usually for group presentation.  
 2. Conventional media treats a topic, multi media treats  
a concept within a topic.  
 3. Conventional media serves general purpose and broad  
objective, multi media serves, specific objective.  
 4. Conventional media could be passive - in multi media  
active student participation is built in.  
 5. In conventional media all students have no choice but  
to view and hear at the same time. Multi media offers  
variety of materials from which students can choose.

128. a. 9, 10, 12      b. 9, 12      c. 4  
d. 6, 9, 11      e. 2, 9      f. 5, 9  
g. 3, 9      h. 7, 11      i. 1, 9  
j. 1, 3
129. a. 1, 8, 9, 10      b. 1, 4      c. 1, 2, 3, 4  
d. 5      e. 2, 3, 6      f. 1 to 6, 8, 9  
g. 1 to 6, 8, 9, 11
130. a. 1, 2, 3, 4, 7, 10, 12  
b. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
c. 1, 2, 3, 4, 5, 7

## AUDIO VISUAL EDUCATION

Module III

Projected Aids.

KEY TO

Film Strip Projectors

CRITERION TEST

SECTION C/1

Question 131.

The check list given under are not in a sequence. Put Numbers 1,2,3 ..... against each step in the correct sequence, for A,B and C separately.

A. SETTING UP

- 3 a. Switch on motor/lamp.
- 2 b. Connect the power cord.
- 5 c. Focus.
- 1 d. Place the projector and screen.
- 4 e. Center the light on screen.

B. OPERATION

- 2 a. Place the holder on projector correctly.
- 1 b. Properly insert half frame filmstrip into holder.
- 5 c. Adjust frame line.
- 4 d. Project frame.
- 3 e. Focus.
- 10 f. Insert double frame filmstrip lastly.
- 7 g. Focus again and project
- 6 h. Back up frame upto two frames.
- 9 i. Adjust frame line and project.
- 11 j. Correct double frame exposure, and focus.
- 8 k. Skip two frames.
- 12 l. Project the double frame filmstrip.

C. PUTTING AWAY

- 2 a. Disassemble.
- 3 b. Store all cords, filmstrips & projector.
- 1 c. Switch off.

## AUDIO VISUAL EDUCATION

Module III

Projected Aids

KEY TO

Slide Projector

CRITERION TEST

Section C/1

Question 132

The check list given under are not in a sequence. Put numbers 1,2,3 ... against each step in the correct sequence, for A,B and C separately.

A. SETTING UP

- 2 a. Connect the power cord.
- 4 b. Load the slide carrier with slides.
- 5 c. Install the slide carrier.
- 1 d. Place the projector & screen in position.
- 3 e. Connect the remote control cord.
- 7 f. Center the light on screen.
- 9 g. Adjust the image size to full screen.
- 8 h. Focus.
- 6 i. Turn on the lamp.

B. OPERATION

- 2 a. Refocus if necessary with remote control.
- 3 b. Skip one slide, use remote control.
- 1 c. Advance slides, use remote control.
- 6 d. Show the End.
- 4 e. Skip back two slides.
- 5 f. Show slide number 10.

C. PUTTING AWAY

- 3 a. Level the machine and retract the lens.
- 4 b. Disconnect the power & control cords.
- 2 c. Remove the tray, remove slides, store them.
- 1 d. Turn off the lamp.
- 5 e. Store the accessories & projector.



## AUDIO VISUAL EDUCATION

Module III

Projected Aids:

Motion Picture Projector

KEY TO  
CRITERION TEST

Section C/1.

Question 133

The check list given under are not in a sequence. Put Numbers 1,2,3 ... against each step in the correct sequence, for A,B,C and D separately.

A. SETTING UP

- 1 a. Place the projector on stand, open the case and plug in the power cords.
- 7 b. Turn on the motor/lamp, change lamp if required.
- 6 c. If there is a reverse control, set it for 'forward' position.
- 5 d. If there is a film selector, set it for sound film 24 f.p.s.
- 2 e. Place the screen, speaker near the screen, attach the speaker cable to the projector.
- 3 f. Turn on amplifier.
- 9 g. Move the projector towards or away from the screen to fill the screen with desired area of image.
- 8 h. Elevate the projector to center the image.
- 11 i. Turn off the projector.
- 10 j. Focus the aperture image.
- 13 k. Check the sound system. Adjust the volume and tone control.
- 12 l. Open the film channel, and clean all the surfaces over which film passes, with a brush.
- 15 m. Check to make sure that film is properly wound on the supply reel. (image head down, sound track nearest projector.)
- 4 n. Attach or set the reel arms/drive belts.
- 14 o. Attach or set both the reels firmly on to the spindle and lock them in position. (Both reels should be of same size, or take-up reel shall be bigger than feed reel).

B. THREADING

- 3 a. Unroll  $1\frac{1}{2}$  metres of film and place the film in the feed sprocket.
- 2 b. Open sprocket shoes.
- 1 c. Swing open film gate.
- 10 d. Close sprocket shoes.
- 8 e. Thread around sound drum and stabiliser.
- 9 f. See that film is taut or draw the film taut around the sound drum before engaging sprocket holes of sprocket wheel.
- 11 g. Check once again, that teeth on each sprocket fits the holes in the film.
- 4 h. Thread the film over feed sprocket and close shoes.
- 7 i. Take the film and through guide roller, forming a lower loop as per markings on the projector.
- 6 j. Leave on upper loop as per markings on the projector, close film gate.
- 5 k. Place the film in the film channel.
- 14 l. Check if threading is okay by hand operation knob.
- 12 m. Established loops must be accurate as per markings.
- 13 n. Attach film to the take up film through snubber.

C. SHOWING FILM

- 5 a. Adjust focus when image is visible on screen.
- 2 b. Turn off the room lights.
- 1 c. Set sound volume and tone control at mid points.
- 4 d. Turn on the lamp.
- 3 e. Turn on motor.
- 7 f. Correct the framing if necessary.
- 6 g. Adjust the volume and then tone.
- 9 h. Shut off the projector, when faults are notified that cannot be rectified during showing, e.g. snapping of film, very bad sound.
- 8 i. Correct focus and adjust the sound whenever necessary during projection.
- 11 j. Turn off the volume when sound fades and ends.
- 10 k. Turn off the lamp, when title fades away.

D. REWINDING AND PACKING UP

- 3 a. Position the ~~operate~~-rewind lever at REVERSE/REWIND. Turn control switch of the projector to on.
- 1 b. Attach end of the film to the hub of the feed (supply) reel which is empty now.
- 2 c. Turn several turns counter clockwise.
- 6 d. Unplug the speaker cable, wind the cable and attach to case or speaker as the case may be.
- 4 e. After the film is rewound, turn the control switch to OFF.
- 5 f. Lower front of the projector by turning the elevator knob.
- 9 g. Push in the drive belts into the interior of the projector case.
- 8 h. Push in or remove the arms attach these at proper position.
- 7 i. Unplug the power cord and place cord after winding in the space provided.
- 10 j. Retract the lens mechanism, elevator mechanism and make certain that all switches and controls are normal.
- 11 k. Close and lock the lids firmly, after fitting speaker case over projector (if your projector is so designed).

## AUDIO VISUAL EDUCATION

Module III

Projected Aids

Overhead Projector

KEY TO  
CRITERION TEST

Section C/1

Aquestion 134

The check list given under are not in a sequence. Put numbers 1,2,3 ..... against each step in the correct sequence, for A,B and C separately.

A. SETTING UP

- 2 a. Connect the power cord and switch.
- 1 b. Set up the projector cord and switch on.
- 5 c. Adjust the image size.
- 3 d. Put the test transparency.
- 4 e. Adjust the top mirror.
- 6 f. Focus.

B. OPERATION

- 1 g. Replace the test transparency with a set of O.H. transparency with overlays and manipulate overlays.
- 2 h. Replace with a transparency containing a number of items, for progressive disclosure.
- 4 i. Using pencil write on the scroll.
- 3 j. Attach the scroll.

C. PUTTING AWAY

- 2 k. Pack up the power cords.
- 1 l. Switch off and bring to the normal position the projector and parts.
- 3 m. Remove and pack up the transparency.

## AUDIO VISUAL EDUCATION

Module III

Projected Aids

Opaque Projector

Key to  
Criterion Test

Section C/1

Question-135

The check list given under are not in a sequence, Put numbers 1,2,3 ... against each step in the correct sequence, for A,B and C separately.

A. SETTING UP

- 1 a. Place the projector & screen, darken the room.
- 5 b. Adjust focus.
- 2 c. Connect the power & switch on the lamp.
- 3 d. Insert a flat picture.
- 4 e. Elevate & Level the projector.

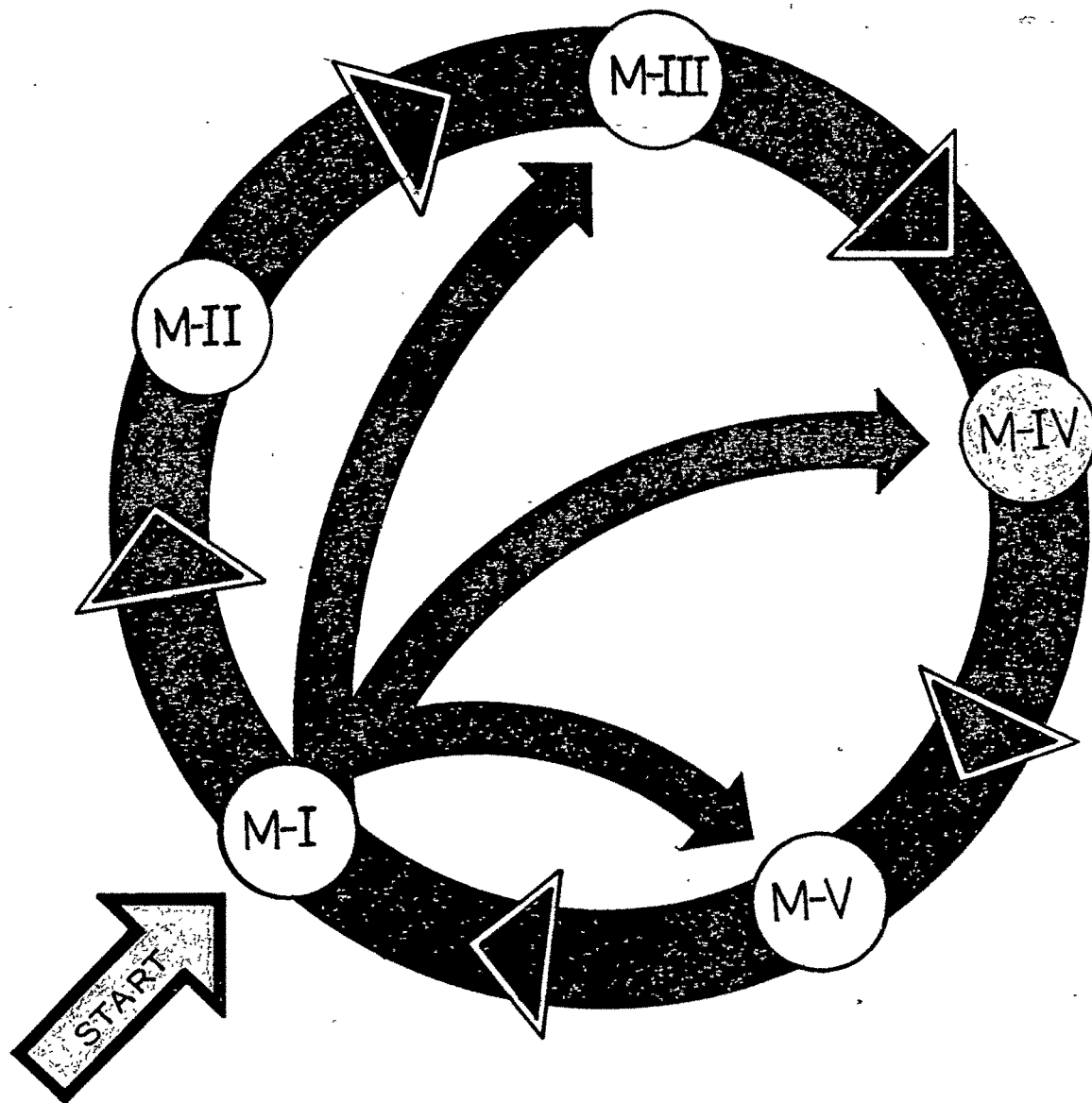
B. OPERATION

- 1 f. Show a photograph.
- 2 g. Show book pages.
- 3 h. Show small metal objects.

C. PUTTING AWAY

- 1 i. Remove the materials.
- 4 j. Place the cover
- 3 k. Retract the lens.
- 2 l. Remove the power cords & store.

# AUDIO VISUAL EDUCATION



KRISHNAN.

## AUDIO VISUAL EDUCATION

-----  
Module IV            Duplicating Processes        Section A.

Units 1-5            CRITERION TEST                    Time: 15 mts.  
-----

Use separate response sheets provided for Section A, Section B and Section C.

Answer Section A first, hand over it, then Section B, Answer Section C last.

DO NOT write anything in the question paper; Return the question paper to your Instructor.

Circle appropriate letter(s) a,b,c or d for Section A on response sheets.  
-----

1. The process of producing copies from a prepared master/Stencil is known as -
  - a) Photo Copying
  - b) Duplicating
  - c) Xero-graphing
  - d) Mimeographing
2. You are required to make 20 copies of a monthly test paper for your class immediately. Among the methods given below, which one will you suggest for this purpose ?
  - a) Electronic Stencil Scanner
  - b) Stencil Duplication
  - c) Mimeography
  - d) Spirit Duplication
- 3) An instruction sheet about 'Safety' is to be distributed among 500 trainees of your institute. While one of the following processes will you suggest for preparing these copies.
  - a) Hectographing
  - b) Mimeographing
  - c) Photo Copying
  - d) Printing

4. If you are required to produce one copy of a printed text page with illustration, Which one among the following will you adopt ?
  - a) Mimeography
  - b) Mimeograph with electronically scanned stencil
  - c) Hectography
  - d) Electrostatic Copier
5. A brochure is to be prepared for your institute as a publicity material. The brochure contains coloured photographs and other matters. Among the following processes which one will you recommend if you are to make about 6000 copies ?
  - a) Spirit Duplicating
  - b) Photocopying
  - c) Printing
  - d) Mimeography with electronically scanned stencil
6. You are required to prepare a stencil from one original which illustrates the stencil view of an assembly containing minute details. You also need 200 copies of this material. Among the methods suggested below, Which one would you consider will give the best results ?
  - a) Drawing by hand using a stylus
  - b) Electronic Stencil Scanner
  - c) Hectography
  - d) Majox
7. Among the items listed below, indicate the item which you consider is not a controlling factor, if the quality of copies produced by spirit duplicating process is the criterion factor.
  - a) Master paper
  - b) Exposure time
  - c) Carbon
  - d) Fluid
8. The kind of paper used for preparing spirit duplicating master is -
  - a) Wax coated paper
  - b) Tissue paper
  - c) Tracing paper
  - d) Glazed paper



9. While preparing a spirit duplicating master on typewriter the ribbon position should be
  - a) Normal
  - b) Neutral
  - c) Ribbon removed
  - d) None of the above
10. While preparing a stencil using a typewriter for stencil duplicating, the position of typewriter ribbon should be
  - a) Neutral
  - b) Normal
  - c) Red colour
  - d) **Black colour**
11. The problem of creasing of stencil when stencils are reused can be avoided by
  - a) Pulling both ends together and lay the stencil on the screen.
  - b) Ironing the stencil before mounting.
  - c) Fix the stencil and run manually in low speed.
  - d) Fix one end of the stencil on the screen and stretch the other end by pulling and lay on screen.
12. The Stencil used in India for the electronic stencil scanner (Gestetner ESC 79) is
  - a) Gestafax 200
  - b) FAXIL 300
  - c) Wax coated stencil
  - d) Dry type G.
13. Which of the following is not an advantage of electronic stencil cutting.
  - a) Multi coloured copies can be made from stencils cut.
  - b) Dont need a dark room.
  - c) Stencils of half tone material can be made
  - d) Illustrations from originals can be made perfectly.

14. The proportion of toner concentrate and dispersant in the toner mixture of "Lennox 200" Photo copier is
- a. 10 c.c.                      -- 1 litre
  - b. 60 c.c.                      -- 1 litre
  - c. 6 c.c.                        -- 1 litre
  - d. 1 litre                        -- 10 c.c.
15. The Lennox 200 copier is an electro static copier which will produce copies from originals of any
- a. page of a bound book.
  - b. sheet of printed matter
  - c. coloured chart of A<sub>3</sub> size.
  - d. sheet of 8½ or 216 mm maximum width.
16. When using Lennox 200 copier, Which one of the following reasons is not a criterion for using a carrier sheet.
- a. original is flimsy
  - b. Thick sheet of originals
  - c. Very small tiny matter.
  - d. Badly torn and crumpled paper.

## AUDIO VISUAL EDUCATION

## RESPONSE SHEET

Roll No:

Module IV

Unit 1-5

Trade :

Section A

1	2	3	4
a	a	a	a
b	b	b	b
c	c	c	c
d	d	d	d
5	6	7	8
a	a	a	a
b	b	b	b
c	c	c	c
d	d	d	d
9	10	11	12
a	a	a	a
b	b	b	b
c	c	c	c
d	d	d	d
13	14	15	16
a	a	a	a
b	b	b	b
c	c	c	c
d	d	d	d

## AUDIO VISUAL EDUCATION

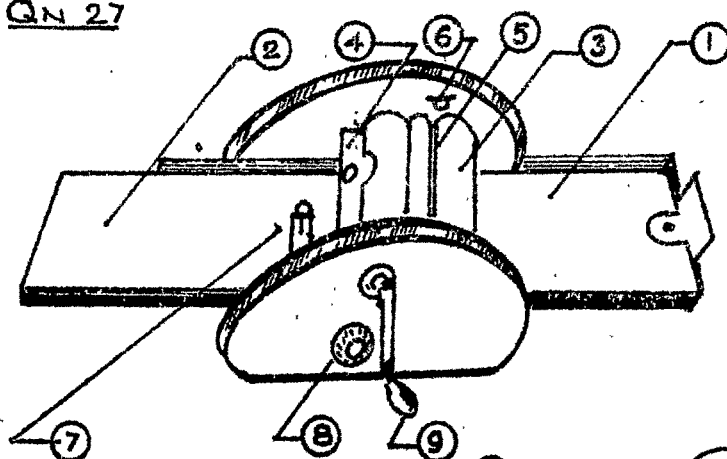
-----  
 Module IV      Duplicating Processes      Time: 40 mts.  
 Units 1-5      CRITERION TEST      Section B.  
 -----

Use separate response sheets provided for section B.  
 Answer Section A before attempting Section B, and  
 hand over to your instructor.  
 DO NOT write anything in the question paper.  
 Write each answer in the space provided for on the  
 response sheets.  
 RETURN the question paper to your instructor, with  
 response sheets.  
 ANSWER section C after completing Section B.

- 
17. Name the four commonly used duplicating processes.
  18. What are the three methods of preparing stencils for duplicating instructional materials.
  19. While you are developing instructional materials for skill training and duplicating the copies, there are five general points to be considered. What are they -
  20. When instructional materials are prepared, we should ensure that all trainees understand the content and remember it for a long time. Suggest in your own words three aspects to be considered for achieving this.
  21. Name the three types of Photo copying process.
  22. A copy you have cyclostyled is found to be defective, the copies get cropped during duplication. Suggest how the problem is solved in your own words.
  23. Some times on instructional materials the letter styles are changed intentionally. From your experience of this course what do you think is the purpose of this?

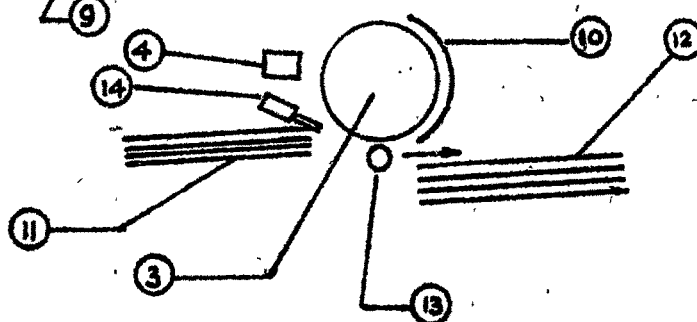
24. On written instructional materials you would have noticed space between blocks of information. What is the idea of this ?
25. You have prepared several spirit duplicating masters and made copies from it. Based on your experience, state four advantages of spirit duplication process.
26. Explain the functions of the following parts of spirit duplicator in not more than one sentence for each.
  - a. Drum
  - b. Feed tray
  - c. Felt pad
  - d. Fluid tank
  - e. Counter
27. In the sketch I given at the end of this section (sketch) the parts of a spirit duplicator are indicated as 1,2,3, ... . Against the names given in the response sheet write the appropriate number.
28. You are to prepare a master pack for spirit duplicating. Describe the arrangement of papers in the pack.
29. State three safety precautions to be observed while using spirit duplicator.
30. Name the four essential items for making copies using mimeography.
31. State the basic principle of stencil duplication.
32. The sketch II given at the end of this section is of stencil duplicator with some of its parts marked 1,2,3 ... against the names given in the response sheet write the corresponding number.
33. Explain, how you can prepare an overhead transparency using electronic scanner.
34. You have a two speed operation in an electronic scanner
  - a. What are they ?
  - b. What is the purpose of the two speeds ?
  - c. State two situations where you would use each speed.

Qn 27

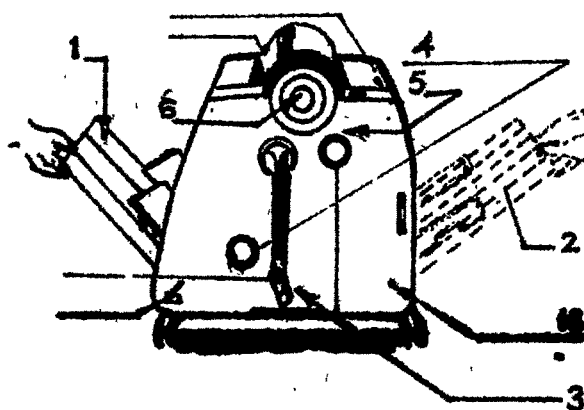


SKETCH-1

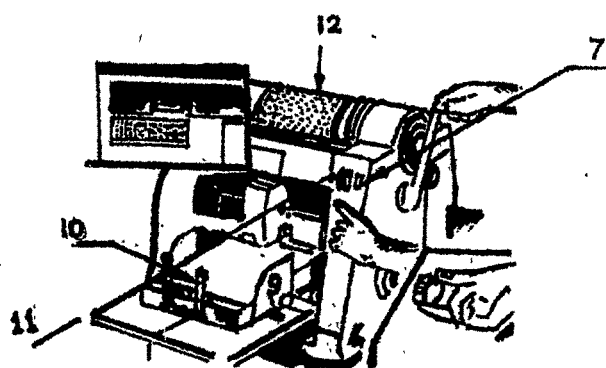
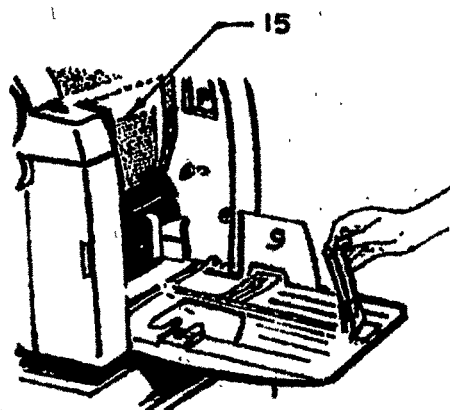
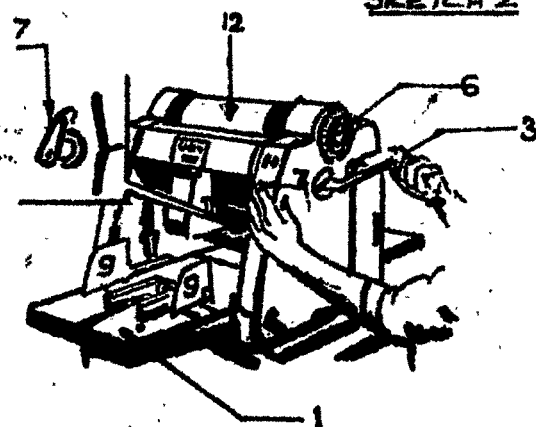
SPIRIT DUPLICATOR



Qn 32



SKETCH 2



M IV/1-5/CT-7

SKETCH 2. STENCIL DUPLICATOR

## AUDIO VISUAL EDUCATION

## RESPONSE SHEET

Roll No:

Module IV

Trade:

Unit 1-5  
Section B.

17. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_

18. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

19. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_

20. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

21. 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

22. \_\_\_\_\_  
\_\_\_\_\_

23. \_\_\_\_\_  
 \_\_\_\_\_

24. \_\_\_\_\_  
 \_\_\_\_\_

25. a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_

26. a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_  
 d. \_\_\_\_\_  
 e. \_\_\_\_\_

27.	_____ feed tray	_____ Impression roller
	_____ receiving tray	_____ Master
	_____ fluid tank	_____ handle
	_____ drum	_____ Master holding strip
	_____ copy paper	_____ counter
	_____ duplicated paper	_____ felt pad.

28. a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_

29. a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_



30. a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 c. \_\_\_\_\_  
 d. \_\_\_\_\_

31. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- |     |                               |                       |
|-----|-------------------------------|-----------------------|
| 32. | _____ feed board raising knob | _____ feeding unit    |
|     | _____ print height adjuster   | _____ feed board      |
|     | _____ handle                  | _____ back guide      |
|     | _____ collecting tray         | _____ side guide      |
|     | _____ ink selector            | _____ hand feed lever |
|     | _____ counter                 | _____ stencil drum    |

33. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

34. a. \_\_\_\_\_  
 b. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 c. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## AUDIO VISUAL EDUCATION

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 Module IV      Duplicating Processes      Section C.  
                  CRITERION TEST                   Time: 60 Mts.  
 -----

Use separate answer sheets for Section A, Section B and Section C.  
 DO NOT write anything on this question paper.  
 RETURN the question paper along with your responses.  
 ANSWER Section C after completing Section A and Section B.

-----  
 C/1. PERFORMANCE CHECK LIST

Performance check list for operating different duplicating equipment are given separately for each of the question below. This check list may not be in the correct sequence of performance re-arrange the check list in order and make it in the correct sequence by placing the appropriate number indicating the sequence.

Note:- Collect separate response sheets provided for each one of the equipment operation.

- 35. Spirit Duplicator
- 36. Stencil Duplicator
- 37. Electronic Scanner
- 38. Photo copier.

C/2 PRACTICALS

- 39. Prepare a handwritten master sheet with illustrations in two colours for spirit duplicating, using duplograph master sheet and hectograph carbon sheet for a given illustration in five minutes.
- 40. Using the prepared master sheet make 10 copies on a spirit duplicator in 2 minutes.

41. Make a hand written stencil for duplicating the given illustration in 10 minutes.
42. Duplicate 10 copies from the stencil prepared by you, using Gestetner Duplicating Machine in 2 mts.
43. Using Gestetner ESC 79 stencil scanner, reproduce a given line drawing in  $2\frac{1}{2}$  minutes.
44. Prepare a copy of the given original using a Lennox 200 copier.



## AUDIO VISUAL EDUCATION

 ROLE NO:  
 TRACK:

RESPONSES: SELECT FOR PRACTICAL EXERCISES

MODULE IV

PROJECTS

SECTION C

READ THE QUESTIONS 35 - 44 UNDER SECTION C OF YOUR QUESTION PAPER. THESE ARE PRACTICAL EXERCISES TO BE DONE BY YOURSELF WITHOUT ANY ASSISTANCE. THESE ARE EQUIPMENT OPERATIONS OF DUPLICATING PROCESSES AND ALLIED WORK. BE SURE YOU KNOW THEM BEFORE YOU START THE PRACTICAL EXERCISES. YOU MAY SELECT THE QUESTIONS YOU CAN DO WITHOUT ANY HELP AND TICK THEM. YOU MAY CROSS THE QUESTIONS YOU THINK YOU ARE NOT SURE THAT YOU CAN OPERATE OR DO WITHOUT ANY HELP. THEN HAND OVER THIS SHEET TO THE INSTRUCTOR OR AND ATTEMPT THOSE QUESTIONS YOU CAN DO. SIMILARLY IF YOU CAN'T DO PERFORMING, MARK LIST MARK 'X'.

35 \_\_\_\_\_

40 \_\_\_\_\_

36 \_\_\_\_\_

41 \_\_\_\_\_

37 \_\_\_\_\_

42 \_\_\_\_\_

38 \_\_\_\_\_

43 \_\_\_\_\_

39 \_\_\_\_\_

44 \_\_\_\_\_

## AUDIO VISUAL EDUCATION

Module IV

Duplicating Processes

Unit 1-6

Spirit Duplication

C1/35

Operating a Spirit Duplicator.

The following check list is not in an orderly sequence. Number 1,2,3, ..... against each of the sub heads in the correct order.

I. READY THE DUPLICATOR

- \_\_\_\_\_ Adjust pressure of impression roller
- \_\_\_\_\_ Adjust guides if any
- \_\_\_\_\_ Check for moistness of felt, wet if necessary
- \_\_\_\_\_ Insert paper in the feed tray
- \_\_\_\_\_ Rotate and check for proper flow of fluid
- \_\_\_\_\_ Clean duplicator if required
- \_\_\_\_\_ Check for fluid in the tank, add if necessary.
- \_\_\_\_\_ Remove the cover.

II. ATTACH MASTER:

- \_\_\_\_\_ the side with carbon impression faces up
- \_\_\_\_\_ Insert the top edge of the master into the opening (about 5 mm)
- \_\_\_\_\_ Turn handle to 7 'O' clock position.
- \_\_\_\_\_ Return the clamping to normal locked position.
- \_\_\_\_\_ Rotate handle counter clock wise.
- \_\_\_\_\_ Then rotate handle clock wise, and

III. RUN COPIES

- \_\_\_\_\_ Run copies, feed paper continuously, check continuously spirit, paper and other adjustments.
- \_\_\_\_\_ Check again spirit flow and adjust if needed
- \_\_\_\_\_ Run test sheet

- \_\_\_ Set counter for copy numbering
- \_\_\_ Adjust impression strength
- \_\_\_ Adjust margin (top and bottom)

#### IV. LEAVE MACHINE:

- \_\_\_ Remove and store spirit
- \_\_\_ Set copy control knob and pressure control knob to zero
- \_\_\_ Replace dust cover
- \_\_\_ Rotate clock wise again, close - clamp lever, leave  
drum to normal position.
- \_\_\_ Remove and store unused paper
- \_\_\_ Stop handle to 7 'O' clock position.
- \_\_\_ Rotate counter clockwise, open clamp
- \_\_\_ File master after stapling to it a specimen
- \_\_\_ Remove master without touching the carbon impression
- \_\_\_ Clean the machine and,

## AUDIO VISUAL EDUCATION

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Module IVDuplicating Processes  
-----

## C1/36 Operating Stencil Duplicator

The check list given under is not in a sequence. Number 1,2,3 ... against each step in the correct sequence, and sub-heads A,B,C and D separately.

A. READY MACHINE:

- \_\_\_\_\_ a. Connect power plug to electrical socket.
- \_\_\_\_\_ b. Check, that feed lever is raised and give handle, one complete clockwise turn, to ensure feed mechanism is not operating.
- \_\_\_\_\_ c. Remove cover.
- \_\_\_\_\_ d. Lower feed board and collecting tray

B. INKING:

- \_\_\_\_\_ a. Hold ink tube by its shoulder and remove its cap.
- \_\_\_\_\_ b. Insert tube nozzle in a tube holder.
- \_\_\_\_\_ c. Place crimped end in 'V' of tube support.
- \_\_\_\_\_ d. Open inker door.
- \_\_\_\_\_ e. Push tube locking lever fully downwards until roller is at extreme end of slot.
- \_\_\_\_\_ f. Push nozzle fully into holder.
- \_\_\_\_\_ g. Raise tube locking lever.
- \_\_\_\_\_ h. Press gently until tube nozzle is in level with tube holder.
- \_\_\_\_\_ i. Do not grip the tube or squeeze it.
- \_\_\_\_\_ j. Close inker door.
- \_\_\_\_\_ k. Switch off machine by depressing switch.
- \_\_\_\_\_ l. Start machine by switching on switch
- \_\_\_\_\_ m. Apply ink by moving ink lever fully backwards and forwards with a slow, steady action. When ink is evenly distributed an even, thin film of ink will be visible, giving a slight sheen to the surface of the ink screen and then,

- \_\_\_\_\_ n. Turn ink selector to full width inking position-this is indicated by full blue line appearing on top of ink selector knob

#### C. FITTING THE STENCIL

- \_\_\_\_\_ a. Ensure fixing bar studs project through stencil heading perforations.
- \_\_\_\_\_ b. Turn back, backing sheet, if stencil is creased, re-lay it by holding the bottom of stencil
- \_\_\_\_\_ c. Release proofing knob.
- \_\_\_\_\_ d. Turn handle anticlockwise to the bottom position and tear off the backing sheet along perforated line.
- \_\_\_\_\_ e. Check that the copy is uniformly inked, if necessary repeat the operation till the inking is uniform.
- \_\_\_\_\_ f. Turn handle slowly one complete rotation (clockwise)
- \_\_\_\_\_ g. Keep right hand steady to maintain continual pressure over full length of backing sheet.
- \_\_\_\_\_ h. Hold bottom edge of backing sheet, raise slightly outward.
- \_\_\_\_\_ i. Turn handle clockwise until stencil fixing bar is at top of machine.
- \_\_\_\_\_ j. Turn back backing sheet.
- \_\_\_\_\_ k. With typed side of stencil facing inwards, place tongue and top edge of stencil heading beneath fixing bar flap.
- \_\_\_\_\_ l. Place right hand lightly on backing sheet.
- \_\_\_\_\_ m. Stop turning when the handle is in its top position.
- \_\_\_\_\_ n. Turn handle to its stop position.
- \_\_\_\_\_ o. Depress proofing knob and
- \_\_\_\_\_ p. Turn handle slowly clockwise.

#### D. PREPARING COLLECTING TRAY AND FEEDBOARD

- \_\_\_\_\_ a. For quick re-loading raise paper weight to top-position and lay back fence horizontal on feed board.
- \_\_\_\_\_ b. Adjust and position side fences.
- \_\_\_\_\_ c. Pull back fence of feedboard fully to rear.
- \_\_\_\_\_ d. Slide back fence towards paper to touch it and lower paper weight.



- \_\_\_\_\_ e. Raise back and side guides of collecting tray and move them fully outwards.
- \_\_\_\_\_ f. Place paper on feedboard fully forward, never place more paper on feedboard than will fit easily under paper height stop.
- \_\_\_\_\_ g. Fan out paper and square it up to the original state.

#### E. SETTING FEED UNIT:

- \_\_\_\_\_ a. For light weight paper adjust feed pressure lever to bottom of slot '-'
- \_\_\_\_\_ b. For normal use set it at top of slot '+'
- \_\_\_\_\_ c. Check position of feed pressure lever.

#### F. PRINTING FIRST COPY:

- \_\_\_\_\_ a. Adjust side margin by moving paper stack across feedboard using the scale as a guide.
- \_\_\_\_\_ b. To set the collecting tray lay the edge of printed copy against front guide.
- \_\_\_\_\_ c. Position the back guide to touch the top end of copy.
- \_\_\_\_\_ d. Move side guides to touch the sides of printed copy and lock.
- \_\_\_\_\_ e. Raise front guide wings.
- \_\_\_\_\_ f. Raise feed lever whilst completing clockwise turn of handle.
- \_\_\_\_\_ g. Depress the feed lever and
- \_\_\_\_\_ h. Examine the correct position and the impression.
- \_\_\_\_\_ i. Raise feed board by turning feed board raising knob until paper stack contacts paper height stop. The raising knob is automatically disengaged then.
- \_\_\_\_\_ j. Adjust print height up or down by using print height adjuster knob.
- \_\_\_\_\_ k. Slowly turn handle clockwise as soon as feed mechanism begins to operate.
- \_\_\_\_\_ l. The duplicated copy which is printed in the meantime during this process is collected in the tray.

#### G. SETTING THE COUNTER:

- \_\_\_\_\_ a. Turn unit setter anti-clockwise to units required (twenty five)
- \_\_\_\_\_ b. Set hundred setter anti-clockwise to hundreds required (one thousand) and

#### H. PRINTING COPIES:

- \_\_\_\_\_ a. Start machine by raising switch.
- \_\_\_\_\_ b. Depress feed lever to commence printing.
- \_\_\_\_\_ c. Select speed of machine - raise speed switch for fast speed and lower for slow speed.

#### I. TO CLOSE THE MACHINE:

- \_\_\_\_\_ a. Turn handle clockwise and remove stencil from the machine.
- \_\_\_\_\_ b. Turn handle to bottom position and fold inwards.
- \_\_\_\_\_ c. Close up feedboard and collecting tray.
- \_\_\_\_\_ d. Fold back and side guide of collecting tray inwards.
- \_\_\_\_\_ e. Replace the cover.
- \_\_\_\_\_ f. Release stencil heading from studs.
- \_\_\_\_\_ g. Lay back fence backward, horizontal on to feedboard.
- \_\_\_\_\_ h. Lift up stencil fixing bar flap.
- \_\_\_\_\_ i. Depress the feedboard raising knob.
- \_\_\_\_\_ j. Remove paper slide back fence fully forward below feed unit.
- \_\_\_\_\_ k. Turn handle clockwise until stencil fixing bar is at top of machine.
- \_\_\_\_\_ l. Detatch flap.
- \_\_\_\_\_ m. Lower paper weight.

#### J. RE-RUNNING OF USED STENCILS:

- \_\_\_\_\_ a. Turn handle little at a time and stretch out any creases with fingers of left hand.
- \_\_\_\_\_ b. Lay it evenly on ink screen over its entire length.
- \_\_\_\_\_ c. Turn handle until stencil fixing bar is in line with feed mechanism.
- \_\_\_\_\_ d. Remove any creases by lifting bottom of stencil with right hand and relaying stencil slowly on ink screen.
- \_\_\_\_\_ e. Ink machine and attach stencil as discussed earlier.
- \_\_\_\_\_ f. Grip bottom of stencil and hold it upright and then.

## Module IV

## Duplicating Processes

## C1/37 Electronic Stencil Scanning

The Check list given under are not in a sequence. Number 1,2,3 ... against each step in the correct sequence.

PROCEDURE:

- \_\_\_\_\_ a. Set the speed. (If the details in the original are very close set the speed to 300 rpm. Where the details are not so close use 600 rpm).
- \_\_\_\_\_ b. Fold the top edge of the stencil and insert the top edge in the slit of the drum opening.
- \_\_\_\_\_ c. Open the safety flap/guard on the left. Adjust density and sensitivity, depending on the density and tone of the original.
- \_\_\_\_\_ d. Remove the stencil fastening strip from the left hand drum.
- \_\_\_\_\_ e. Rotate the drum by hand along with the stencil and insert the other end of the stencil in the opening and hold with the stencil in position by means of the fastening strip.
- \_\_\_\_\_ f. Move the right hand side stop to position and lock-listen for the CLICK.
- \_\_\_\_\_ g. Shift the electronic eye towards left and locate it 3 mm beyond the actual left hand side limit of the original.
- \_\_\_\_\_ h. Switch on the electronic eye by depressing white button.
- \_\_\_\_\_ i. Move the carriage and locate the beam so that the light from the electronic eye fall 3 mm beyond the actual right side limit of the original.
- \_\_\_\_\_ j. Set density and sensitivity based on the originals.
- \_\_\_\_\_ k. Connect the power supply and switch on the mains.
- \_\_\_\_\_ l. Lift open the safety guard and check the stylus tip. (If it is worn out replace with a new one)
- \_\_\_\_\_ m. Remove the dust cover.
- \_\_\_\_\_ n. Place the original under the transparent carrier on the copy side of the drum and clamp it. (Originals should be with in the guidelines provided on the drum).

- \_\_\_\_\_ o. After the completion of scanning the drum will stop automatically. Time for scanning at 300 rpm is a little over 4 minutes and the 600 rpm is a little over 2 minutes.
- \_\_\_\_\_ p. Close the machine with cover.
- \_\_\_\_\_ q. Swing the cover to position
- \_\_\_\_\_ r. Remove the stencil and original and check the stencil, for the effect of impression. Switch off disconnect power plug.
- \_\_\_\_\_ s. Switch on the green button for scanning.
- \_\_\_\_\_ t. Switch off the electronic eye, by pressing the white button.

M IV/1-5/CT-18

## AUDIO VISUAL EDUCATION

## Module IV

## Photocopying

C1/38 Operating Lennox 200 copier.

The check list given under are not in a sequence. Number 1,2,3 .... against each step in the correct sequence.

PROCEDURE:

- \_\_\_\_\_ a. Rest both sheets against left hand guide edge and move forward so that original enters in lower slot and copy enters upper slot.
- \_\_\_\_\_ b. With the original facing up, place coated side of the copy paper on top. Coated side is much whiter than the uncoated side and can be easily distinguished.
- \_\_\_\_\_ c. Open the front door by turning the knob to horizontal position.
- \_\_\_\_\_ d. With plate in position, push back door to close and turn the knobs to back.
- \_\_\_\_\_ e. Then align the original and copy paper along left and top edges.
- \_\_\_\_\_ f. Start the machine.
- \_\_\_\_\_ g. Position the feed plate taking care that notch in centre of the plate engages in the guide pin of front door assembly.
- \_\_\_\_\_ h. Switch off the machine.
- \_\_\_\_\_ i. Pick up the original from the bottom and the copy from the top.
- \_\_\_\_\_ j. Release the grip on sheets, immediately when these are caught in the rollers.

## AUDIO VISUAL EDUCATION

## KEY

Roll No:

Module 1 V

Unit 1-5

Trade :

Section A

1	2	3	4
a	a	a	a
(b)	b	(b)	b
c	c	c	c
d	(d)	d	(d)
5	6	7	8
a	a	a	a
b	(b)	(b)	b
(c)	c	c	c
d	d	d	(d)
9	10	11	12
(a)	(a)	a	a
b	b	b	(b)
c	c	c	c
d	d	(d)	d
13	14	15	16
(a)	a	a	a
b	b	b	(b)
c	(c)	c	c
d	d	(d)	d

Roll No:	Module IV
KEY TO CRITERION TEST	Unit 1-5
Trade :	Section B

17.
  1. Spirit duplicating
  2. Stencil duplicating
  3. Photo copying
  4. Printing
18.
  1. Hand written
  2. Type written
  3. Scanning
19.
  1. organise materials
  2. Use clean and good typewriter
  3. Develop good layout
  4. Leave enough margin
  5. Do proof reading
20.
  1. Write to the level of trainees
  2. Be correct and consistent, be simple
  3. Emphasise by heading and separation
21.
  1. Electrostatic (Xerox)
  2. Diazo
  3. Infra aid
  4. Dye transfer
22. Leave enough margins-top, bottom and sides - so that the copy is not cropped up during duplication.
23. To emphasise, and separate headings and information.

24. To separate ideas, items
25. a. Cheaper  
 b. Drawing can be made easily by hand  
 c. Multi colouring can be done easily  
 d. Writing or typewriting is easier
26. a. Drum - carries master copy  
 b. Feed tray - carries paper for duplication  
 c. Felt pad - moisturing the duplicating paper(copy)  
 d. Fluid tank - container for spirit  
 e. Counter - to show number of copies made
27. 2 feed tray                      13 Impression roller  
1 receiving tray                  10 Master  
4 Fluid tank                      9 handle  
3 drum                              5 Master holding strip  
11 copy paper                      7 counter  
12 duplicated paper              14 felt pad
28. a. First backing sheet  
 b. Second carbon facing glazed surface of master  
 c. Master with glazed surface facing carbon
29. a. Handle spirit with care, being inflammable.  
 b. Avoid undue long exposure to spirit  
 c. Do not smoke within vicinity  
 d. Keep in a proper ventilated room
30. a. Stencil  
 b. Ink for duplicating  
 c. Duplicating paper  
 d. Duplicator
31. The ink is made to pass through perforation made on the stencil (by writing or typing or scanning) to leave impressions on the duplicating paper.



32. 4 feed board raising knob 8 feeding unit  
11 print height adjuster 1 feed board  
3 handle 10 back guide  
2 collecting tray 9 side guide  
5 ink selector 7 hand feed lever  
6 counter 12 stencil drum

33. A clear acetate sheet is placed between blank stencil and backing sheet while scanning as usual. You make the clear acetate, the transparency.

34. a. 300 , 600  
 b. The lower speed is used when your material has close lines and you desire better quality.  
 c. When you have sketches and photographs you use lower speed.  
For typewritten matter or when there is no difference in tones, you can use higher speed.

## Module IV

## Duplicating Processes

C1/35

Operating a Stencil duplicator.

I. READY THE DUPLICATOR

- 5 Adjust pressure of impression roller.
- 4 Adjust guides if any
- 7 Check for moistness of felt, wet if necessary
- 3 Insert paper in the feed tray
- 8 Rotate and check for proper flow of fluid
- 2 Clean duplicator if required
- 6 Check for fluid in the tank, add if necessary
- 1 Remove the cover

II. ATTACH MASTER:

- 4 the side with carbon impression faces up
- 3 insert the top edge of the master into the opening (about 5 mm)
- 1 Turn handle to 7 'O' Clock position
- 6 return the clamping to normal locked position
- 2 rotate handle counter clock wise
- 5 then rotate handle clock wise, and

III. RUN COPIES:

- 6 run copies, feed paper continuously, check continuously spirit, paper and other adjustments.
- 4 check again spirit flow and adjust if needed
- 1 run test sheet
- 5 set counter for copy numbering
- 3 adjust impression strength
- 2 adjust margin (top and bottom)

IV. LEAVE MACHINE:

- 7 remove and store spirit
- 6 set copy control knob and pressure control knob to zero
- 10 replace dust cover
- 4 rotate clock wise again, close clamp lever, leave drum to normal position.

- 8 remove and store unused paper
- 1 stop handle to 7 'O' clock position
- 2 rotate counter clockwise, open clamp
- 5 file master after stapling to it a specimen
- 3 remove master without touching the carbon impression
- 9 clean the machine and

## AUDIO VISUAL EDUCATION

## KEY

## Module IV

## Duplicating Processes

## C1/36- Operating Stencil Duplicator

The following check list given under is not in a sequence. Number 1,2,3.... against each step in the correct sequence, for sub-heads A,B,C and D separately;

A. READY THE MACHINE

- 3 a. Connect power plug to electric socket.
- 4 b. Check that feed lever is raised and give handle one complete clockwise turn to ensure feed mechanism is not operating.
- 1 c. Remove cover.
- 2 d. Lower feed board and collecting tray.

B. INKING:

- 3 a. Hold ink tube by its shoulder and remove its cap.
- 6 b. Insert tube nozzle into tube holder
- 4 c. Place crimped end in 'V' of tube support and
- 1 d. Open inker door
- 8 e. Push tube locking lever fully downwards until roller is at extreme end of slot.
- 7 f. Push nozzle fully into holder.
- 2 g. Raise tube locking lever.
- 5 h. Press gently until nozzle is in level with tube holder.
- 10 i. Do not grip the tube or squeeze it.
- 9 j. Close inker door.
- 14 k. Switch off machine by depressing switch.
- 12 l. Start machine by switching on switch
- 13 m. Apply ink by moving ink lever fully backwards and forwards with a slow, steady action. When ink is evenly distributed an even, thin film of ink will be visible, giving a slight sheen to the surface of the ink screen and then,

- 11 n. Turn ink selector to full width inking position-this is indicated by full blue line appearing on top of ink selector knob

#### C. FITTING THE STENCIL

- 3 a. Ensure fixing bar studs project through stencil heading perforations.
- 8 b. Turn back, backing sheet, if stencil is creased, re-lay it by holding the bottom of stencil
- 11 c. Release proofing knob.
- 1 d. Turn handle anticlockwise to the bottom position and tear off the backing sheet along perforated line.
- 14 e. Check that the copy is uniformly inked, if necessary repeat the operation till the inking is uniform.
- 10 f. Turn handle slowly one complete rotation (clockwise)
- 6 g. Keep right hand steady to maintain continual pressure over full length of backing sheet.
- 15 h. Hold bottom edge of backing sheet, raise slightly outward.
- 16 i. Turn handle clockwise until stencil fixing bar is at top of machine.
- 13 j. Turn back backing sheet.
- 2 k. With typed side of stencil facing inwards, place tongue and top edge of stencil heading beneath fixing bar flap.
- 4 l. Place right hand lightly on backing sheet.
- 7 m. Stop turning when the handle is in its top position.
- 12 n. Turn handle to its stop position.
- 9 o. Depress proofing knob and
- 5 p. Turn handle slowly clockwise.

#### D. PREPARING COLLECTING TRAY AND FEEDBOARD

- 7 a. For quick re-loading raise paper weight to top-position and lay back fence horizontal on feed board.
- 5 b. Adjust and position side fences.
- 2 c. Pull back fence of feedboard fully to rear.
- 6 d. Slide back fence towards paper to touch it and lower paper weight.

- 1 e. Raise back and side guides of collecting tray and move them fully outwards;
- 4 f. Place paper on feedboard fully forward never place more paper on feedboard than will fit easily under paper height stop;
- 3 g. Fan out paper and square it up to the original state.

#### E. SETTING FEED UNIT

- 3 a. For light weight paper adjust feed pressure lever to bottom of slot '-'
- 2 b. For normal use set it at top of slot '+'
- 1 c. Check position of feed pressure lever.

#### F. PRINTING FIRST COPY

- 8 a. Adjust side margin by moving paper stack across feedboard using the scale as a guide.
- 9 b. To set the collecting tray lay the edge of printed copy against front guide.
- 11 c. Position the back guide to touch the top end of copy.
- 10 d. Move side guides to touch the sides of printed copy and lock.
- 12 e. Raise front guide wings.
- 4 f. Raise feed lever whilst completing clockwise turn of handle.
- 2 g. Depress the feed lever and
- 6 h. Examine the correct position and the impression.
- 1 i. Raise feed board by turning feed board raising knob until paper stack contacts paper height stop. The raising knob is automatically disengaged
- 7 j. Adjust print height up or down by using print height adjuster knob.
- 3 k. Slowly turn handle clockwise as soon as feed mechanism begins to operate.
- 5 l. The duplicated copy which is printed in the meantime during this processes is collected in the tray

#### G. SETTING THE COUNTER

- 2 a. Turn unit setter anti-clockwise to units required (twenty five).
- 1 b. Set hundred setter anti-clockwise to hundreds required (one thousand) and

#### H. PRINTING COPIES

- 2 a. Start machine by raising switch.
- 3 b. Depress feed lever to commence printing.
- 1 c. Select speed of machine - raise speed switch for fast speed and lower for slow speed.

#### I. TO CLOSE THE MACHINE

- 9 a. Turn handle clockwise and remove stencil from the machine.
- 10 b. Turn handle to bottom position and fold inwards.
- 12 c. Close up feedboard and collecting tray.
- 11 d. Fold back and side guides of collecting tray inwards.
- 13 e. Replace the cover.
- 7 f. Release stencil heading from studs.
- 4 g. Lay back fence backward, horizontal on to feedboard.
- 6 h. Lift up stencil fixing bar flap.
- 1 i. Depress the feedboard raising knob.
- 2 j. Remove paper slide back fence fully forward below feed unit.
- 5 k. Turn handle clockwise until stencil fixing bar is at top of machine.
- 8 l. Detach flap.
- 3 m. Lower paper weight.

#### J. RE-RUNNING OF USED STENCILS

- 6 a. Turn handle little at a time and stretch out any creases with fingers of left hand.
- 4 b. Lay it evenly on ink screen over its entire length.
- 2 c. Turn handle until stencil fixing bar is in line with feed mechanism.
- 5 d. Remove any creases by lifting bottom of stencil with right hand and relaying stencil slowly on ink screen.
- 1 e. Ink machine and attach stencil as discussed earlier.
- 3 f. Grip bottom of stencil and hold it upright and then.

## KEY

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Module IVDuplicating Processes  
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## C1/37 Electronic Stencil Scanning.

The check list given under are not in a sequence. Number 1,2,3 ... against each step in the correct sequence.

PROCEDURE

- 13 a. Set the speed. (If the details in the original are very close set the speed to 300,rpm. Where the details are not so close use 600 rpm).
- 11 b. Fold the top edge of the stencil and insert the top edge in the slit of the drum opening.
- 14 c. Open the safety flap/guard on the left. Adjust density and sensitivity, depending on the density and tone of the originals.
- 10 d. Remove the stencil fastening strip from the left hand drum.
- 12 e. Rotate the drum by hand along with the stencil and insert the other end of the stencil in the opening and hold with the stencil in position by means of the fastening strip.
- 8 f. Move the right hand side stop to position and lock-listen for the CLICK.
- 9 g. Shift the electronic eye towards left and locate it 3 mm beyond the actual left hand side limit of the original.
- 6 h. Switch on the electronic eye by depressing white button.
- 7 i. Move the carriage and locate the beam so that the light from the electronic eye fall 3 mm beyond the actual right side limit of the original.
- 5 j. Set density and sensitivity based on the originals.
- 2 k. Connect the power supply and switch on the mains.
- 4 l. Lift open the safety guard and check the stylus tip. (If it is worn out replace with a new one)
- 1 m. Remove the dust cover.
- 3 n. Place the original under the transparent carrier on the copy side of the drum and clamp it. (Originals should be within the guidelines provided on the drum).



- 17 o. After the completion of scanning the drum will stop auto-matically. Time for scanning at 300 rpm is a little over 4 minutes and the 600 rpm is a little over 2 minutes.
- 20 p. Close the machine with cover.
- 15 q. Swing the cover to position.
- 19 r. Remove the stencil and original and check the stencil, for the effect of impression switch off disconnect the power plug.
- 16 s. Switch on the green button for scanning.
- 18 t. Switch off the electronic eye, by pressing the white button.

M IV/ C 1/37/KCT-2

## AUDIO VISUAL EDUCATION

KEY

## Module IV

## Photocopying

C1/38 Operating Lennox 200 copier

The Check list given under are not in a sequence. Number 1,2,3 .. against each step in the correct sequence.

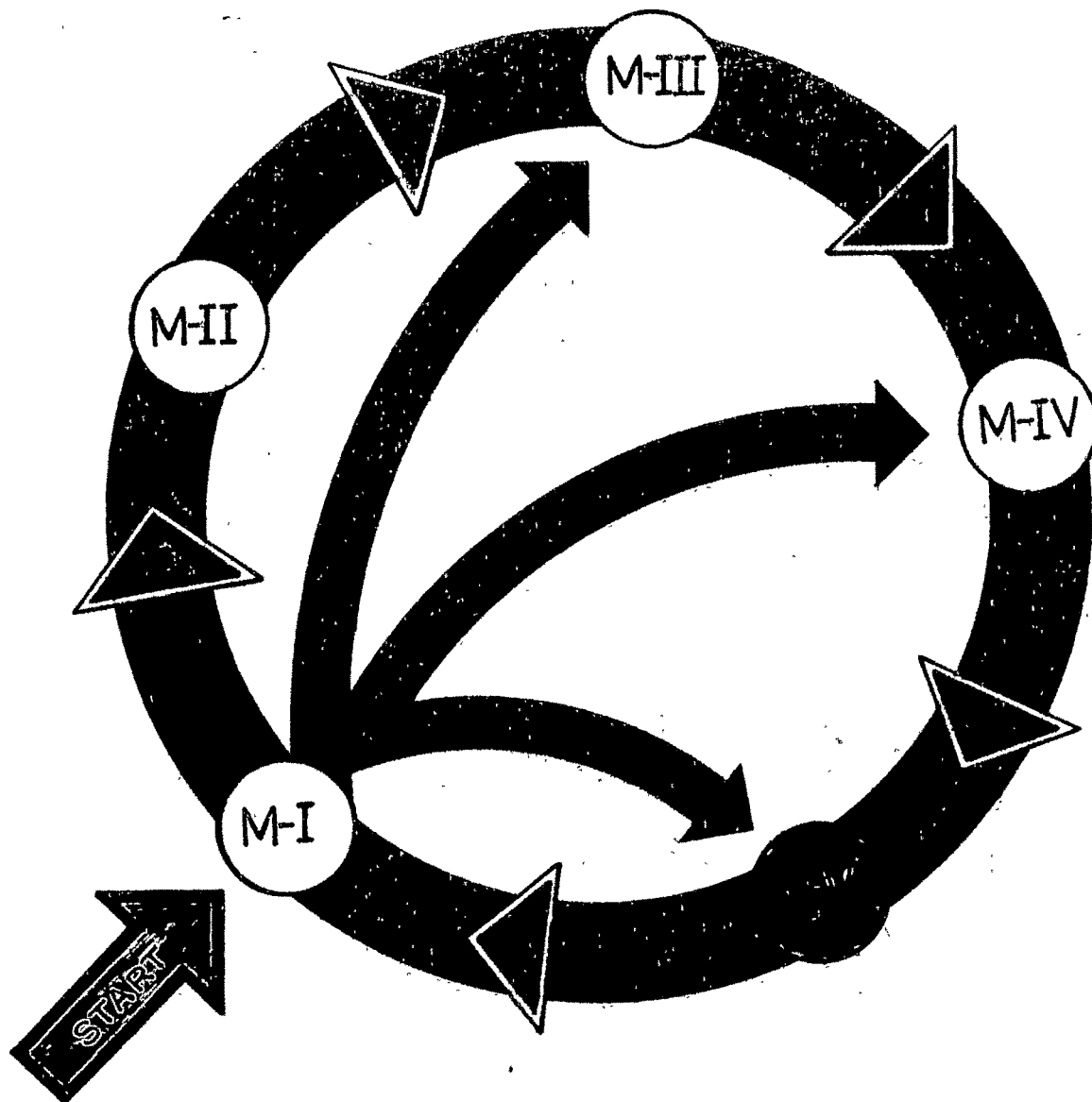
PROCEDURE:

- 7 a. Rest both sheets against left hand guide edge and move forward so that original enters in lower slot and copy enters upper slot.
- 5 b. With original facing up, place coated side of the copy paper on top. Coated side is much whiter than the uncoated side and can be easily distinguished.
- 1 c. Open the front door by turning the knob to horizontal position.
- 3 d. With plate in position, push back door to close and turn the knobs to lock.
- 6 e. Then align the original and copy paper along left and top edges.
- 4 f. Start the machine.
- 2 g. Position the feed plate taking care that notch in centre of the plate engages in the guide pin of front door assembly.
- 10 h. Switch off the machine.
- 9 i. Pick up the original from the bottom and the copy from the top.
- 8 j. Release the grip on sheets, immediately when these are caught in the rollers.

M IV/ C1/38/KCT-1

# AUDIO VISUAL EDUCATION

## MODULE -V



KRISHNAN.

## AUDIO VISUAL EDUCATION

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Module V                      AUDIO AIDS                      Time: 20 mts.

Units 1-6                      CRITERION TEST                      Section A  
-----

1. What do you consider should be the speed of speech, so that listening is effective.
  - a. 30 - 50 words per minute
  - b. 300 - 350 words per minute
  - c. 200 - 250 words per minute
  - d. 100 - 175 words per minute
2. In Dale's cone of experience Verbal Communication is placed in the
  - a. Middle of the cone
  - b. Top of the cone
  - c. Bottom of the cone
  - d. Just above the bottom of the cone
3. Hearing capacity of human ear to respond fall in the range of
  - a. 10-30 cycles per second
  - b. 1000-3000 cycles per second
  - c. 500-800 cycles per second
  - d. 30-1500 cycles per second
4. A monaural tape recorder will have
  - a. Two channels and one speaker
  - b. Two channels and two speakers
  - c. One channel and two speaker
  - d. Three channels and two speakers

5. The function of tone control is to -
  - a. control the volume
  - b. balance the volume control in a stereo system.
  - c. eliminate low frequencies.
  - d. eliminate high frequencies.
6. If you are asked to position the speakers of an audio system, which one of the following will be your choice.
  - a. knee level
  - b. ear level
  - c. below the ear level
  - d. 300 mm above the ear level.
7. Tone control is operated during -
  - a. recording only
  - b. playing only
  - c. playing and recording.
  - d. stereophonic recording only.
8. You are required to record a conversation between two individuals sitting opposite, which one of the following microphones will be your choice.
  - a. Bi-directional microphone
  - b. Uni-directional microphone
  - c. One lavalier microphone.
  - d. One lapel microphone.
9. A group of persons are sitting around and discussing. If you want to audio record this group actively, what will be your microphone.
  - a. Bi-directional microphone
  - b. Lapel microphone
  - c. Omni directional microphone.
  - d. Uni-directional microphone.
10. An audio tape which cannot be used for recording both mono and stereo is -
  - a. Dual track
  - b. Full track
  - c. Quarter track
  - d. Four track.

11. Which one of the following is an essential requirement when you use an audio aid ?
  - a. You should be able to provide information to your student to act on hearing.
  - b. You should have the visual in front of you.
  - c. You must have the projected visual along with the audio.
  - d. You must provide more than one source of audio to listen at the same time.
12. Cassette recorders are available at present only for a fixed speed. Which one of the following speeds is the speed of a cassette tape recorder ?
  - a. 4.75 cm/sec.
  - b. 9.30 cm/sec.
  - c. 19.00 cm/sec.
  - d.  $7\frac{1}{2}$  i.p.s.
13. The best reason for deciding whether you require a particular length of tape for use in your tape recorder is:
  - a. Playing time
  - b. life of tape
  - c. length of tape
  - d. spool diameter of tape recorder.
14. Which one of the following tape of 7" diameter will have the thin base and hence not very desirable for selection for long and continued use ?
  - a. 3600 ft.
  - b. 2400 ft.
  - c. 1800 ft.
  - d. 1200 ft.
15. Which one of the following recording systems has better quality of sound reproduction ?
  - a. 4.75 cm/sec.
  - b. 9.5 cm/sec.
  - c. 19.00 cm/sec.
  - d. 1.90 cm/sec.
16. Accidental tape erasure is prevented by providing
  - a. one control for erasure
  - b. two controls for erasure-play and fast forward being not passed.
  - c. providing strong magnets near the magnetic head.
  - d. not pressing record and play mode buttons together.

17. When you are not using a bulk tape eraser, for erasing dual-track tape recorders you must:
  - a. Run the tape from one end to another in one direction.
  - b. Run the tape from one end to another in both directions
  - c. Use the record and play button and re-record a programme in one direction.
  - d. Play the record in a stereo record player in one direction.
18. The best way to splice a tape is to:
  - a. Cut them, so that the cut being perpendicular to the length of the tape, and apply gum after overlapping.
  - b. Cut both ends perpendicular to the length of the tape, and apply cellophane tape and press it down, smooth side in one direction.
  - c. Cut the ends, by lapping them at 45 degrees angle by a scissor diagonally and then overlap the tapes, and place short length of splicing tape over the joint and press it down.
  - d. Cut both ends of the tape by lapping them at 45 degrees by a scissor diagonally, then butt the ends together smoothly and place a short length of splicing tape over the joint, and press it down.
19. When duplicating tapes, if you want to use the tone adjustments.
  - a. Make this on the machine that is playing, not on the machine recording.
  - b. Make this on the machine that is recording, not on the machine playing.
  - c. Make this on both the playing and recording machines for better effect.
  - d. None of the above.

20. You are given two tape recorders, and is asked to transfer recordings from one to another. The best way of transfer recording from one machine to another machine is to :
- a. Use the condenser microphone and play the other tape recorder.
  - b. Use a separate microphone and play the other tape recorder.
  - c. Use patch cords and connect the output of playing tape recorder to input of the other recorder.
  - d. Use patch cords and connect the input of the playing tape recorder to the output of the recording machine.
21. Which one of the following is Not a common speed of commercial record player ?
- a. 33  $\frac{1}{3}$  rpm
  - b. 45 rpm
  - c. 78 rpm
  - d. 16  $\frac{2}{3}$  rpm
22. Cassette tape C 60 played with constant tape speed of 475 cm/sec. tapes playing time for one side.
- a. 60 minutes
  - b. 30 minutes
  - c. 120 minutes
  - d. None of the above.
23. For monophonic reproduction we require a minimum of speakers:
- a. Two
  - b. One
  - c. Four
  - d. Three
24. For making stereophonic tape recording we require essentially a minimum of \_\_\_\_\_ to record.
- a. One single track
  - b. Two tracks
  - c. Four tracks
  - d. Six tracks



25. When you select a stereo system, in addition to its use as a normal stereo recorder, can you from what you have learned on the potentialities of the system say which one of the following is not a possible additional use of stereo system in the teaching - learning process.
- a. Instructional sequence can be recorded on one channel and confirmation of answers in the other channel.
  - b. Stereo on second channel can be used later on for adding echo effects, multiple recordings like machine sound, cutting sound, water or oil dripping sound, or other similar relevant sound effects separately without disturbing the main recording on the first channel.
  - c. Question-answer sessions from two sources can be recorded easily and without compilation with two separate voices on two channels on two or more different occasions.
  - d. Simultaneously recording of the same voice on both channels so that you can hear the voice from both speakers kept in the same class clearly.

## AUDIO VISUAL EDUCATION

## RESPONSE SHEET

Roll No.

Module V

Trade :

Unit 1-6

Date :

Section-A

1	2	3	4	5	6	7
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
8	9	10	11	12	13	14
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
15	16	17	18	19	20	21
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
22	23	24	25			
a	a	a	a			
b	b	b	b			
c	c	c	c			
d	d	d	d			

## AUDIO VISUAL EDUCATION

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Module V                      Audio Aids                      Time: 40 mts.

CRITERION TEST              Section B.

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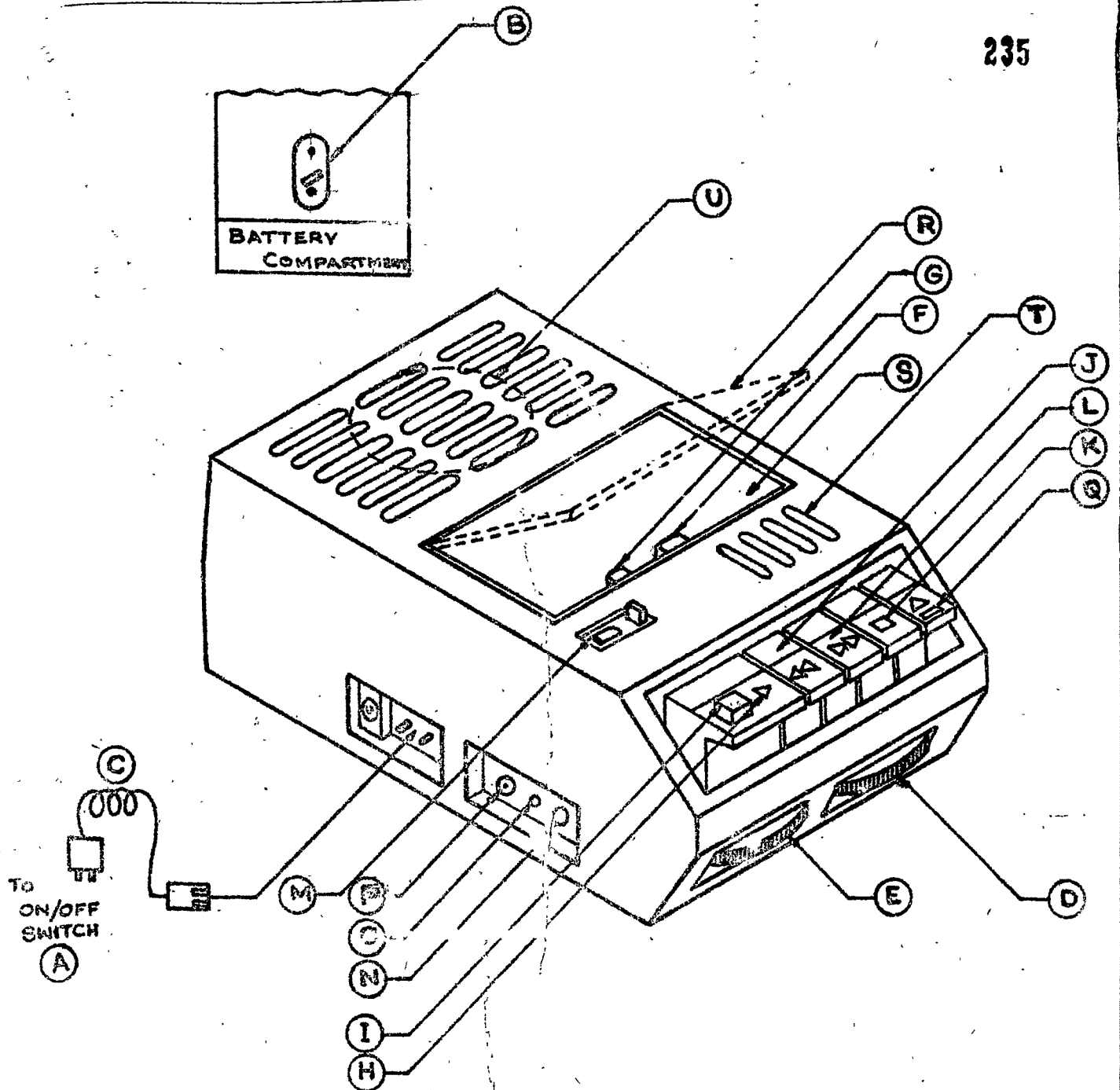
1. Name three kinds of audio experiences that can be used for instructional purposes.
2. During teaching you have observed that your trainees are lacking in listening capabilities. Suggest the methods which you think can help to improve their listening skills.
3. There are several ways of presenting mediated materials for instruction, but there is a familiar procedure known as five step procedure. Name the five steps.
4. Name the five factors, which influences the quality of sound production.
5. The sketch I given at the end of the Section B is of common type of cassette player, Identify the parts by placing the correct letter representing the part against the name listed.

___ Play	___ Mike input	___ Fastforward
___ Record	___ Remote	___ Rewind
___ Stop	___ DC inlet	___ Volume
___ Eject	___ AC inlet	___ Tone
___ Condenser mike	___ Cassette compartment	___ Speaker

6. Name the four types of microphones based on their technical classifications.
7. You are to replace a microphone for one of your tape recorders and it has to be of good quality and correct matching. Name the characteristics, you will look for while buying the replacement.

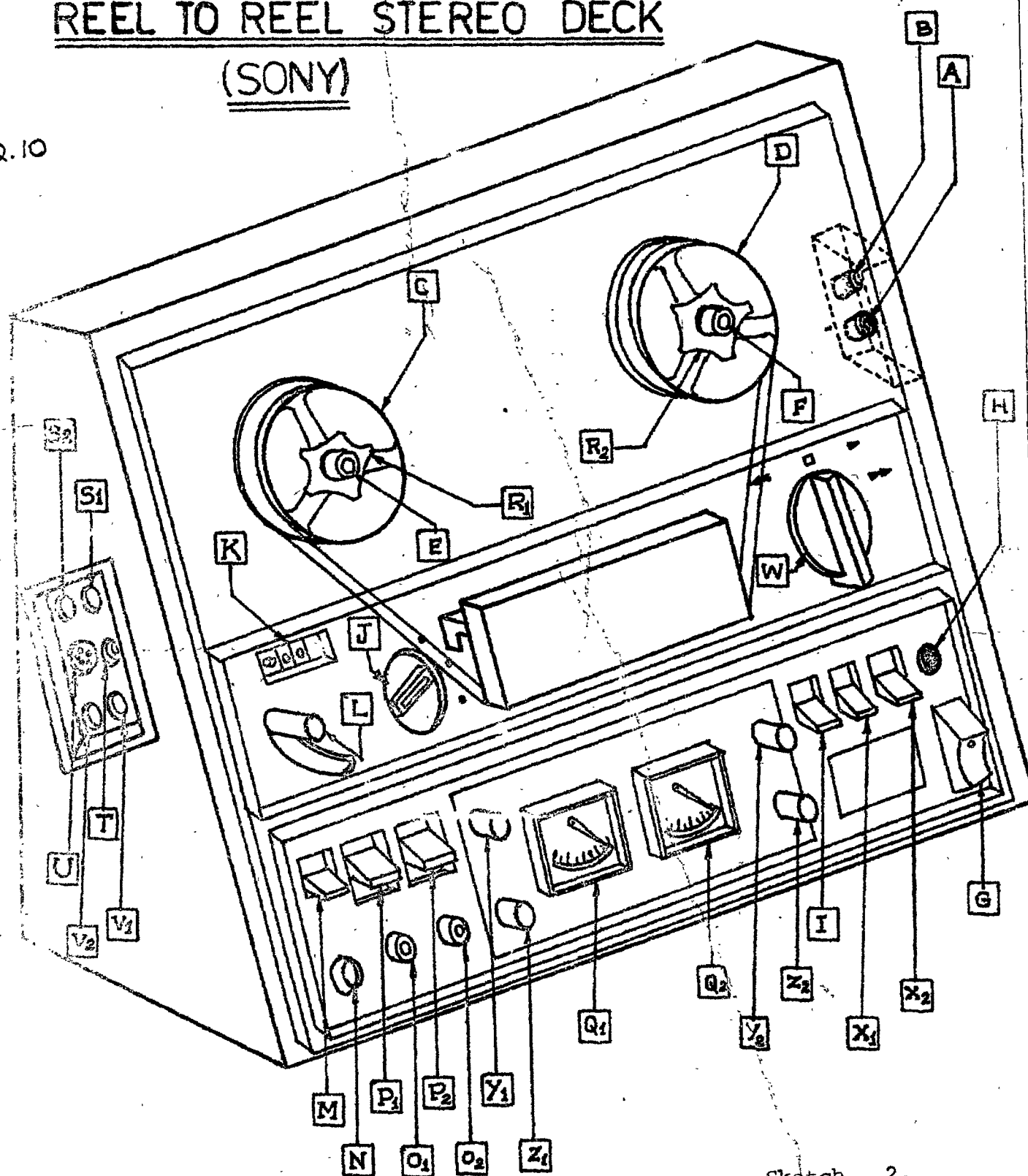
8. It is said that fluorescent lights within the vicinity of tape recording should be avoided, state the reason.
9. You are to produce a good quality audio recording and do not have an acoustically treated room. Suggest an alternate simple and economical way to improve the room condition for recording purposes.
10. The sketch II at the end of Section B is of reel to reel tape recorder with certain parts indicated by letters. In the response sheet are few names of parts. Identify the parts by placing the letter against the corresponding names of parts.
11. Name the two audio modes commonly used.
12. The sketch III at the end of the Section B is of a record player. Some of its parts are indicated by letters. Identify them by placing the letters against the corresponding name of parts given in the response sheet.
13. State the four aspects for identifying records.
14. HMV Fiesta, record player, that is available for your practice, is one which is different from other turntables. In what respect does this differ? What makes it to act independently, without connecting to any other equipment or radio.
15. HMV Fiesta, the record player has only one speaker, and it is a \_\_\_\_\_ (monophonic, stereophonic, quadraphonic) requiring \_\_\_\_\_ speakers (two, one, three, four)
16. You have seen the Sony turntable, what is the main difference it has compare to Fiesta record player. What is the advantage?
17. Why is it necessary to use some of the inexpensive turntables using the radio for playing? What item(s) in the radio is made use of, while playing the record.
18. What is the main difference between a tape deck and a tape recorder?
19. State three functions of heads in a tape recorder.

20. If you have a three head machine, state one separate function of each head.
21. If you have only one head in your machine, which are the two functions that are combined in one head ?
22. When you have only one head, which of the above function(s) can the machine perform ?
23. What is the single major disadvantage of using a permanent magnet as an erase head ?
24. What is the function of a pause button in a tape recorder ?
25. How does operating the pause button differ from a stop button ?



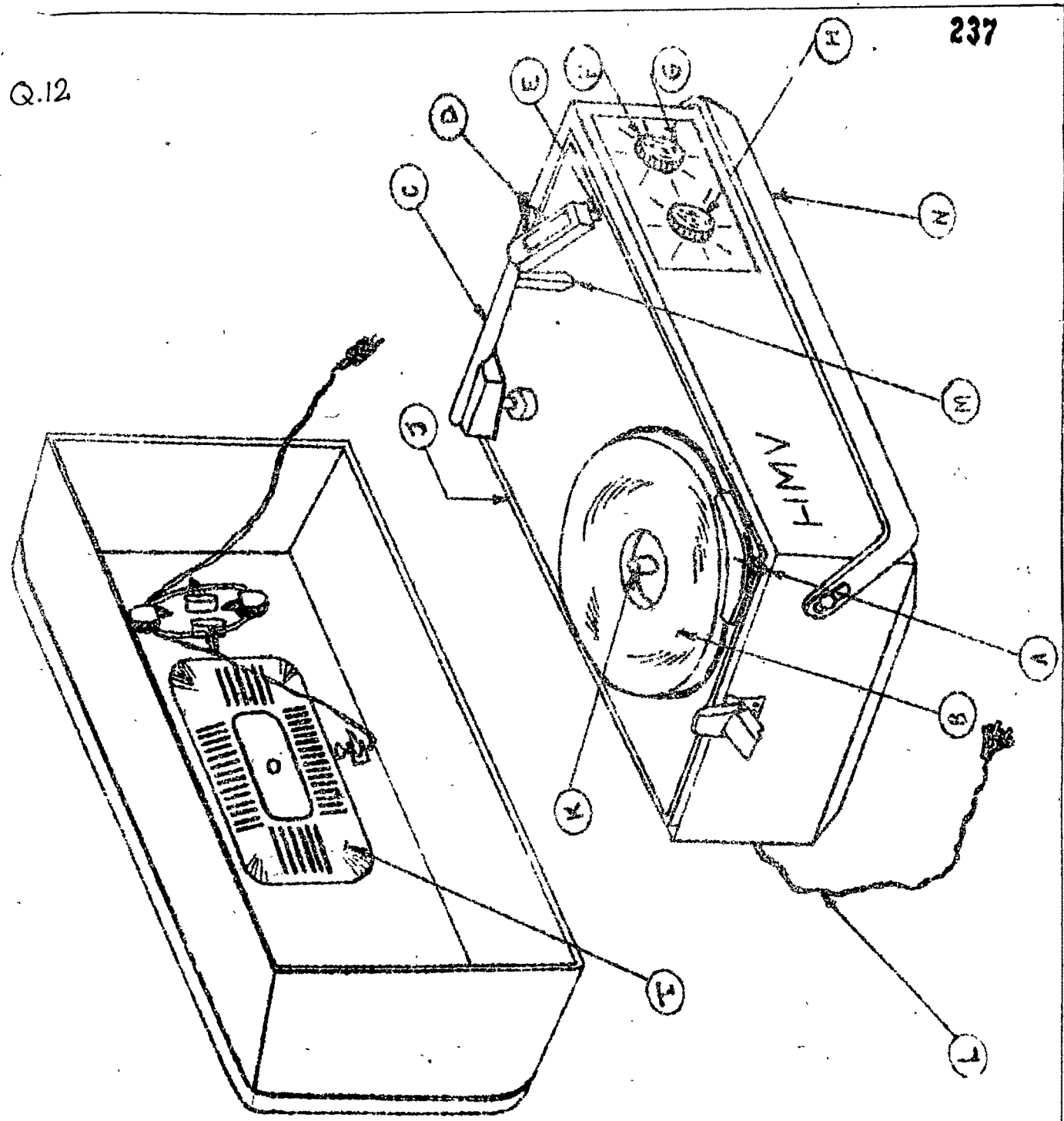
# REEL TO REEL STEREO DECK (SONY)

Q.10



Sketch . 2.

Q.12



SKETCH - 3.



## AUDIO VISUAL EDUCATION

## RESPONSE SHEET

Roll No:

Module V

Trade :

Unit 1-6

Section B.

1. 1. \_\_\_\_\_.
2. \_\_\_\_\_.
3. \_\_\_\_\_.
4. \_\_\_\_\_.
2. 1. \_\_\_\_\_.
2. \_\_\_\_\_.
3. \_\_\_\_\_.
4. \_\_\_\_\_.
5. \_\_\_\_\_.
3. 1. \_\_\_\_\_.
2. \_\_\_\_\_.
3. \_\_\_\_\_.
4. \_\_\_\_\_.
5. \_\_\_\_\_.
4. 1. \_\_\_\_\_.
2. \_\_\_\_\_.
3. \_\_\_\_\_.
4. \_\_\_\_\_.
5. \_\_\_\_\_.
6. \_\_\_\_\_.

5. ☐ Play ☐ Mike input ☐ Fastforward  
☐ Record ☐ Remote ☐ Rewind  
☐ Stop ☐ Voltage selector ☐ Volume  
☐ Eject ☐ AC inlet ☐ Tone  
☐ Condenser mike ☐ Cassette compartment ☐ Speaker

6. 1. \_\_\_\_\_.  
2. \_\_\_\_\_.  
3. \_\_\_\_\_.  
4. \_\_\_\_\_.

7. 1. \_\_\_\_\_.  
2. \_\_\_\_\_.  
3. \_\_\_\_\_.

8. \_\_\_\_\_.

9. 1. \_\_\_\_\_.  
2. \_\_\_\_\_.

10. ☐ Tape counter ☐ Supply reel  
☐ Speed selector ☐ Power switch  
☐ Noise suppressor ☐ Tape Selector  
☐ Instant stop lever ☐ Switch indicator lamp  
☐ Auxiliary inputs ☐ Microphone inputs  
☐ Record/Playback ☐ Record levers  
pin commuter input/  
output ☐ Level meters  
☐ Voltage selector ☐ Position selector.  
☐ Take up reel

11. 1. \_\_\_\_\_.  
2. \_\_\_\_\_.

- |           |                 |       |                |
|-----------|-----------------|-------|----------------|
| 12. _____ | Speed selector  | _____ | Volume         |
| _____     | Turn table      | _____ | Tone           |
| _____     | Pickup arm      | _____ | Speaker output |
| _____     | Stylus          | _____ | Speaker        |
| _____     | Stylus selector | _____ | Switch.        |

13. a. \_\_\_\_\_.
- b. \_\_\_\_\_.
- c. \_\_\_\_\_.

14. a. \_\_\_\_\_.
- b. \_\_\_\_\_.
- \_\_\_\_\_.

15. 1. \_\_\_\_\_.
2. \_\_\_\_\_.

16. \_\_\_\_\_.

17. 1. \_\_\_\_\_.
2. \_\_\_\_\_.

18. \_\_\_\_\_.

19. \_\_\_\_\_.
- \_\_\_\_\_.
- \_\_\_\_\_.
20. \_\_\_\_\_.
- \_\_\_\_\_.
- \_\_\_\_\_.
21. \_\_\_\_\_.
22. \_\_\_\_\_.
23. \_\_\_\_\_.
- \_\_\_\_\_.
24. \_\_\_\_\_.
- \_\_\_\_\_.
- \_\_\_\_\_.
25. \_\_\_\_\_.
- \_\_\_\_\_.
- \_\_\_\_\_.

## AUDIO VISUAL EDUCATION

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Module V                      AUDIO AIDS                      Section C  
                                 CRITERION TEST                      Time 60 mts.  
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Use separate answer sheets for Section A, Section B and Section C.  
DO NOT write anything on this question paper.  
Return the question paper along with your responses.  
Answer Section C after completing Section A & B.  
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C/1. PERFORMANCE CHECK LIST

Performance check list for operating different audio aids are given not in correct sequence and separately under different headings. Under each heading write item number in the sequence of operation. Items in each heading may be considered separate and complete.

Note:- Collect separate response sheets provided for each question.

1. Operating an audio cassette tape recorder.
2. Operating reel-to-reel stereo deck.
3. Operating record player.
4. Copying from disc to audio tape.

C/2. PRACTICALS

1. Set up, load, and operate cassette tape recorder.
2. Set up, load, and operate a stereo deck.
3. Set up, load, and operate a record player.
4. Set up a tape deck, amplifier, a stereo record player, speaker, and record sound on audio tape.

## AUDIO VISUAL EDUCATION

REEL NO: RESPONSE SHEET FOR PRACTICAL EXERCISES

TRADE :

MODULE V

PRE-TEST

SECTION C

READ THE QUESTIONS C 1/1-4 and C 2/1-4. C 1 QUESTIONS ARE PERFORMANCE CHECK LIST FOR PRACTICAL EXERCISES AND C2 QUESTIONS ARE PRACTICAL EXERCISES. YOU WILL HAVE TO DO THE PRACTICALS YOURSELF WITHOUT ANY ASSISTANCE. YOU WILL HAVE TO OPERATE CERTAIN EQUIPMENT AND DO SOME RELATED CONNECTED WORK. YOU MAY PROBABLY KNOW THEM. IF SO, PICK THOSE WHICH YOU CAN DO WITHOUT ANY HELP. YOU MAY CROSS THOSE QUESTIONS, WHICH YOU CANNOT DO WITHOUT ANY ASSISTANCE. THEN HAND OVER THE ANSWERS TO YOUR INVESTIGATOR AND GO TO VISUAL AID WORKSHOP TO DO THE EXERCISES YOU CAN DO. SIMILARLY IF YOU KNOW TO ANSWER THE PERFORMANCE CHECKLISTS, YOU MAY ANSWER THEM AND HAND OVER TO YOUR INVESTIGATOR. IF NOT CROSS IN THIS SHEET AND DO NOT WRITE ANYTHING ON THE PERFORMANCE CHECKLISTS GIVEN TO YOU.

C/1

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_

C/2

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_

MODULE V

AUDIO AIDS

UNIT 1-5

Operating Tape Recorders.

C<sub>1</sub>/35

The following performance check list for operating an audio cassette recorder is not in order. You are required to place appropriate numbers in the space provided under each sub-head in the order in which the operations are to be carried out.

## A. SETTING UP

- \_\_\_ Locate cassette recorder.
- \_\_\_ Place microphone (if there is a separate mike).
- \_\_\_ Switch on mike & place speakers in position if there are separate speakers.
- \_\_\_ Switch ON.
- \_\_\_ Select power source (Battery/AC)
- \_\_\_ Connect power cord, if you select A.C.
- \_\_\_ If battery source is adopted, check battery level.

## B. OPERATION

- \_\_\_ Check recorder for STOP mode. If not keep it in stop mode.
- \_\_\_ Press Cassette in and close shutter.
- \_\_\_ Press eject button.
- \_\_\_ Rewind tape.

## C. RECORDING

- \_\_\_ Set index counter to 000.
- \_\_\_ Record sound for testing.
- \_\_\_ Set and switch ON mike.
- \_\_\_ Engage RECORD & PLAY control.
- \_\_\_ Rewind again.
- \_\_\_ STOP.
- \_\_\_ Switch PLAY button.
- \_\_\_ Listen, adjust volume and tone levels.
- \_\_\_ Press pause for stopping machine if necessary and release when you want.
- \_\_\_ For re-recording or recording again, engage PLAY & RECORD controls.

- \_\_\_ Record again.
- \_\_\_ Rewind again.
- \_\_\_ STOP.

#### D. PLAYBACK

- \_\_\_ Adjust volume and tone controls.
- \_\_\_ Press PLAY and listen.
- \_\_\_ STOP FAST FORWARD for skipping and listen to recording.
- \_\_\_ Press REWIND for going back to zero position.
- \_\_\_ Use index counter to locate correctly segments.

#### E. PACKING UP

- \_\_\_ Switch OFF.
- \_\_\_ REWIND fully
- \_\_\_ Remove cassette.
- \_\_\_ Press EJECT.
- \_\_\_ Close cassette compartment.
- \_\_\_ Store accessories.
- \_\_\_ Remove accessories.



## AUDIO VISUAL EDUCATION

Module V

Audio Aids

Unit 1-6

Operating Tape Recorders

C<sub>1</sub>/36

The performance Check list for operating Sony reel to reel Tape Deck given here under is not in a sequence. Number 1,2,3 ... against each step in the correct sequence, for A,B, C,D and E. separately.

A. SETTING UP

- \_\_\_\_\_ Locate tape recorder.
- \_\_\_\_\_ Place microphones properly and plug in. (for stereo, 2 mikes).
- \_\_\_\_\_ Place speaker properly and connect it (them).
- \_\_\_\_\_ Connect deck to amplifier (if recorder is not having amplifier).
- \_\_\_\_\_ Select power source.
- \_\_\_\_\_ Check reel rotation with PLAY control.
- \_\_\_\_\_ Connect power cords to recorder (and amplifier).
- \_\_\_\_\_ Set speed control.
- \_\_\_\_\_ Push in rubber caps, on reels.
- \_\_\_\_\_ Attach supply reel.
- \_\_\_\_\_ Attach empty reel.
- \_\_\_\_\_ Thread tape through slots of heads for record and playback.
- \_\_\_\_\_ Engage tape end to take up reel.
- \_\_\_\_\_ Rotate both reels by hand for about  $1\frac{1}{2}$  turns

B. OPERATING

- \_\_\_\_\_ REWIND TAPE
- \_\_\_\_\_ Check recorder for STOP mode, if not keep it in STOP mode
- \_\_\_\_\_ Set counter to 000 by pressing the button.
- \_\_\_\_\_ Switch on power of recorder/amplifier.

**C. RECORDING**

- \_\_\_\_\_ Record test sound.
- \_\_\_\_\_ Adjust volume control.
- \_\_\_\_\_ Engage FORWARD & RECORD button, for stereo recording.
- \_\_\_\_\_ Set mike and switch to 'ON' position.
- \_\_\_\_\_ STOP after recording test sound and rewind.
- \_\_\_\_\_ **PLAYBACK**
- \_\_\_\_\_ REWIND, if satisfactory recording is done, after pressing STOP mode.
- \_\_\_\_\_ If unsatisfactory repeat again.
- \_\_\_\_\_ Complete recording for a minute and stop.
- \_\_\_\_\_ REWIND.

**D. PLAYBACK**

- \_\_\_\_\_ Use FORWARD position.
- \_\_\_\_\_ Listen.
- \_\_\_\_\_ Adjust volume & tone control.
- \_\_\_\_\_ Use fast forward to skip.
- \_\_\_\_\_ Use rewind to go back to particular segment.
- \_\_\_\_\_ Use index counter to locate programme.

**E. PACKING**

- \_\_\_\_\_ Switch off
  - \_\_\_\_\_ REWIND
  - \_\_\_\_\_ Remove microphone
  - \_\_\_\_\_ Disconnect amplifier cords and accessories.
  - \_\_\_\_\_ Keep recorder in original position.
  - \_\_\_\_\_ Remove reels, and tape
  - \_\_\_\_\_ Remove all other cords, accessories and store.
- [Handwritten scribbles and marks at the bottom of the page]*

Module V

Audio Aids

Unit 1-6

Record Players

C1/37

The performance checklist for operating record player given hereunder is not in a sequence. Number 1,2,3 ... against each step in the correct sequence, for A,B. and C separately.

A. SETTING UP

- ☐ Place and assemble gently on a truly horizontal surface.
- ☐ Turn on amplifier.
- ☐ Turn on motor
- ☐ Place speaker, if there is no built-in-speaker.
- ☐ Plug in speaker cords into the receptacle.
- ☐ Open the case.

B. OPERATING

- ☐ Select speed of turntable for 45 rpm record.
- ☐ Select a 45 rpm record.
- ☐ Place pickup arm stylus on record gently.
- ☐ Start turntable.
- ☐ Place record properly side I on the record player.
- ☐ Select proper stylus for the record.
- ☐ Adjust pick up arm weight if provided.
- ☐ Unlock and lift the pickup arm
- ☐ Play for one minute.
- ☐ Adjust volume.
- ☐ Adjust tone
- ☐ Lift arm
- ☐ Replace it on rest.

C. PUTTING AWAY

- ☐ Lock arm
- ☐ Amplifier off
- ☐ Remove record
- ☐ Release turntable
- ☐ Lock lid
- ☐ Store all cords.
- ☐ Motor off
- ☐ Place in original position.

## Module V

## Audio Aids

## Unit 1-6

## Record Players

C<sub>1</sub>/4

This check list for copying from a stereo disc to audio tape (stereo) given hereunder is not in a sequence. Number 1,2,3 . . . against each step in the correct sequence, for A,B,C, D and E separately.

A. SETTING UP

- \_\_\_\_\_ Place tape deck and amplifier on table.
- \_\_\_\_\_ Place record player on table near and connect appropriately to tape deck and amplifier.
- \_\_\_\_\_ If there are no built in speakers, place speaker and connect appropriately to amplifier.
- \_\_\_\_\_ Connect power cords.
- \_\_\_\_\_ Select A/C power source in all the equipment.
- \_\_\_\_\_ Push rubber caps on both spindles.
- \_\_\_\_\_ Engage tape end in the slot of take-up reel.
- \_\_\_\_\_ Attach supply wheel to the other spindle.
- \_\_\_\_\_ Attach empty reel to wheel that turns.
- \_\_\_\_\_ Select speed of tape deck (4.8 cm/sec.).
- \_\_\_\_\_ Set speed of record player to 33 rpm.
- \_\_\_\_\_ Select 33 rpm record.
- \_\_\_\_\_ Check reel rotation with PLAY CONTROL.
- \_\_\_\_\_ Thread tape through record/play heads.
- \_\_\_\_\_ Rotate both reels by hand for about  $1\frac{1}{2}$  turns.

B. OPERATING

- \_\_\_\_\_ Check tape deck for stop mode, if not keep it in stop mode.
- \_\_\_\_\_ Rewind tape to starting point (take care that tape end does not leave spool).
- \_\_\_\_\_ Switch on power to tape deck/amplifier.
- \_\_\_\_\_ Set counter to 000.
- \_\_\_\_\_ Keep record on turn table, side 1 facing you.
- \_\_\_\_\_ Select appropriate stylus (33 rpm).
- \_\_\_\_\_ Start turn table.
- \_\_\_\_\_ Switch on record player.

B. OPERATION (CONTD..)

- \_\_\_\_\_ Adjust pickup arm weight if provided.
- \_\_\_\_\_ Place stylus gently on record edge in the run-in-groove.
- \_\_\_\_\_ Unlock and lift pickup arm.

C. RECORDING

- \_\_\_\_\_ Engage record and play (forward) levers for stereo recording (Press both L & R buttons).
- \_\_\_\_\_ Play record for 15 seconds.
- \_\_\_\_\_ Adjust volume control. The needle should not show red mark on tape deck.
- \_\_\_\_\_ Check sound recorded. If unsatisfactory repeat 1 to 5. STOP tape and record.
- \_\_\_\_\_ Stop record, tape, and rewind tape.
- \_\_\_\_\_ If satisfactory, rewind again, bring to stop.
- \_\_\_\_\_ Engage record & play of tape deck.
- \_\_\_\_\_ Play record for 1 minute.
- \_\_\_\_\_ Stop tape and record.
- \_\_\_\_\_ Rewind tape to 000.

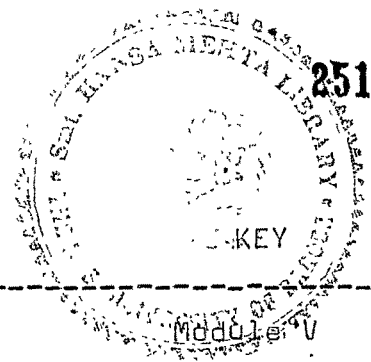
D. PLAYBACK

- \_\_\_\_\_ Play fully 1 minute.
- \_\_\_\_\_ Bring tape deck control to Play/Forward.
- \_\_\_\_\_ Adjust volume control.
- \_\_\_\_\_ Lift pickup arm and lock in position.

E. PICKUP

- \_\_\_\_\_ Switch off tape deck.
- \_\_\_\_\_ Rewind tape.
- \_\_\_\_\_ Remove record and store.
- \_\_\_\_\_ Release turn table.
- \_\_\_\_\_ Remove reels, tape and all connecting cords and store.
- \_\_\_\_\_ Remove all accessories and store.
- \_\_\_\_\_ Lock lids.

# AUDIO VISUAL EDUCATION



Roll No.

Trade :

Date :

Module V

Unit 1-6

Section-A

1	2	3	4	5	6	7
a	a	a	a	a	a	a
b	(b)	b	b	b	(b)	(b)
c	c	c	(c)	c	c	c
(d)	d	(d)	d	(d)	d	d
8	9	10	11	12	13	14
(a)	a	a	(a)	(a)	a	(a)
b	b	b	b	b	b	b
c	(c)	c	c	c	c	c
d	d	(d)	d	d	(d)	d
15	16	17	18	19	20	21
a	a	a	a	(a)	a	a
b	b	(b)	b	b	b	b
(c)	c	c	c	c	(c)	c
d	(d)	d	(d)	d	d	(d)
22	23	24	25			
a	a	a	a			
(b)	(b)	(b)	b			
c	c	c	c			
d	d	d	(d)			

## AUDIO VISUAL EDUCATION

## KEY

Roll No:

Module V

Unit 1-6

Trade

Section B

- 
1. 1. Disc Recording
    2. Cassettetape recording
    3. Reel-to-reel recording
    4. Radio
  2. 1. Direct and maintain attention
    2. Stress the importance of message the first time
    3. Use context while explaining.
    4. Distinguish between, relevant and irrelevant information.
    5. Find and recall main ideas and details.
  3. 1. Prepare yourselves.
    2. Develop student-readiness.
    3. Listen to the programme.
    4. Follow up the programme.
    5. Listen carefully.
  4. 1. Quality of original sound.
    2. Condition of recording and playback.
    3. Capability of medium to record full frequency range.
    4. Capability of the system to reproduce all frequencies.
    5. Distortion free recording and playback.
    6. Ability to handle the equipments.

5. H Play                      N Mike input                      L fastforward  
I Record                      O Remote                      J Rewind  
K Stop                      B Voltage                      D Volume  
Q Eject                      selector                      F Tone  
T Condenser mike                      A A/C inlet                      U Speaker  
   S Cassette                      compartment
6. 1. Dynamic  
2. Magnetic  
3. Ceramic  
4. Condenser type
7. 1. Free from distortion  
2. Matching impedance  
3. Matching both output of mike and input of recorder
8. Causes hum.
9. 1. Carpeting  
2. Draperis
10. K Tape counter                      C supply reel  
J Speed selector                      G Power switch  
M Noice suppressor                      I Tape selector  
L Instant stop lever                      H Switch indica or lamp  
S<sub>1</sub> S<sub>2</sub> Auxiliary inputs                      O<sub>1</sub> O<sub>2</sub> Microphone inputs  
U Record/Playback                      P<sub>1</sub> P<sub>2</sub> Record levers  
   pin commuter                      input/output  
A Voltage selector                      Q<sub>1</sub> Q<sub>2</sub> Level meters  
D Take up reel                      W Position selector
11. 1. Monophonic  
2. Stereophonic



12. A Speed Selector      H Volume  
      B Turn table          G Tone  
      C Pick up arm          J Speaker output  
      E Stylus                I Speaker  
      D Stylus selector      F Switch

13. a. Speed  
      b. Diameter  
      c. Type of stylus - mode of playing
14. a. It has a built in amplifier  
      b. The amplifier - it does not require an amplifier system.
15. 1. Monophone  
      2. One speaker
16. It has stroboscope for speed setting.
17. 1. It has no amplifier.  
      2. Speaker and amplifier.
18. Deck is without amplifier and speakers.

19. Record.

Erase.

Reproduce.

20. Record.

Erase.

Reproduce.

21. Record and reproduce.

22. Reproduction.

23. It will produce hum.

The magnet losses the strength.

24. The pause button when depressed stops recording  
or playback instantaneously when it is held down and  
when released allows the machine to function without  
any change of other settings.

25. As soon as pause button is released, recording or playback  
continues, without changing other settings, while a stop  
button when released, all other settings- record & playback  
buttons - are to be readjusted.

## AUDIO VISUAL EDUCATION

KEY

Module V

Audio Aids

Unit 1-6

Operating Tape Recorders

C<sub>1</sub>/1 Performance Check list: Operating Audio Cassette Tape RecorderA. SETTING UP

- 1 Locate cassette recorder
- 2 Place microphone (if there is a separate mike)
- 3 Switch on mike and place speakers in position if there are separate speakers.
- 6 Switch ON.
- 4 Select power source (Battery/AC)
- 5 Connect power cord, if you select AC.
- 7 If battery source is adopted, check battery level.

B. OPERATION

- 1 Check recorder for STOP MODE. If not keep it in stop mode.
- 3 Press cassette in and close shutter.
- 2 Press eject button.
- 4 Rewind tape.

C. RECORDING.

- 1 Set index counter to 000.
- 4 Record sound for testing.
- 3 Set and switch 'on' mike.
- 2 Engage RECORD & PLAY control.
- 6 REWIND again.
- 5 STOP.
- 7 SWITCH PLAY button.
- 8 Listen, adjust volume and tone levels.

- 9 press pause, for stopping machine if necessary and release when you want.
- 10 For re-recording or recording again, engage PLAY & RECORD controls.
- 11 Record again.
- 12 REWIND again.
- 13 STOP

#### D. PLAYBACK

- 2 Adjust volume and tone control.
- 1 Press play and listen.
- 3,4 STOP FAST FORWARD for skipping and listen to recording.
- 6 Press REWIND for going back to zero position.
- 5 Use index counter to locate correctly segments.

#### E. PACKING UP

- 2 Switch off,
- 1 REWIND fully.
- 4 Remove cassette
- 3 Press Eject
- 5 Close cassette compartment.
- 7 Store accessories,
- 6 Remove accessories.

## AUDIO VISUAL EDUCATION

KEY

Module V

Audio Aids

Unit 1-5

Operating Tape Recorders

C1/2

Performance Check list : Operating Sony reel to reel Tape Deck

A. SETTING UP

- 1 Locate tape recorder.
- 2 Place microphones properly and plug in (for stereo, 2 mikes)
- 3 Place speaker properly and connect, it (them).
- 4 Connect deck to amplifier (if recorder is not having amplifier).
- 5 Select power source
- 8 Check reel rotation with PLAY control.
- 6 Connect power cords to recorder (and amplifier)
- 7 Set speed control.
- 14 Push in rubber caps, on reels.
- 10 Attach supply reel
- 9 Attach empty reel.
- 11 Thread tape through slots of heads for record and playback.
- 12 Engage tape end to take up reel.
- 13 Rotate both reels by hand for about  $1\frac{1}{2}$  turns.

B. OPERATING

- 3 REWIND TAPE
- 1 Check recorder for STOP mode, if not keep it in STOP mode.
- 4 Set counter to 000 by pressing the button.
- 2 Switch on power of recorder/amplifier.

C. RECORDING

- 3 Record test sound
- 4 Adjust volume control
- 1 Engage FORWARD & RECORD buttons, for stereo recording
- 2 Set mikes and switch to 'ON' position.
- 5 STOP after recording test sound and REWIND.
- 6 PLAYBACK.
- 7 REWIND, if satisfactory recording is done, after pressing STOP mode.
- 8 If unsatisfactory repeat again.
- 9 Complete recording for a minute & STOP.
- 10 REWIND.

D. PLAYBACK

- 1 Use FORWARD POSITION
- 3 Listen
- 2 Adjust volume and tone control
- 4 Use fast forward to skip.
- 5 Use rewind to go back to particular segment.
- 6 Use index counter to locate programme.

E. PACKING

- 1 Switch off
- 2 REWIND
- 5 Remove microphone
- 4 Disconnect amplifier cords and accessories.
- 7 Keep recorder in original position.
- 3 Remove reels, and tape.
- 6 Remove all other cords, accessories and store.

Module V

Audio Aids

Unit 1-6

Record Players

C<sub>1</sub>/3 Performance Check list for Operating Record PlayerA. SETTING UP

- 1 Place and assemble gently on a truly horizontal surface.
- 5 Turn on amplifier
- 6 Turn on motor
- 3 Place speaker, if there is no built-in-speaker.
- 4 Plug in speaker cords into the receptacle.
- 2 Open the case.

B. OPERATING

- 1 Select speed of turntable for 45 rpm record.
- 2 Select a 45 rpm record.
- 8 Place pickup arm stylus on record gently.
- 6 Start turntable.
- 3 Place record properly side I on the record player.
- 4 Select proper stylus for the record.
- 5 Adjust pickup arm weight if provided.
- 7 Unlock and lift the pickup arm.
- 9 Play for one minute.
- 10 Adjust volume
- 11 Adjust tone.
- 12 Lift arm
- 13 Replace it on rest.

C. PUTTING AWAY

- 1 Lock arm
- 4 Amplifier off
- 5 Remove record
- 3 Release turntable
- 7 Lock lid
- 6 Store all cords
- 2 Motor off
- 8 Place in original position.

KEY

Module V

Audio Aids

Unit 1-6

Record Players

C<sub>1</sub>/4 Performance Check list for copying from a stereo disc to an audio tape (stereo).

A. SETTING UP.

- 1 Place tape deck and amplifier on table.
- 2 Place record player on table near and connect appropriately to tape deck and amplifier.
- 3 If there are no built in speakers, place speaker and connect appropriately to amplifier.
- 5 Connect power cords.
- 4 Select A/C power source in all the equipment.
- 15 Push rubber caps on both spindles.
- 13 Engage tape end in the slot of take up reel.
- 11 Attach supply wheel to the other spindle.
- 10 Attach empty reel to wheel that turns.
- 6 Select speed of tape deck (4.8 cm/sec.).
- 7 Set speed of record player to 33 rpm.
- 8 Select 33 rpm record.
- 9 Check reel rotation with PLAY CONTROL.
- 12 Thread tape through record/Play heads.
- 14 Rotate both reels by hand for about 1½ turns.

B. OPERATING

- 1 Check tape deck for stop mode, if not keep it in stop mode.
- 3 Rewind tape to starting point ( take care that tape end does not leave spool).
- 2 Switch on power to tape deck/amplifier.
- 4 Set counter to 000.
- 5 Keep record on turn table, side 1 facing you.
- 6 Select appropriate stylus (33 rpm).
- 9 Start turn-table.
- 8 Switch on record player.



- 7 Adjust pickup arm weight if provided.
- 11 Place stylus gently on record edge in the run-in-groove.
- 16 Unlock and lift pickup arm.

#### C. RECORDING

- 1 Engage record and play (forward) levers for stereo recording (press both L & R buttons).
- 2 Play record for 15 seconds.
- 3 Adjust volume control. The needle should not show red mark on tape deck.
- 5 Check sound recorded. If unsatisfactory repeat 1 to 5. STOP tape and record.
- 4 Stop record, tape, and rewind tape.
- 6 If satisfactory, rewind again, bring to stop.
- 7 Engage record & play of tape deck.
- 8 Play record for 1 minute.
- 9 Stop tape and record.
- 10 Rewind tape to 000.

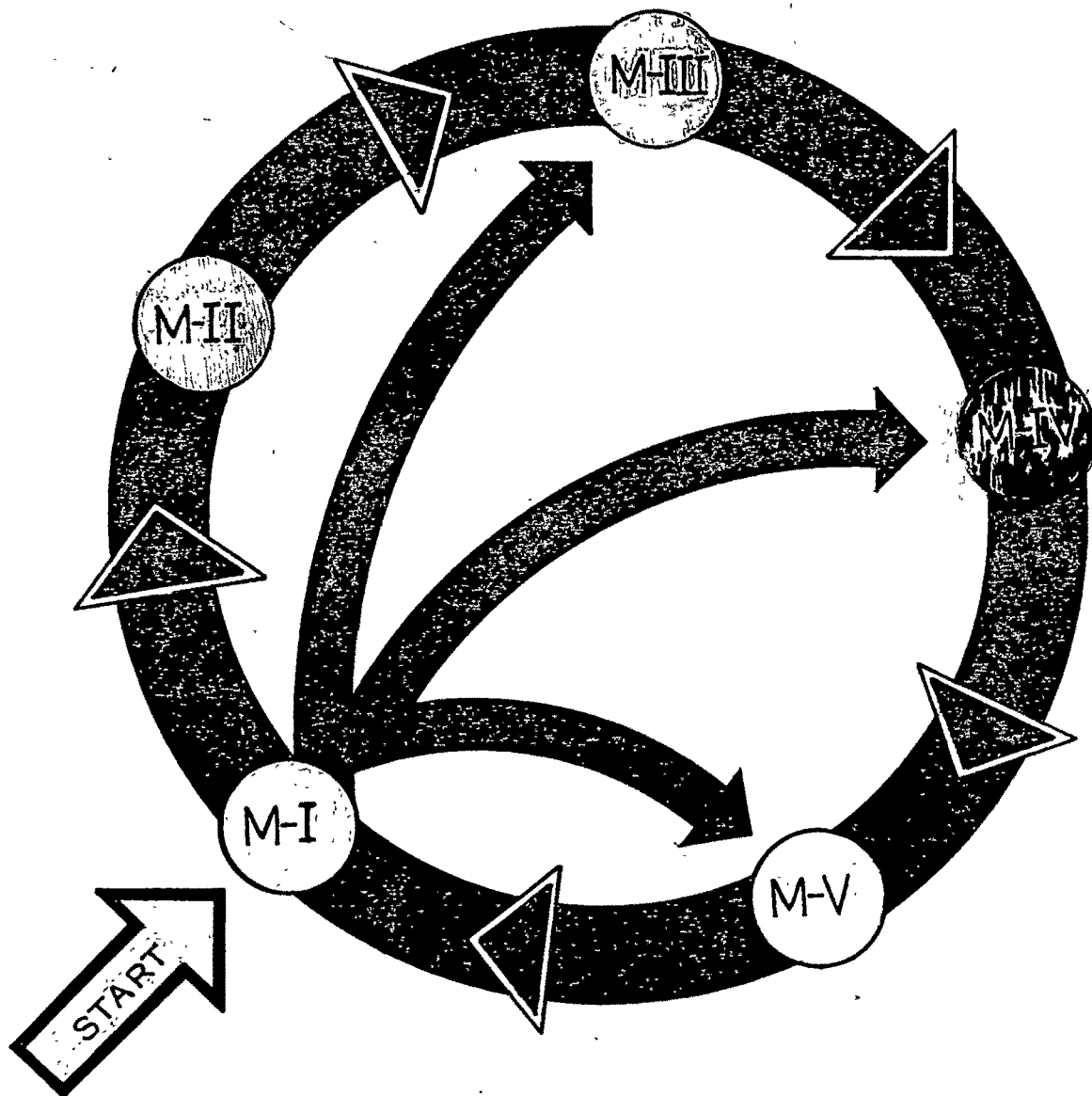
#### D. PLAYBACK

- 3 Play fully 1 minute.
- 1 Bring tape deck control to play/forward.
- 2 Adjust volume control.
- 4 Lift pickup arm and lock in position.

#### E. PACK UP

- 2 Switch off tape deck, amplifier and record player.
- 1 Rewind tape.
- 4 Remove record and store.
- 3 Release turn-table.
- 5 Remove reels, tape and all connecting cords and store.
- 6 Remove all accessories and store.
- 7 Lock lids.

# AUDIO VISUAL EDUCATION



KRISHNAN.

Course Test

SECTION - A

Time: 30 Min.

-----  
Use separate answer sheets for Section 'A', Section 'B',  
Section 'C'. DO NOT Write anything on this question paper.

Return the question paper to the Instructor with the  
response sheet.

Answer Section 'A' first, hand it over, then section 'B'.

Answer Section 'C' separately on practical assignment  
sheets.

-----  
CIRCLE appropriate letter(S) a, b, c or d for Section 'A', on  
the response sheets.  
-----

1. What is the main difference between instructional goal and behavioural objective? (Circle the appropriate letter a, b, c, or d).
  - a. From needs, behavioural objectives are stated in precise terms, and then the instructional goals are identified.
  - b. Instructional goals are stated in more precise terms than behavioural objectives.
  - c. Instructional goal is stated in general term while the behavioural objective is stated more precisely.
  - d. Instructional goal is a broad statement or "What ought to be" (future need) while behavioural objective is a broad statement of "What are the present need of the instructions".
2. Which of the following statements are not classified as behavioural objectives? (Circle the letters a,b,c or d)
  - a. The trainee will know filing.
  - b. The trainee will identify the data charts from other charts given to him.
  - c. The trainee will learn to use a slide projector.
  - d. The trainee will write the correct procedure in the order of performance for cleaning a carburettor.

- 264
3. What are the three advantages to be gained from interactive instruction? (Circle the appropriate letter a, b, c, or d).
    - a. Keep instructor active, tests every objective, validate instruction.
    - b. Keep trainee active, instructor and trainee determine progress at all times, and instructor adopts to trainee's needs.
    - c. Instructor and trainees determine progress, instructor tests sample objectives, trainees judge instructor ability.
    - d. Keep instructor active, instructor determines progress in the final examination, and instructor follow test and available books.
  4. The purpose of validation is to:  
(Circle correct response - a, b, c or d)
    - a. Make sure our instruction is effective
    - b. Test whether students can understand
    - c. Check continually on the trainee's progress
    - d. None of the above.
  5. Which one of the following statement gives the reason that it is easier to validate interactive instruction?
    - a. Because interactive instruction is a two way communication.
    - b. We design instruction based on needs of the job.
    - c. We can monitor the trainee's progress continuously, find the deficiencies, correct the trainee and revise instruction.
    - d. We depend on the instructor's capacity to prepare objective questions.
  6. What are the three key components of Instructional design?  
(Circle a, b, c or d for correct answers)
    - a. Instructional goals, instructional objectives, instructional needs.
    - b. Instructional goals, instructional objectives, validation.
    - c. Specific objectives, interactive instruction, validation.
    - d. Instructional need, instructional goal and interactive instruction.
  7. By job performance requirements, we mean:  
(Circle correct letter a, b, c or d)
    - a. Everything the skilled worker must do on the job.
    - b. Degree requirements of prospective trainees.
    - c. Job description prepared by administrative personnel.
    - d. Stating the method of goal-free evaluation of a job.

\*\*\* First and foremost in the development of instructional materials is the task analysis. We do task analysis to find the job performance requirement - i.e., the skills and other behaviors exhibited by the worker on the job. There are four types of task analysis. They are:

- a. Stimulated task analysis
- b. Content analysis
- c. Observation task analysis
- d. Interview analysis

Four situations are given below.

Categorise each of the following as one of the above four type of task analysis. You may repeat the type of task analysis applicable or do not use one type at all.

8. You are an expert electronics technician. From your own experience on the subject, you are analysing certain curricula for testing with different digital and analogue multi-meters.
9. You are entrusted with the design of instruction for operating a major photocopier, and you are not an expert. First and foremost in the process you decide to completely go through the instructional manuals and other relevant literature supplied by the manufacturers.
10. A numerical control lathe has been ordered for your institute and you are given the task of formulating training schemes with that lathe. But you are not an expert in the field. You are not having the relevant literature, nor has any one with whom you can discuss about the issue. You have a worker who can do the job, but he is not conversant with the language. You have decided to .....
11. You do not know anything about optics, and you are required to do task analysis for grading the lenses, by the industry next door who are manufacturers of lenses. You have experts to consult for this task.
12. We determine training requirements:  
(Circle the correct item - a,b,c or d)
  - a. From past experience of instructor
  - b. From job content description
  - c. By subtracting trainee's entry level performance from job performance requirements.
  - d. All the above.

13. Which one of the following is the definition of a criterion test? (Circle correct answer a,b,c or d). 266
- a. It is a sample of multiple choice test items for skill training.
  - b. It samples trainee's learning by testing objectives.
  - c. A criterion test is the same as norm referenced test given at the end of the semester.
  - d. A criterion test is the one that is designed to test the objective.
14. Which one of the following statements is classified as the 'purpose of a job aid' (Circle a,b,c or d for correct response)
- a. It eliminates unnecessary training in order to make the trainees more productive in a short span.
  - b. It prevents training time from being wasted.
  - c. It finds out job classifications.
  - d. It eliminates the presence of instructor from the teaching learning situation.
15. Which one of the following would you categorise, as developmental testing? (Circle a,b,c or d for correct response)
- a. Test during the design of instruction.
  - b. Test at the end of the course
  - c. Test of the validation of course materials
  - d. Test to find out the entry level of the trainees.
16. We relate perception to the design of audio-visual aids by (Circle a,b,c or d for correct answer)
- a. Providing perceptual experiences in terms of the teacher's past experiences, and present situation.
  - b. Providing perceptual experiences in terms of learner's past experiences, and present environment.
  - c. Providing stimulus different from the kind of experience the learner has.
  - d. Providing experiences that the best boy in the class has, so that the poorest boy can become equal to him, by using the audio visual aids, so designed.
17. Which of the following groups give correctly the seven components of BERLO'S MODEL OF COMMUNICATION? (Circle a,b,c or d for correct answer)
- a. Sender, Receiver, Channel, Noise, Feedback, Brain, Senses.
  - b. Source, Encoder, Channel, Decoder, Destination, Noise, Feedback.
  - c. Source, Destination, Message, Channel, Noise, Feedback Senses.
  - d. Source, Encoder, Message, Nervous system, Decoder, Destination, Noise.

18. Which of the following are examples of stimuli? **267**  
(Circle a,b,c or d for correct answer).
- a. Your answer to this test.
  - b. Lifting a telephone when it rings.
  - c. Content presented to learner like this unit (sound slide)
  - d. Stopping at red traffic signal.
19. Which one of the following group gives the three domains of behavioural outcome categorised by BLOOM?  
(Circle a,b,c or d for correct answer)
- a. Attitude, knowledge and skill.
  - b. Signal learning, concept learning and rule learning
  - c. Cognitive, affective and psychomotor.
  - d. Attitude, value, appreciation.
20. Which of the following statements is not a difference between audio visual aids and media?  
(For correct answer circle a,b,c or d)
- a. An audio visual aid is a device that assists an instructor or teacher whereas media are physical means of conveying instructional inputs...
  - b. An audio visual aid is used by an instructor as part of his instructional strategy or as an individual entity of his own, while media is used as inputs within an instructional design determined by the instructional design requirements.
  - c. Audio visual aids are used as supplements to instruction or for enrichment purposes while media are integrated components of a system.
  - d. Audio visual aid is an aid used during the instruction by the trainees and the instructor, while media helps only the trainees to do individualised learning without the teacher.
21. A teacher is to start the first class for his trainees as TV assembling and checking.
- All necessary equipment and tools have been set up for demonstration by the attendant. The instructor has with him teaching tapes, a video programme on the subject, quiz and answer to the quiz and the equipment-TV tube, transistors, IC, and other parts - and tools. Categorise the last item i.e., the equipment and tools as one of the following.
- a. Audio stimuli
  - b. Visual stimuli
  - c. Audio visual stimuli
  - d. Visual response.

22. What is the minimum letter size a visual displayed in front of a classroom 10 m deep so that it can be read by a person sitting at the last row.
- a. 20 mm
  - b. 25 mm
  - c. 6 mm
  - d. 50 mm
23. Which one of the following is the most important reason, why legibility standards must be considered for any visual, so that
- a. they can be read easily by audience sitting at an anticipated maximum distance?
  - b. they can be read easily by any student sitting in the middle of the class?
  - c. they can be read with ease by students sitting in the front row of the classroom?
  - d. they can be easily read by student sitting anywhere.
24. What is the maximum ratio of letter height to the height of the art work you would adopt if you prepare a transparency of size 25 cm X 25 cm ?
- a. 1: 50
  - b. 1: 25
  - c. 2: 3
  - d. 1: 4
25. Which type of graph is best suited for following:-  
"Expenditure on audio visual equipment incurred for a college in 1980-81 is : Record players - 20%, Tape Recorders-30%; Slide Projectors 15%, Motion picture projectors 25% and opaque projector 10%.
- a. Bar graph, b.pie graph, c.Line graph, d.picto graph.
26. If a sequence of information which would be difficult to show on a single chart is to be presented to your student, which one of the following charts will you prepare?
- a. Strip chart
  - b. Flip chart
  - c. Schematic chart
  - d. Flow chart.



27. In a situation where diagrammatic outlines and the image representation of the object is to be used for the purpose of explaining the function of the object, which one of the following will you make?
- Exploded chart
  - Flow chart
  - Animated chart
  - Schematic chart
28. For showing the movement of the shutter over the aperture in a 16 mm projector, you are to use a chart. Which one of the following would you use?
- Tree chart
  - Animated chart
  - Diagrammatic chart
  - Exploded chart
29. Select the statement among the following, which you consider is not a characteristic of posters.
- Self contained message
  - design and colour
  - supported by detailed explanation.
  - attractiveness.
30. Which one of the following is not considered as a requirement of cartoons?
- the symbols must be clear
  - simplicity
  - should contain detailed explanation
  - should meet the experience level of audience.
31. Which one of the following is the best definition of bulletin board -
- A bulletin board like a notice board is to paste notices meant for students about their assignments, examination dates etc.,
  - A bulletin board is to pin various advertisements about availability of sale articles,
  - A bulletin board unlike notice board displays instructional informative visuals and kept for fixed short duration.
  - A bulletin board unlike notice board displays informative visuals and kept for longer duration to enable everyone to see many times.

32. A flannel board cutout utilises the adhering quality of
- fevicol
  - gummed cutouts
  - masking tapes
  - textural materials
33. Which of the following materials are not suited for making flannelboards?
- Flannel
  - Felt
  - Corduroy
  - Terrene
34. Which one of the following factors will you consider best to determine the size of the flannel board.
- number who must view the board
  - distance from which it must be viewed
  - nature of the material appearing on the board
  - quality of the adhering material.
35. Which one of the following is NOT a feature of chalkboard?
- It can be versatile with diagrams by colour chalks
  - It can be easily erased
  - It produces glare
  - It provides maximum contrast with background.
36. For drawing horizontal strokes the chalk length should be kept.
- inclined downwards
  - horizontal
  - inclined upwards
  - inclined sideways

37. When you draw horizontal strokes, the line at the end bends up. The reason is
- a. Body always towards back
  - b. Right leg is not bent as the line progressed
  - c. Taking the body close to the chalkboard
  - d. You are away from the chalkboard to enable you to write.
38. While writing on chalkboard the chalk piece is rolled to
- a. avoid wastage of chalk
  - b. prevent frequent break of chalk
  - c. maintain uniform thickness in writing
  - d. reduce strain on fingers.
39. While preparing for a chalkboard presentation on a series of intricate parts of component or a machine, you are required to explain with a diagram various elements in the assembly and their location. The type of diagram you will prepare and use will be:
- a. line diagram
  - b. strip diagram
  - c. progressive diagram
  - d. exploded diagram
40. Template and pounce pattern are used for
- a. prepared diagrams
  - b. progressive diagrams
  - c. helping students to draw
  - d. animated drawings.
41. Chalkboard summary is essential to highlight the important aspects of a lesson. What is the best way of doing this, if you are the teacher.
- a. in note form
  - b. in essay form
  - c. written before the class assembles
  - d. dictated.
42. You do not have facilities for darkening the room. You are given the following projectors to be used in the illuminated room, and you have to use them, facing class. Which one will you select?
- a. epidiascope
  - b. overhead projector
  - c. filmstrip projector
  - d. slide projector

43. Which one of the following projection equipments will enable you to get in a classroom, the biggest screen image over a short projection distance?
- a. Overhead projector
  - b. Slide projector
  - c. Epidiascope
  - d. 16 mm motion picture projector
44. You are not having a chalkboard for taking a class, but you are given the following aids and equipment to use them. Select the aid that will permit you to add information to it, while using them.
- a. 16 mm. film
  - b. slide
  - c. transparency
  - d. filmstrip.
45. While one of the following projectors while using in the classroom, permits the instructor to face students and watch the content of the projectual at the same time?
- a. Filmstrip projector
  - b. 16 mm. film projector
  - c. Epidiascope
  - d. Overhead projector.
46. Which the following projectors permits you to project materials from text-books directly?
- a. 16 mm. motion picture projector
  - b. Slide projector
  - c. Overhead projector
  - d. Epidiascope.
47. Which one of the following parts of a projector ensures that all light is directed forward?
- a. lamp
  - b. condenser
  - c. reflector
  - d. objective lens.

48. When you use overhead projector, you place the transparency on the stage, such that
- You can read what is projected
  - bottom of the transparency faces class
  - it is placed upside down
49. The maximum size of transparencies that could be prepared by you for overhead projection is:
- 300 mm X 300 mm
  - 250 mm X 250 mm
  - 300 mm X 250 mm
  - 36 mm X 24 mm
50. Which one of the following faults in your T.V set occurs due to R-F interference (radio frequency)?
- Ghosts
  - Snow
  - extraneous electrical signals
  - break in antenna cable.
51. Which one of the following is NOT a standard speed of record players?
- 78 rpm
  - 45 rpm
  - $33\frac{1}{3}$  rpm
52. A teacher has to explain the various parts of a camera to a batch of 50 students in a classroom. Which one of the following aids will you choose for the purpose?
- an actual camera
  - a transparency with picture of camera
  - a set of slides with pictures of camera
  - an enlarged mockup of the camera.

53. You are required to demonstrate different tools for filing, to ten trainees. Which one of the following aids would you recommend for use as most appropriate?
- Flip charts
  - A set of slides
  - Explain with aid of audio tapes
  - Use actual filing tools.
54. An expert surgeon is doing a heart transplantation. A professor decides that all medical students enrolled for his class for the 3rd year MBBS, course - 150 Nos. shall see the operation; (which is rare to be witnessed) at the same time all doubts on that will be cleared during operation. Which one of the following aids would you decide to recommend?
- A TV set kept in an auditorium where all will assemble.
  - A 16 mm movie film presented in an auditorium for all students.
  - The professor making announcements from the operation theatre and all students assemble in a hall.
  - A CCTV system displays the operation in eight classrooms where TV sets are arranged with a tutor for each group.
55. For the following objectives, which one of the aids given below will be selected by you for teaching the working of a four stroke cycle?
- Objectives:
- The student shall at the end of the lesson
    - identify different parts of the engine.
    - identify the TDC and BDC.
    - show the functions of the 4 stroke cycle.
- a static model
  - an overhead transparency with overlays
  - a sound slide presentation system
  - a working model.
56. Which one of the following aids would you select for showing 'how to operate a 16 mm sound projector to a group of 25 trainees' in your class room?
- Actual demonstration.
  - Lecture with chalkboard drawings
  - Lecture with charts
  - 16 mm, motion picture on the subject.

57. Which of the following circumstances will require you to decide the use of visual aid:-
- a. Difficulty experienced in lecturing due to throat trouble.
  - b. Higher level of abstractions are to be taught better
  - c. Principal desires that in each class you must use visual aids because your Institute has a large collection of aids.
  - d. The students find it more enjoyable to see a film than to hear a lecture from the instructor.
58. Which of the following is NOT the rationale in the use of multi-media?
- a. Different media are necessary to serve ~~different~~ instructional purposes.
  - b. Since students have different learning styles, alternative ways of study habits should be provided.
  - c. Since multimedia presentations have combined different modes, they provide more effective communication.
  - d. Many of us select media on the basis of availability and ease of use in the classroom.
59. A multi imagery presentation is usually.
- a. Combination of charts, books, periodicals
  - b. Exhibition, bulletin board and felt board presentation.
  - c. Overhead projector, models, mockups and radio.
  - d. Sound slide system with three slide presentations simultaneously.
60. Which one of the following is not the case of learning by verbal abstraction ?
- a. Books
  - b. Programmed texts
  - c. Demonstration
  - d. Microfilm.

HANDOVER YOUR RESPONSE SHEETS AND QUESTION PAPER TO  
YOUR INSTRUCTOR.





AUDIO VISUAL EDUCATION

COURSE TEST

SECTION- B

Time: 90 mts.

Use SEPARATE answer sheets for Section A, Section B and Section C.

DO NOT write anything on this question paper.

Return the question paper to the instructor with the response sheets.

Answer Section A first, hand over the answers to instructor, then answer Section B, hand it over to the instructor, and thereafter Section C.

USE SEPARATE RESPONSE SHEETS, and answer in the space provided as directed in this question paper.

61. Arrange the following in the order in which they are to be followed for instructional design. Write against the alphabet a,b,c,d,e,f,g, and h, the number according to the order.
- a. job performance requirements.
  - b. identify training requirements
  - c. define course objectives
  - d. construct criterion test
  - e. field implementation
  - f. design instruction
  - g. validate instruction
  - h. take follow up action.
62. Categorise the following as aids that can be heard, seen, and heard and seen. Write in the space provided on the response sheets against alphabets a, b, and c.
- a. audio aids
  - b. visual aids
  - c. audio visual aids.

63. Categorise the following as projected aids, non projected aids, by writing P for projected aids, and NP for non-projected aids. ADD suffix s for sound to those items with sound along with it.

Write against the alphabets a, b, c ..... p on the response sheets.

- |            |               |                 |                    |
|------------|---------------|-----------------|--------------------|
| a. Posters | e. Recordings | i. Television   | m. Overhead        |
| b. Charts  | f. Chalkboard | j. Soundslide   | n. Flat pictures   |
| c. Radio   | g. Filmstrips | k. mockups      | o. Motion pictures |
| d. Models. | h. Slides     | l. maps, graphs | p. audio tapes.    |

64. List five recognised contributions of audio visual aids to learning.

65. List the five senses through which we learn.

66. Arrange the following in the order in which they are given by Edgar Dale starting with No.1 for the item on the base of the cone, and 11 for the item on the apex of the cone. Write against alphabets given in the response sheet the number in the order.

- |                                  |                         |
|----------------------------------|-------------------------|
| a. Direct purposeful experience. | g. television           |
| b. Dramatised experiences        | h. exhibits             |
| c. Contrived experiences.        | i. field trips          |
| d. Motion picture                | j. demonstrations       |
| e. Verbal symbols                | k. chalk board, charts, |
| f. radio, recordings and         | maps and diagrams       |
| still pictures.                  |                         |

\*\*\* Jerome S. Bruner has related three kinds of experiences, & three major modes of learning. They are:

three kinds of learning experiences:      three modes of learning.

- |                                |             |
|--------------------------------|-------------|
| A. direct experiences          | a. symbolic |
| B. pictorial experiences       | b. iconic   |
| C. highly abstract experiences | c. enactive |

Edgar Dale, in his cone of experiences classified various types of instructional materials according to the relative degree of experiences - direct, pictorial and highly abstract and the three modes of learning made by Bruner - enactive, iconic and symbolic.

Now in the response sheet, for questions 67 to 77: write down against the numbers of the items given below i.e. 67 to 77 representing the eleven range of Dale's Cone of experiences with the alphabet in Capital letter (A, B or C) indicating the kind of learning experiences and with the alphabet in lower case letters (a, b or c) indicating the modes of learning that are related to each of these eleven items.

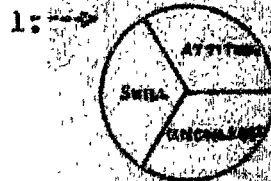
67. Direct purposeful experiences
68. Dramatised experiences
69. Demonstrations
70. Verbal symbols
71. Recordings, Radio and Still pictures
72. Educational Television
73. Study strips
74. Contrived experiences
75. Exhibits
76. Motion pictures
77. Chalk board, charts, maps, diagrammes.
78. Enumerate the five principles of visual design.
79. Name the five visual tools that contribute to the successful use of five design principles.
80. State the five guide lines that will contribute to good legibility in lettering.

81. Match the following, by writing against items in column I corresponding numbers of items given under column II. Write the answers on the response sheets, against corresponding alphabets a,b,c,or d.

Column-I

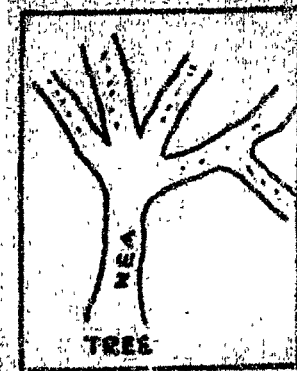
Column-II

a. \_\_\_\_\_ Bar graph

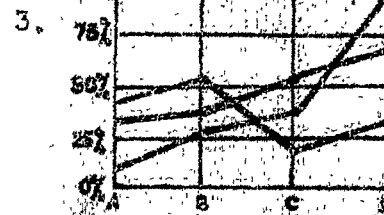


b. \_\_\_\_\_ Pie graph

2. -----→

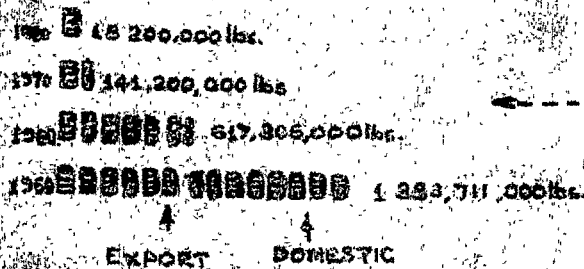
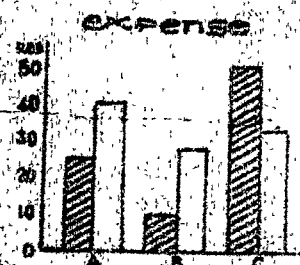


c. \_\_\_\_\_ Picto graph



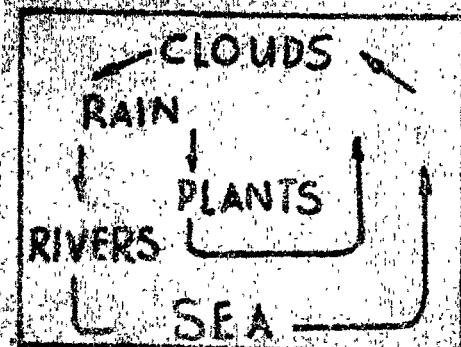
d. \_\_\_\_\_ line graph

4. -----→



←-----5.

6. -----→



82. List four methods of enlarging or reducing pictures.
83. State three functions of using a poster in a classroom.
84. State seven characteristics of a flannel board.
85. Define Model.
86. Define Mockup.
87. State the purpose of using mock ups for instructional purposes.
88. In any projection, the following defects are called \_\_\_\_\_

Fig. a.

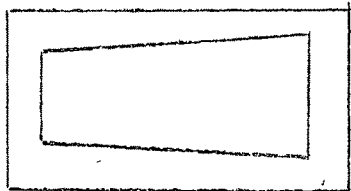
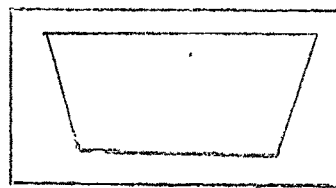


Fig. b.



89. For the defect shown in fig. a above, you have to align projector \_\_\_\_\_ly.
90. For the defect shown in fig. b above, you have to align projector \_\_\_\_\_ly.
91. Give one example each of the projector that gives
  - a. indirect projection \_\_\_\_\_ and
  - b. reflected projection \_\_\_\_\_.
92. Under col. I are given some of the aids and under Col. II some of the advantages of the aids. Match aids against the appropriate advantages given under Col. II. Write on the response sheets against the number, the appropriate alphabets of col.I. There may be more than one matching item.

92. Contd.....

Col. ICol. II

- |                                |  |
|--------------------------------|--|
| ___ a. Multi Media             | 1. Require, no equipment for use..   |
| ___ b. Multi imagery           | 2. Are compact, series of projected visuals for use in sequence.   |
| ___ c. O.H. Transparency       | 3. Flexible and adaptable for independent study. Do not require projection.  |
| ___ d. Motion picture          | 4. Useful for large groups and projected from front of the room.   |
| ___ e. Filmstrips              | 5. A series of visuals that could be interchangeable, visuals that can be combined with and synchronised with taped narration; usually adopted for large and small groups. |
| ___ f. Slides                  | 6. Are particularly useful for showing relationships describing .. motion, and useful for large groups.  |
| ___ g. Recordings              | 7. Combines different media and offers capability to <b>make analyse</b> of a live action on the spot.   |
| ___ h. Television              | 8. Combines different media and provide different visuals at the same time with taped commentary and comparison of the situation with possibilities of magnification.      |
| ___ i. Photographs             | 9. Useful for individual and group study.  |
| ___ j. Programmed Instruction. | 10. Combines different media, used in combination with many others, both for independent study and group use.  |
|                                | 11. Ensures consistency in presentation of all instructional materials.  |

93. Which one of the audio visual aids given under Col.II can best serve the purpose stated in Col.I. Give against each alphabet under Col.I given in the response sheet, the appropriate number of items given under Col.II. You may have more than one answer. 283

<u>Col. I</u>	<u>Col. II</u>
___ a. Outline of a process	1. motion pictures
___ b. skills involving motion	2. transparency
___ c. repairing of intricate parts of a machine.	3. slide series
___ d. identification of small electronic components	4. television
___ e. I.S.I. symbols.	5. originals
___ f. Different types of Stone walls	6. Charts
___ g. Measurement with a micrometer	7. Poster
	8. Flannel Board
	9. Magnetic Board
	10. Bulletin Board
	11. Programmed text

94. You are given the task of media selection for teaching a course on operation of numerical controlled lathe - a complicated process. Which one of the following method of presentation would you propose to adopt, for different groups. The groups are given under Col. I and the methods of presentation under Col.II. Write against alphabets on the response sheets, the appropriate numbers of items given under Col.II. There can be more than one method for each.

<u>Col. I</u>	<u>Col. II</u>
___ a. individual students	1. books, workbook, guide and other publications of manufacturers.
___ b. small group study	2. TV programme
___ c. large size group.	3. Sound slide presentation
	4. 16 mm. sound film
	5. lecture with OH transparency
	6. lecture with students responding to verbal questions.
	7. programmed text
	8. lecture-demonstration
	9. multi media & discussion
	10. simulators
	11. discussions
	12. demonstration

95. Name the four most common forms of reproduction processes available at the Central Training Institute, Madras. **284**

96. Name four materials used for spirit duplication.

FILL UP THE BLANKS, SELECTING FROM ITEMS GIVEN WITHIN BRACKETS

97. Record players use \_\_\_\_\_ while tape recorders use \_\_\_\_\_ for playing sound. (disc, tapes, films)

98. Cassette tapes has a constant speed of \_\_\_\_\_ (4.75, 9.50, 19cm/sec.).

99. Cassette tape C 60 is used to play for \_\_\_\_\_ minutes (60, 90, 120 mts.)

100. For monophonic reproduction we require \_\_\_\_\_ speakers and stereophonic reproduction we require \_\_\_\_\_ speakers. (one, two, four)

101. The camera used for making single frame filmstrip is \_\_\_\_\_ (120, 35mm, 16mm.)

102. The dimension of a mount of standard slide is \_\_\_\_\_ (50 mm x 50 mm, 35mm x 35mm, 70mm x 70mm).

103. The size of a double frame film strip picture format is \_\_\_\_\_ (35mm x 35mm, 35mm x 24mm, 36mm x 24mm.)

104. The proportion of sides of a 35 mm slide picture is \_\_\_\_\_. (1:2; 2:3; 3:4)

105. The speed of a 16 mm sound film is \_\_\_\_\_ (18 fps, 24fps, 40fps).

106. A projector that can project opaque three dimensional objects in silhouette is \_\_\_\_\_ (filmstrip, projector, slide projector, overhead projector).

107. The self instructional study area where tape recordings and projected materials can be used is known as \_\_\_\_\_. (Acoustic room, Booths, Carrel).

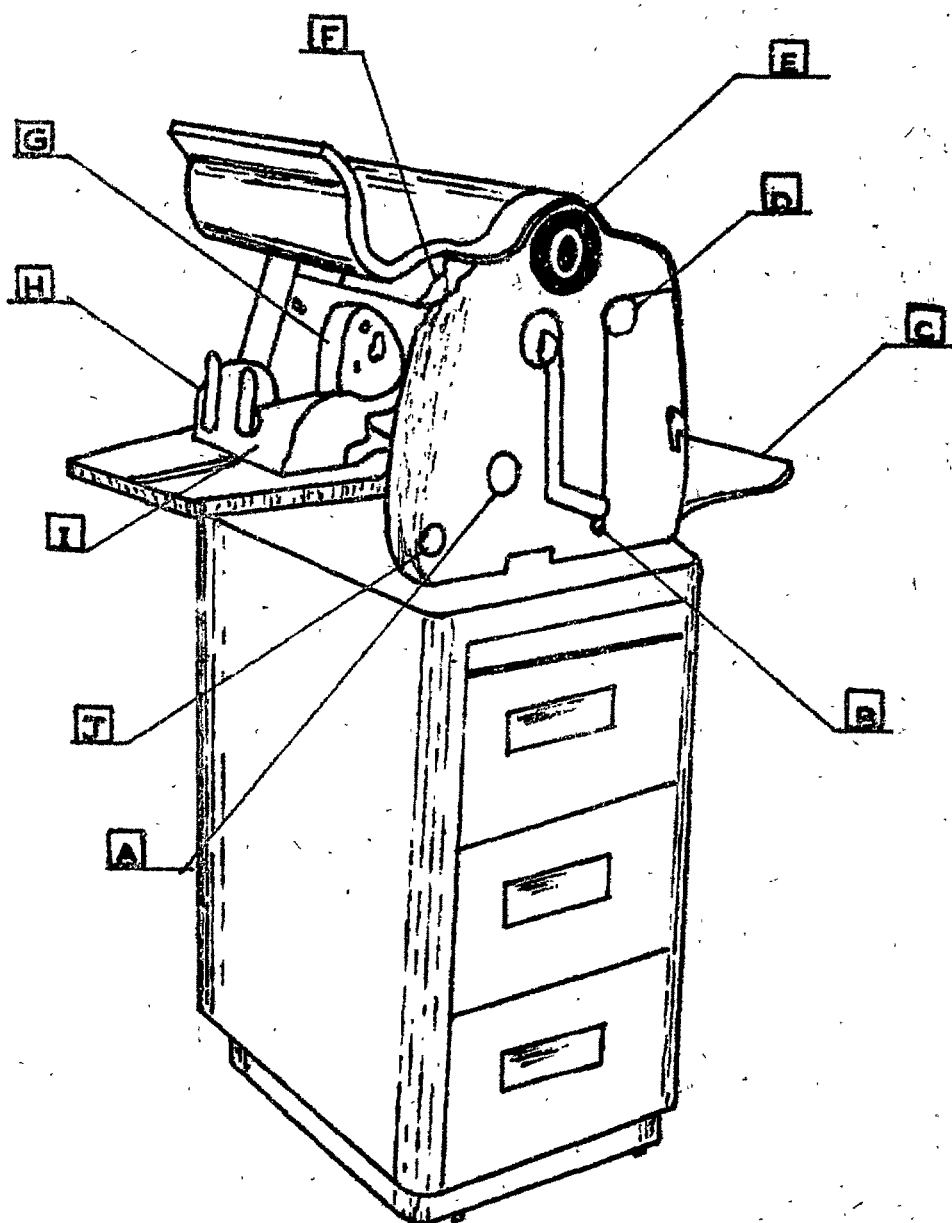
108. A chart having moving parts is called \_\_\_\_\_ chart. (Exploded, flip, animated).

109. While making stereophonic recording we record on the tape in \_\_\_\_\_ track in the same direction. (single, double, four).

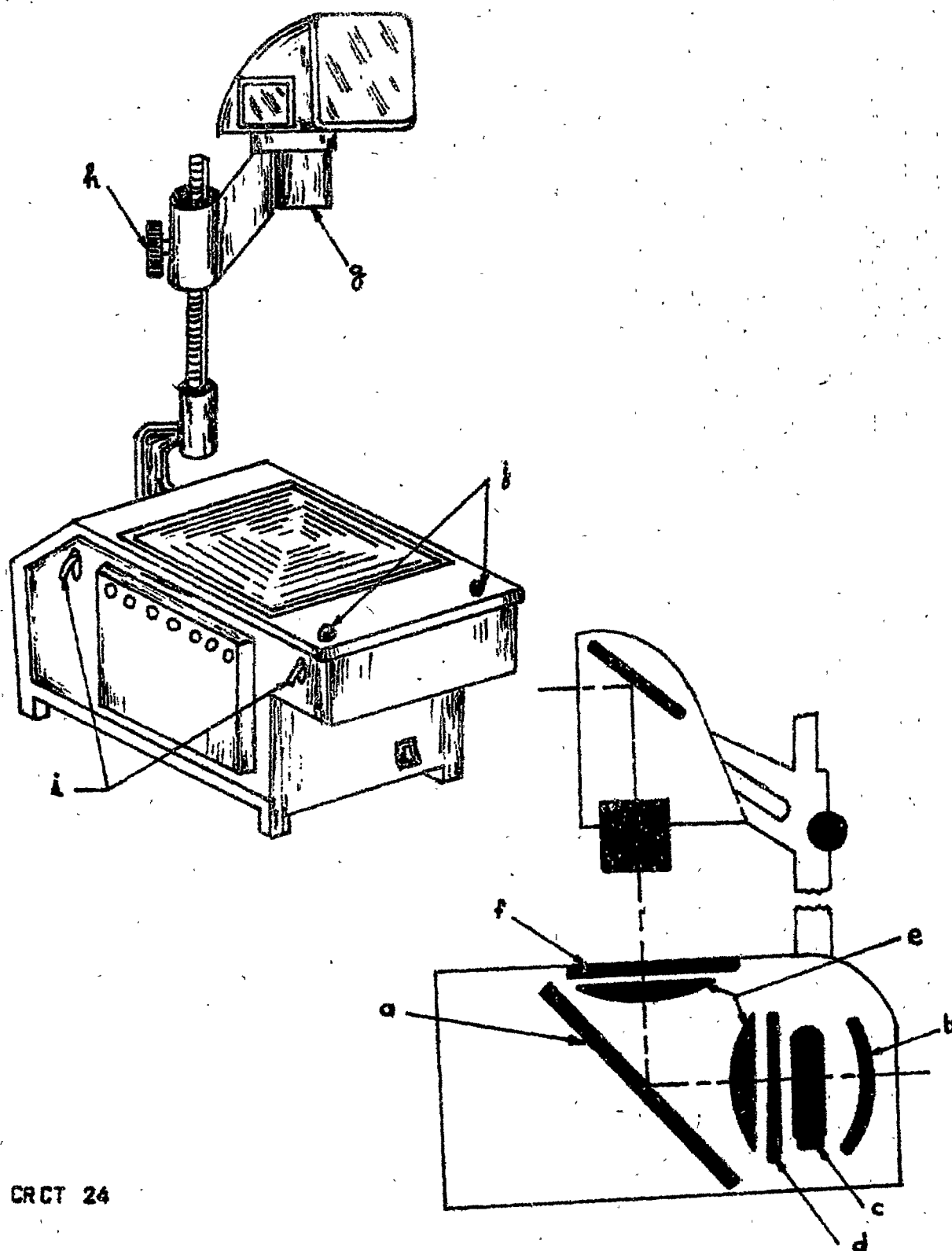


110. To prepare a master pack for spirit duplication; we keep \_\_\_\_\_ the carbon side facing master. (Carbon between backing and master; master between carbon and backing; backing between carbon and master).
111. Write the order of Operation of the Spirit duplicator.
- \_\_\_\_\_ a. Check fluid in the tank.
  - \_\_\_\_\_ b. Insert paper in feed tray.
  - \_\_\_\_\_ c. Adjust pressure lever
  - \_\_\_\_\_ d. Adjust paper guides, grippers
  - \_\_\_\_\_ e. Check the wick for moistness.
  - \_\_\_\_\_ f. Turn drum to proper position
  - \_\_\_\_\_ g. Adjust impression strength
  - \_\_\_\_\_ h. Adjust margin, top and bottom and sides.
  - \_\_\_\_\_ i. Insert top edge of the master into the opening, with carbon facing up.
  - \_\_\_\_\_ j. Depress clamp lever to open the clamp
  - \_\_\_\_\_ k. Return the clamp lever
  - \_\_\_\_\_ l. Check spirit flow
  - \_\_\_\_\_ m. run copies
  - \_\_\_\_\_ n. set counter
  - \_\_\_\_\_ o. Turn drum to initial position
  - \_\_\_\_\_ p. Open clamp lever.
  - \_\_\_\_\_ q. close clamp lever
  - \_\_\_\_\_ r. remove master and cover with specimen sheet.
  - \_\_\_\_\_ s. set copy control to 0 position
  - \_\_\_\_\_ t. Set pressure control lever to 0 position.

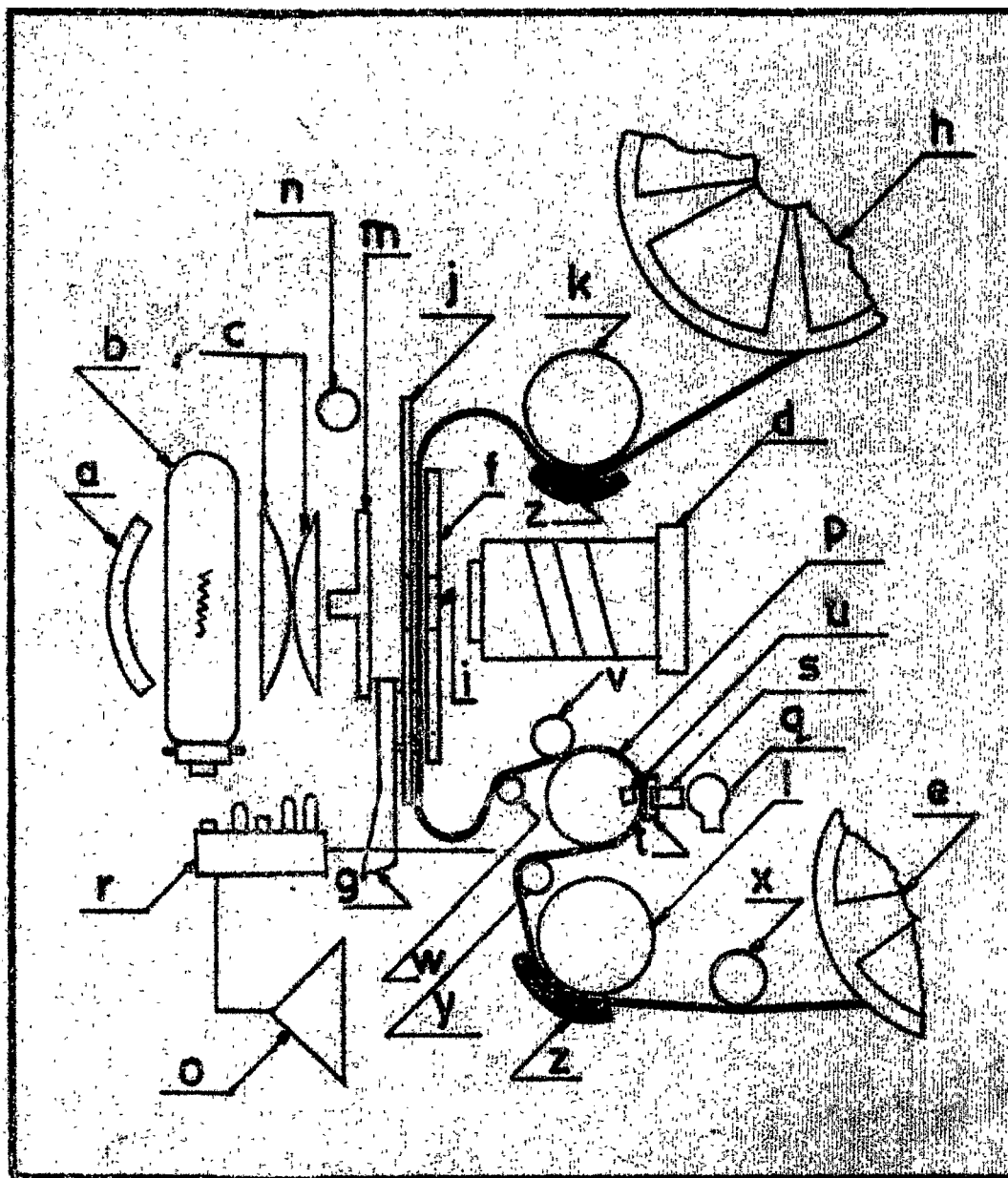
112. In the sketch given below, some parts of the gasetner duplicator are marked by alphabetical letters, a, b, c... Write on the response sheet against the alphabets, the name of the parts of the duplicator.



113. Some of the parts are marked a,b,c,d... in the sketch below. Write against the alphabets on your response sheets the appropriate names.

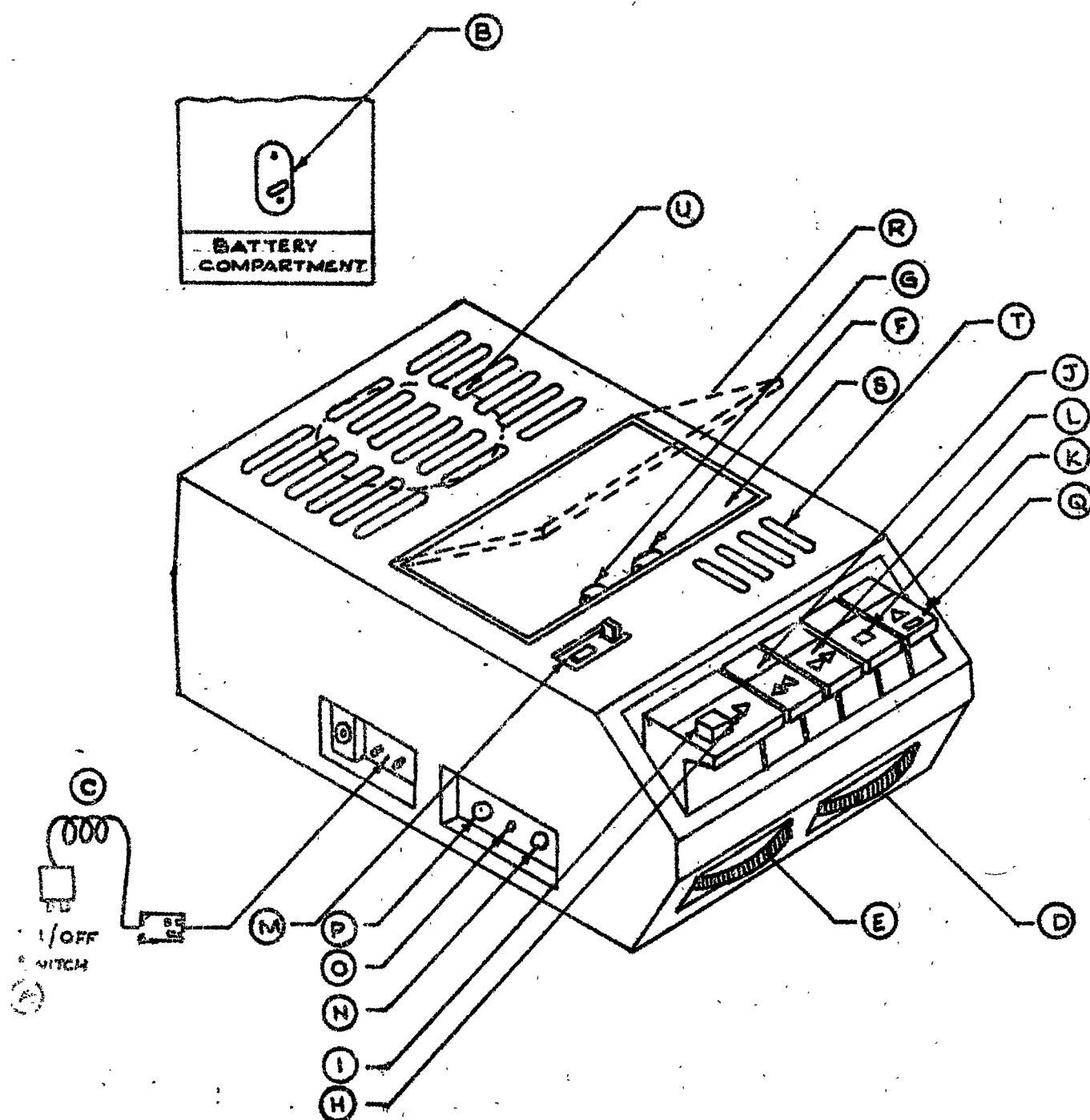


114. Some parts of the schematic diagram of the 16 mm motion picture projector are marked a,b,c,d, ..... Write against the alphabets given on your response sheet the names of the corresponding parts.



115. A stencil you have prepared is found to be defective; The copies get cropped during duplication; State how to solve the problem; in your own words;
116. Explain how will you prepare a transparency for over-head projection using electronic scanning machine - Gestetner esp 79;
117. You have to produce a good quality audio recording and do not have an acoustically treated room; You are required to suggest an alternative, simple and economical way to improve the room condition for the recording purposes;
118. You have to purchase a record player. It is reported that Phillips GA 242 is a good one. If you have to purchase this record player, you must have to purchase in addition to speakers one more item. What is that item?
119. In some of the tape recorders you have three heads. Each head performs different functions. If one of the heads is removed and two heads are to be used, state what functions will be combined in one head?
120. In the sketch given on the next page, some of the parts of an audio cassette recorder are marked by letters a, b, c, d, .....,  
Mark on your response sheet the names of these parts against the corresponding alphabets.

120.



CRCT 27

CONFIDENTIAL	SECTION 3	REPORT TO:
		GRADE :
61.	a. _____ b. _____ c. _____ d. _____ e. _____ f. _____ g. _____ h. _____	
62.	a. _____ b. _____ c. _____	
63.	a. _____ b. _____ c. _____ d. _____ e. _____ f. _____ g. _____ h. _____ i. _____ j. _____ k. _____ l. _____ m. _____ n. _____ o. _____ p. _____	
64.	1. _____ 2. _____ 3. _____ 4. _____ 5. _____	
65.	a. _____ b. _____ c. _____ d. _____ e. _____	
66.	a. _____ b. _____ c. _____ d. _____ e. _____ f. _____ g. _____ h. _____ i. _____ j. _____ k. _____	
67.	_____	68. _____
70.	_____	71. _____
72.	_____	74. _____
75.	_____	77. _____
76.	1. _____	2. _____
	3. _____	4. _____
78.	1. _____	2. _____
	4. _____	5. _____
80.	1. _____	2. _____
	3. _____	5. _____
81.	a. _____ b. _____ c. _____ d. _____	
82.	1. _____	2. _____
	4. _____	5. _____
83.	1. _____	2. _____
	3. _____	

83. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

84. 1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_

7. \_\_\_\_\_

85. \_\_\_\_\_

86. \_\_\_\_\_

87. \_\_\_\_\_

88. \_\_\_\_\_ 89. \_\_\_\_\_ 90. \_\_\_\_\_

91. a. \_\_\_\_\_ b. \_\_\_\_\_

92. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_

g. \_\_\_\_\_ h. \_\_\_\_\_ i. \_\_\_\_\_

j. \_\_\_\_\_

93. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_

g. \_\_\_\_\_

94. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

95. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

96. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_

97. \_\_\_\_\_

98. \_\_\_\_\_ 99. \_\_\_\_\_ 100. a. \_\_\_\_\_ b. \_\_\_\_\_

101. \_\_\_\_\_ 102. \_\_\_\_\_ 103. \_\_\_\_\_

104. \_\_\_\_\_ 105. \_\_\_\_\_ 106. \_\_\_\_\_

107. \_\_\_\_\_ 108. \_\_\_\_\_ 109. \_\_\_\_\_

110. \_\_\_\_\_



## COURSE TEST

## SECTION B

111. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_ g. \_\_\_\_\_  
 h. \_\_\_\_\_ i. \_\_\_\_\_ j. \_\_\_\_\_ k. \_\_\_\_\_ l. \_\_\_\_\_ m. \_\_\_\_\_ n. \_\_\_\_\_  
 o. \_\_\_\_\_ p. \_\_\_\_\_ q. \_\_\_\_\_ r. \_\_\_\_\_ s. \_\_\_\_\_ t. \_\_\_\_\_

112. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_  
 d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_  
 g. \_\_\_\_\_ h. \_\_\_\_\_ i. \_\_\_\_\_  
 j. \_\_\_\_\_

113. a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_  
 d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_  
 g. \_\_\_\_\_ h. \_\_\_\_\_ i. \_\_\_\_\_  
 j. \_\_\_\_\_

114. h. \_\_\_\_\_ f. \_\_\_\_\_ g. \_\_\_\_\_  
 q. \_\_\_\_\_ i. \_\_\_\_\_ k. \_\_\_\_\_  
 n. \_\_\_\_\_ v. \_\_\_\_\_ p. \_\_\_\_\_  
 c. \_\_\_\_\_

115. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

116. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

117. \_\_\_\_\_

118. \_\_\_\_\_ 119. \_\_\_\_\_

120. \_\_\_\_\_ Play \_\_\_\_\_ mike input \_\_\_\_\_ Fast forward  
 \_\_\_\_\_ Record \_\_\_\_\_ Remote \_\_\_\_\_ Rewind  
 \_\_\_\_\_ Stop \_\_\_\_\_ voltage selector \_\_\_\_\_ Volume  
 \_\_\_\_\_ eject \_\_\_\_\_ a.C. inlet \_\_\_\_\_ tone  
 \_\_\_\_\_ condenser mike \_\_\_\_\_ cassette compartment \_\_\_\_\_ Speaker

ON COMPLETION OF SECTION B TAKE SECTION C.

## COURSE TEST

## SECTION C

TIME 90 Mts

Use separate response sheets provided for questions 123, 125, 127, 130 and 134. Write your roll number on the response sheets. Return question paper to your instructor along with response sheets. Do practical exercises under supervision of the instructor. Write the performance check lists for questions 123, 125, 127, 130 and 134 before you attempt practical questions. Time is very important for all practical questions. You must have completed Section A and B before answering Section C.

121. In the time table for instructor training programme the number of hours allotted per week are given below. Show this by a graph, which will give proportionate timing and whole time required for the week.

Trade Practical	-- 10 hours
Trade Theory	-- 6 hours
Science	-- 3 hours
Calculation	-- 2 hours
Precision Measuring Instruments,	-- 2 hours
Pedagogy	-- 4 hours
A.V. Theory	-- 2 hours
A.V. Practicals	-- 2 hours
Engineering Drawing	-- 3 hours
Library	-- 1 hour
Test	-- 1 hour

15 mts.

122. Prepare a folding chart to have four visuals on the trade theory applicable to you. (Continuum to be maintained).

15 mts.

123. Performance Check list

The performance Check list for operating Overhead projector given below is not in sequence. Number 1,2,3 ... etc., against each step in the correct sequence.

PROCEDUREA. SETTING UP

- \_\_\_\_\_ a. Connect power cord and switch.
- \_\_\_\_\_ b. Set up the projector cord and switch on
- \_\_\_\_\_ c. Adjust image size.
- \_\_\_\_\_ d. Put test transparency.
- \_\_\_\_\_ e. Adjust top mirror.
- \_\_\_\_\_ f. Focus.

B. OPERATION

- \_\_\_\_\_ a. Replace test transparency with a set of overhead transparency with overlays and manipulate overlays.
- \_\_\_\_\_ b. Replace with a transparency containing a number of items.
- \_\_\_\_\_ c. Using pencil write on the scroll.
- \_\_\_\_\_ d. Attach scroll.

C. PUTTING AWAY

- \_\_\_\_\_ a. Pack up power cords.
- \_\_\_\_\_ b. Switch off and bring to normal the position of parts.
- \_\_\_\_\_ c. Remove and pack up transparency.

3 mts.

124. Set up and operate an Overhead Projector to project  
(1) a transparent object, (2) hand made coloured  
transparency.

5 mts.

125. Performance Check List

The performance Check list for operating Video cassette recorder given below is not in sequence. Number 1,2,3 .. etc., against each step in the correct sequence.

PROCEDURE

- \_\_\_\_\_ a. Set video mode.
- \_\_\_\_\_ b. Connect V.C.R. and T.V. to the power supply.
- \_\_\_\_\_ c. Switch on mains power (V.C.R.)
- \_\_\_\_\_ d. Remove TV and VCR from the boxes and place them in proper place
- \_\_\_\_\_ e. Set operate switch.
- \_\_\_\_\_ f. Switch on power (TV).
- \_\_\_\_\_ g. Cover the VCR and TV.
- \_\_\_\_\_ h. Load video cassette correct side up.
- \_\_\_\_\_ i. Switch on the test pattern.
- \_\_\_\_\_ j. Adjust VCR to channel 37.
- \_\_\_\_\_ k. Adjust TV receiver to channel 37
- \_\_\_\_\_ l. Set the pattern with the help of a pre-tuner.
- \_\_\_\_\_ m. Press eject key.
- \_\_\_\_\_ n. Switch off the test pattern.
- \_\_\_\_\_ o. Adjust volume control.
- \_\_\_\_\_ p. Press cassette holder down gently.
- \_\_\_\_\_ q. For colour projection adjust colour density for correct balance.
- \_\_\_\_\_ r. Press sound key.
- \_\_\_\_\_ s. Depress play key.
- \_\_\_\_\_ t. Adjust tone control.
- \_\_\_\_\_ u. Press stop key.
- \_\_\_\_\_ v. Put off the TV and VCR main switch.
- \_\_\_\_\_ w. Remove cassette.
- \_\_\_\_\_ x. Repack carefully.
- \_\_\_\_\_ y. Put off the operate switch.
- \_\_\_\_\_ z. Remove all connections.
- \_\_\_\_\_ z1. Close the cassette holder.
- \_\_\_\_\_ z2. Press eject key.
- \_\_\_\_\_ z3. Connect VCR to TV.

7 mts.

126. Using Weston Video Cassette recorder, show a colour T.V. programme for one minute on Weston Television.

5 mts.

127. The performance check list for operating Lennox 200 given below is not in sequence. Number 1,2,3... etc., against each step in the correct sequence.

PROCEDURE

- \_\_\_\_\_ a. Rest both sheets touching left hand guide and move forward so that original enters in lower slot and copy enters upper slot.
  - \_\_\_\_\_ b. With original facing up, place coated side of the copy paper on top. Coated side is much whiter than the uncoated side and can be easily distinguished.
  - \_\_\_\_\_ c. Open the front door by turning the knob to horizontal position.
  - \_\_\_\_\_ d. With plate in position, push back door to close and turn the knobs to back.
  - \_\_\_\_\_ e. Then align the original and copy paper along left and top edges.
  - \_\_\_\_\_ f. Start the machine.
  - \_\_\_\_\_ g. Position the feed plate taking care that notch in centre of the plate engages in the guide pin of front door assembly.
  - \_\_\_\_\_ h. Switch off the machine.
  - \_\_\_\_\_ i. Pick up the original from the bottom and the copy from the top.
  - \_\_\_\_\_ j. Release the grip on sheets, immediately when these are caught in the rollers.
128. Set up Lennox and take copy of a line drawing. 3 mts.  
5 mts.
129. Record for 30 secs. on a cassette tape a given passage. Start from setting up until packing.  
5mts.
130. Performance check list for operating Record Player given below is not in the correct sequence. Number 1,2,3,..... etc. against each step in the correct sequence.

PROCEDUREA. SETTING UP

- \_\_\_\_\_ a. Place and assemble gently on a truly horizontal surface.
- \_\_\_\_\_ b. Turn on amplifier.
- \_\_\_\_\_ c. Turn on motor.
- \_\_\_\_\_ d. Place speaker, if there is no built-in-speaker.
- \_\_\_\_\_ e. Plug in speaker cords into the receptacle.
- \_\_\_\_\_ f. Open the case.

B. OPERATING

- \_\_\_\_\_ a. Select speed of turn-table for 45 rpm record.
- \_\_\_\_\_ b. Select a 45 rpm record.
- \_\_\_\_\_ c. Place pickup arm stylus on record gently.
- \_\_\_\_\_ d. Start turntable.
- \_\_\_\_\_ e. Place record properly side I on the record player.
- \_\_\_\_\_ f. Select proper stylus for the record.
- \_\_\_\_\_ g. Adjust pickup arm weight if provided.
- \_\_\_\_\_ h. Unlock and lift the pickup arm.
- \_\_\_\_\_ i. Play for one minute.
- \_\_\_\_\_ j. Adjust volume.
- \_\_\_\_\_ k. Adjust tone.
- \_\_\_\_\_ l. Lift arm.
- \_\_\_\_\_ m. Replace it on rest.

C. PUTTING AWAY

- \_\_\_\_\_ a. Lock arm
- \_\_\_\_\_ b. Amplifier off.
- \_\_\_\_\_ c. Remove record.
- \_\_\_\_\_ d. Release turntable
- \_\_\_\_\_ e. Lock lid.
- \_\_\_\_\_ f. Store all cords.
- \_\_\_\_\_ g. Motor off.
- \_\_\_\_\_ h. Place in original position 7 mts.

131. Operate the H.M.V. Fiesta record player and play 78 rpm,  
and 33 rpm each for one minute. 5 mts.

132. Thread the given 16 mm motion film in the motion picture projector manually. 10 mts
133. Project a given page of the text book to get an image of the picture on an A1 size paper leaving 1 cm margin allround. 5 mts
134. Following checklist for operating a spirit duplicator is not in an orderly sequence. Number 1,2,3,., against each of the sub heads in the correct order.

A. Ready the duplicator

- \_\_\_ a. Adjust pressure of impression roller
- \_\_\_ b. Adjust guides if any
- \_\_\_ c. Check for moistness of felt, wet if necessary
- \_\_\_ d. Insert paper in the feed tray
- \_\_\_ e. Rotate and check for proper flow of fluid
- \_\_\_ f. Clean duplicator if required
- \_\_\_ g. Check for fluid in the tank, add if necessary
- \_\_\_ h. Remove cover

B. Attach master

- \_\_\_ a. the side with carbon impression faces up
- \_\_\_ b. Insert top edge of master into the opening
- \_\_\_ c. Turn handle to 7 O'clock position
- \_\_\_ d. Return the clamping to normal position,
- \_\_\_ e. Rotate handle counter clockwise
- \_\_\_ f. Then rotate handle clock wise

C. Run copies

- \_\_\_ a. Run copies, feed paper & check continually spirit, paper and other adjustments
- \_\_\_ b. Check again spirit flow and adjust if needed
- \_\_\_ c. Run test sheet
- \_\_\_ d. Set counter for copy numbering
- \_\_\_ e. Adjust impression strength
- \_\_\_ f. Adjust margin (both top and bottom).

D. Leave Machine

- \_\_\_ a. Remove and store spirit
- \_\_\_ b. Set copy control knob and pressure control knob to zero
- \_\_\_ c. Replace dust cover
- \_\_\_ d. Rotate clockwise again, close clamp lever, leave drum to normal position

134. contd.

- \_\_\_ e. Remove and store unused paper
- \_\_\_ f. Stop handle to 7'0 clock position .
- \_\_\_ g. Rotate counter clockwise, open clamp
- \_\_\_ h. File master after stapling to it a specimen
- \_\_\_ i. Remove master without touching the carbon impression
- \_\_\_ j. Clean the machine, and

Course Test



Roll No:

RESPONSE SHEET

Trade :

COURSE TEST	SECTION C
123. A. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f. B. ___ a, ___ b, ___ c, ___ d. C. ___ a, ___ b, ___ c.	
125. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f, ___ g, ___ h, ___ i, ___ j, ___ k, ___ l, ___ m, ___ n, ___ o, ___ p, ___ q, ___ r, ___ s, ___ t, ___ u, ___ v, ___ w, ___ x, ___ y, ___ z, ___ z <sub>1</sub> , ___ z <sub>2</sub> , ___ z <sub>3</sub> .	
127. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f, ___ g, ___ h, ___ i, ___ j.	
130. A. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f, ___ g, B. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f, ___ g, ___ h, ___ i, ___ j, ___ k, ___ l, ___ m C. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f, ___ g, ___ h.	
134. A. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f, ___ g, ___ h. B. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f. C. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f. D. ___ a, ___ b, ___ c, ___ d, ___ e, ___ f, ___ g, ___ h, ___ i, ___ j.	



## COURSE TEST

KEY

Roll No:

Date:

Trade :

SECTION B.

61. a. 1 b. 2 c. 3 d. 5  
 e. 4 f. 7 g. 6 h. 8

62. a. Heard b. Seen c. heard and seen.

63. a. NP b. NP c. NPs d. NP  
 e. NPs f. NP g. P h. P  
 i. Ps j. Ps k. NP l. NP  
 m. P n. NP o. Ps p. NPs

64. 1. Make instruction more productive.  
 2. Make instruction more individual.  
 3. Make learning more immediate.  
 4. Make access to instructions equal to all.  
 5. Give instruction a more scientific base.

65. 1. Seeing 2. Hearing 3. smelling 4. Touching.  
 5. Testing.

66. a. 1 b. 3 c. 2 d. 8  
 e. 11 f. 9 g. 7 h. 6  
 i. 5 j. 4 k. 10

67. C a  
 68. A C  
 69. A C  
 70. B b  
 71. C a  
 72. B b  
 73. B b  
 74. B b  
 75. A C

## COURSE TEST

## KEY SECTION B.

76. B b
77. B b
78. 1. Dominance  
2. Simplicity  
3. Harmony or unity  
4. Pattern  
5. Balance
79. 1. Line 2. colour 3. Texture 4. Shaps & size 5. Space.
80. 1. size  
2. Style  
3. Layout  
4. Spacing  
5. contrast
81. a. 3 b. 1 c. 4 d. 2
82. 1. Opaque projector 2. Grid method  
3. Pantograph 4. Photograph enlarger/O.H.Projector.
83. 1. Motivation  
2. Reminder  
3. Atmosphere/creative expression.
84. 1. Attract attention 2. Stimulate interest  
3. Flexible in 4. Utilises demonstration  
5. Improves communication 6. Dramatises concepts  
7. Easily made and stored.
85. Models are scaled representation of real things.
86. A mockup is defined as a contrived or simulated three dimensional device which imitates certain aspects of the real things.
87. It serves as a modified and abridged device which imitates certain aspects of the real thing.
88. Keystone effect.
89. Horizontally.

COURSE TEST - - - - - KEY - - - SECTION B -

90. Vertically.
91. a. Opaque projector.  
b. Overhead projector.
92. a. 8,9,10,13 b. 8,9,10,12,13 c. 4 d. 6,9,7  
e. 2,9,11 f. 5,9 g. 3,9 h. 7,9,11  
i. 1,9 j. 1,9,11
93. a. 1,2,3,4 b. 1,4 c. 1,2,3,4 d. 5  
e. 2,3,6,8,9,10,11 f. 2,3,6 g. 5
94. a. 1,2,3,4,7,10,11,12 b. 1,2,3,4,5,6,7,8,9,10,11,12  
c. 1,2,4,5,7,9,11
95. a. Spirit duplicating b. Stencil duplicating.  
c. Photocopying.
96. a. Spirit (Fluid) b. Spirit carbon  
c. Art paper (Master).
97. Disc Tapes
98. 4.75
99. 60 minutes
100. a. One b. two
101. 35 mm
102. 50 mm x 50 mm
103. 36 mm x 24 mm
104. 2 : 3
105. 24 fps
106. Overhead projector
107. Carrel
108. Animated
109. Double ; four
110. Carbon between master and backing.

## COURSE TEST

## KEY SECTION B

111. a. 4 b. 1 c. 3 d. 2 e. 5  
 f. 6 g. 11 h. 12 i. 8 j. 7  
 k. 9 l. 4 m. 13 n. 10 o. 14  
 p. 15 q. 17 r. 16 s. 18 t. 19
112. a. Feedboard raising knob b. Handle  
 c. Collecting tray d. Ink selector  
 e. Counter f. Print height adjuster  
 g. Feeding unit h. Back guide  
 i. Side guide j. Switch
113. a. Mirror b. reflector  
 c. projection lamp d. heat filter  
 e. condenser lens f. fresnel lens  
 g. objective lens h. focussing knob  
 i. acetate roller knob j. transparency guide pins
114. h. supply (feed) reel k. supply (feed) sprocket  
 f. Pressure plate m. shutter  
 g. claw v. pressure roller  
 q. exciter lamp p. sound drum  
 i. take up sprocket e. take up reel
115. Leave enough margin - top, bottom, sides - so that the copy is not cropped up during duplication.
116. A clear acetate sheet is placed between blank stencil and backing sheet while scanning as usual. You make the clear acetate, the transparency.
117. Carpeting draperies
118. Amplifier
119. Reproduction
120. H play N mike input L fast forward  
i record O remote J rewind  
B voltage selector D volume Q eject  
A AC inlet F tone T condenser mike  
S cassette component U speaker  
K stop

## COURSE TEST

## SECTION C

123. A. 2 a, 1 b, 5 c, 3 d, 4 e, 6 f.

B. 1 a, 2 b, 4 c, 3 d.

C. 2 a, 1 b, 3 c.

125. 5 a, 3 b, 4 c, 1 d, 6 e, 7 f, 29 g,  
14 h, 10 i, 9 j, 8 l, 13 m, 13 n, 12 n,  
18 o, 15 p, 17 q, 21 r, 16 s, 19 t, 20 u,  
26 v, 23 w, 28 x, 25 y, 27 z, 24 z<sub>1</sub>, 22 z<sub>2</sub>,  
2 z<sub>3</sub>.

127. 5 a, 7 b, 1 c, 3 d, 6 e, 4 f, 2 g,  
10 h, 9 i, 8 j.

130. A. 1 a, 5 b, 6 c, 3 d, 4 e, 2 f.

B. 1 a, 2 b, 8 c, 6 d, 3 e, 4 f, 5 g,  
7 h, 9 i, 10 j, 11 k, 12 l, 13 m.

C. 1 a, 4 b, 5 c, 3 d, 7 e, 6 f, 2 g,  
8 h.

134. A. 5 a, 4 b, 7 c, 3 d, 8 e, 2 f, 6 g,  
1 h.

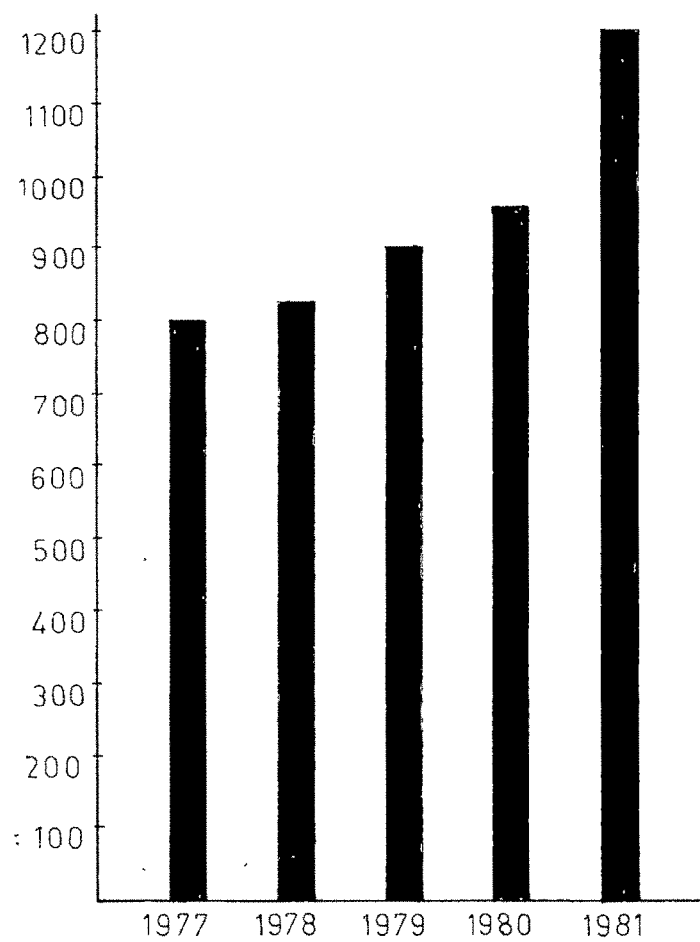
B. 4 a, 3 b, 1 c, 6 d, 2 e, 5 f.

C. 6 a, 4 b, 1 c, 5 d, 3 e, 2 f.

D. 7 a, 6 b, 10 c, 4 d, 8 e, 1 f, 2 g,  
5 h, 3 i, 9 j.

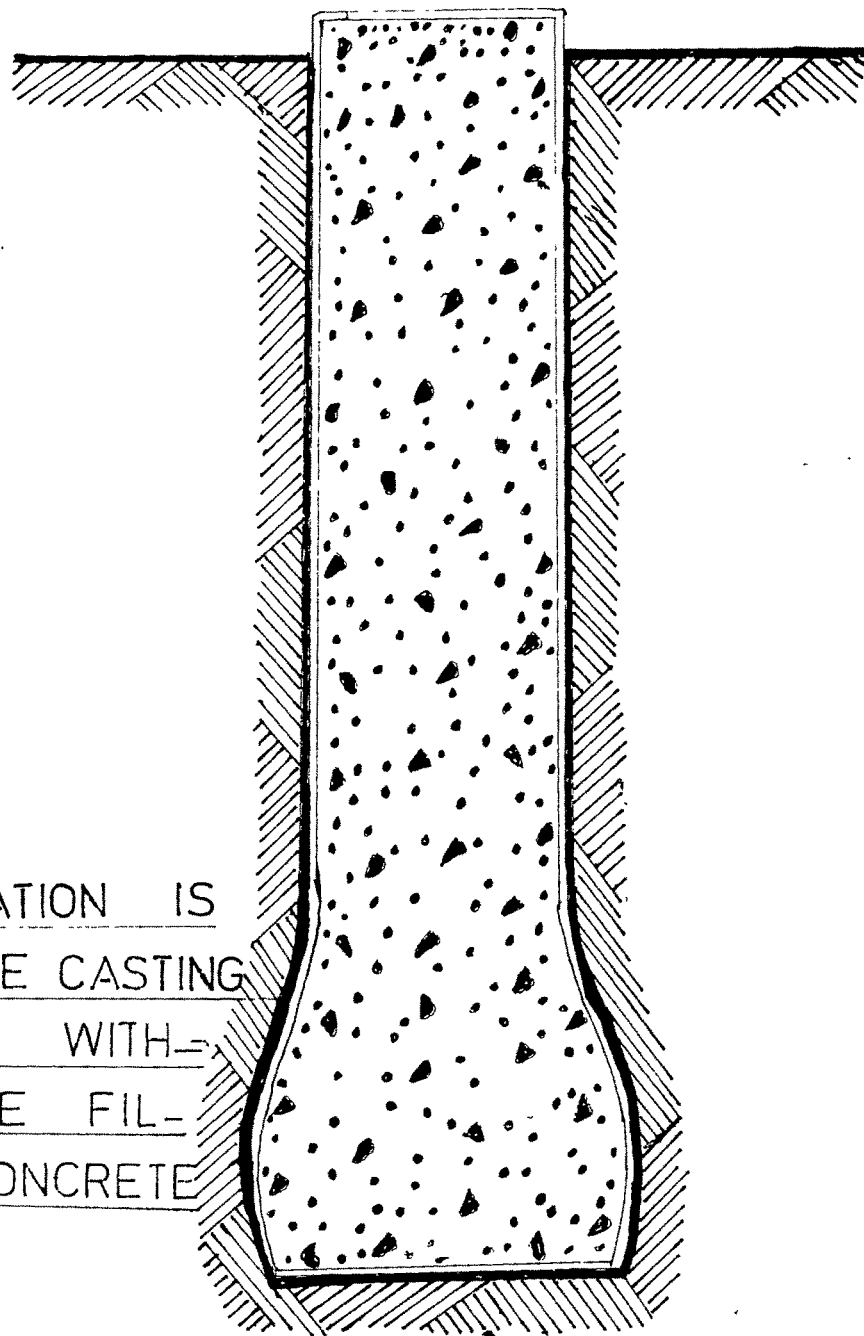
# BAR GRAPH

308





THE OPERATION IS  
REPEATED, THE CASTING  
IS GRADUALLY WITH-  
DRAWN, WHILE FIL-  
LING WITH CONCRETE



# AUDIO - VISUAL EDUCATION

**Module.1 : Introduction to Instructional Design**

310  
DISTRIBUTION OF MARKS

[illegible]

## 311

## 511 DISTRIBUTION OF MARKS

## Summary

## 312

UNIT 6			UNIT 7			UNIT 8			UNIT 9		
Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks
49	C	1½	55	K	1½	59	K	1½	68	C	1½
50	K	1½	56	K	1½	60	K	1½	69	K	1½
51	C	1½	57	C	1½	61	C	1½	70	K	1½
52	K	1½	58	K	1½	62	C	1½	71	K	1½
53	C	1½	96	K	1	63	C	1½	72	K	1½
54	K	1½	97	K	5	64	K	1½	73	K	1½
94	K	6	125	S	2½	65	K	1½	74	K	1½
95	K	4	125	H	5	66	C	1½	75	C	1½
124	H	4	126	S	2½	67	K	1½	99	K	2½
124	S	2	126	H	5	98	K	2	100	K	2½
						127	S	2	135	H	3
						128	S	2	135	S	1
						129	S	2			
						130	S	2			
						131	S	2			
						132	S	2			
						133	S	2			
						134	S	2½			
TOTAL		19			23			23			13

Summary              K ( Knowledge )                      79 ( 30 % )  
                              C ( Comprehension )                  25 ( 10 % )  
                              H ( Higher mental ability )            79 ( 30 % )  
                              S ( Skill )                                     79 ( 30 % )

Module II  
Non-projected visual aids.

## Allocation of marks

Exercise Number	Marks	Skill	H.M.A.	Marks
101, 0102	2	a. Alignment of letters b. Smoothness of ink	a. spacing b. application	2
Lettering		c. Taping (use of tape for sticking) d. General appearance.		
103, D 4 106, 107	2.	a. Neatness b. Colour c. General appearance d. Accuracy (including uniformity of lines)	a. appropriate choice (application) b. Layout, planning (application)	2
Graph				
105, 108, 109, 110, 111, 112, 114, 115, 116.	2½	a. Cleanliness b. Caption c. Uniformity of lines d. General appearance e. Colouring and shading	a. Appropriateness b. application b. Correct use of symbols c. Readability	2½
Charts				
117	2½	a. Visual attraction b. Cleanliness c. Caption d. Colouring e. General appearance	a. appropriateness(1) b. Planning & design c. Message	2½
118	2	a. Evenness of lines b. Closing points c. General appearance.	Method/accuracy of contents.	3
119.	2	a. Evenness of lines b. Cleanliness c. Closing points d. General appearance.		
120	2	a. Evenness of lines b. Cleanliness c. General appearance d. Colour.	a. Proportion b. Appropriateness	2
121	2	a. Evenness of lines b. Cleanliness c. Colour d. General appearance	a. Proportion b. Appropriateness c. Layout Planning	4½
122.	2	a. Evenness b. Cleanliness c. Straightness d. General appearance.	a. Choosing correct letter size b. Readability	2
123	2½	a. Title b. Sub-title c. Neatness d. Evenness e. General appearance	a. Content accuracy b. Emphasis c. Layout d. Readability e. Illustration	5

Exercise No.	Marks	Skill	H.M.A.	Marks
124	2	a. Display of pictures b. Visual attraction c. Neatness d. General appearance	a. Appropriateness b. Content accuracy c. Layout d. Relationship of picture	4
125	2½	a. Caption b. Illustration c. Neatness of cutouts d. Appeal e. General appearance.	a. Appropriateness b. Layout c. Content accuracy d. Simplicity e. Emphasis	5
126	2½	a. Caption b. Illustration c. Neatness d. Appeal e. General appearance.	a. Appropriateness b. Layout c. Content accuracy d. Simplicity e. Emphasis	5
127	2	a. Evenness b. Cleanliness c. General appearance d. Inclusion of all points.		
128	2	a. Evenness b. Cleanliness c. General appearance d. Inclusion of all points		
129	2	a. Evenness b. Cleanliness c. General appearance d. Inclusion of all points		
130	2	a. Evenness b. Cleanliness c. General emphasis d. Inclusion of all points		
131	2	a. Evenness b. Cleanliness c. General appearance d. Inclusion of all points		
132	2	a. Evenness b. Cleanliness c. General appearance d. Inclusion of all points		
133	2	a. Evenness b. Cleanliness c. General appearance d. Inclusion of all points		

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- |      |    |  |  |   |
|------|----|--|--|---|
| 134. | 2½ | <ul style="list-style-type: none"> <li>a. Quality of performances (Spacing, Size)</li> <li>b. Method of chalk dusting</li> <li>c. Impressions(Chalk dust)</li> <li>d. Finish (Completion)</li> <li>e. Neatness(Clarify)</li> </ul> |  |   |
| 135  | 2½ | <ul style="list-style-type: none"> <li>a. Letter shape</li> <li>b. Movement</li> </ul>   | <ul style="list-style-type: none"> <li>a. Accuracy</li> <li>b. Proportion</li> </ul>   | 3 |
| 136  | 2½ | <ul style="list-style-type: none"> <li>a. Neatness</li> <li>b. Illustration</li> <li>c. Appearance</li> <li>d. Uniformity in writing</li> <li>e. Colouring</li> </ul>  | <ul style="list-style-type: none"> <li>a. Planning &amp; Layout</li> <li>b. Legibility</li> <li>c. Accuracy</li> <li>d. Appropriation</li> <li>e. Selection of colour</li> </ul> | 5 |

- 3 -

[illegible]



Summary	K ( Knowledge )	73 <sup>1</sup> <sub>2</sub>	( 25% )
	C ( Comprehension )	88 <sup>1</sup> <sub>2</sub>	( 30% )
	H ( Higher mental abilities )	42 <sup>1</sup> <sub>2</sub>	( 15% )
	S ( Skill )	89	( 30% )
	T ( Total )	293 <sup>1</sup> <sub>2</sub>	

UNIT 1			UNIT 2			UNIT 3			UNIT 4			UNIT 5		
Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks
1	K	$\frac{1}{2}$	7	K	$\frac{1}{2}$	10	K	$\frac{1}{2}$	12	K	$\frac{1}{2}$	14		$\frac{1}{2}$
2	C	$\frac{1}{2}$	8	K	$\frac{1}{2}$	11	K	$\frac{1}{2}$	13	C	$\frac{1}{2}$	15		$\frac{1}{2}$
3	C	$\frac{1}{2}$	9	K	$\frac{1}{2}$	22	H	2	33	C	1	14		$\frac{1}{2}$
4	C	$\frac{1}{2}$	25	C	$1\frac{1}{2}$	30	K	2	34	K	2	21		$1\frac{1}{2}$
5	C	$\frac{1}{2}$	26	C	$2\frac{1}{2}$	31	K	2	34	H	$1\frac{1}{2}$	38	C	$2\frac{1}{2}$
6	C	$\frac{1}{2}$	27	C	6	32	C	6	37	C	5	44	S	$2\frac{1}{2}$
17	K	2	29	K	$1\frac{1}{2}$	36	C	20	43	S	5			
18	K	$1\frac{1}{2}$	35	C	$7\frac{1}{2}$	41	S	11						
19	K	$2\frac{1}{2}$	39	S	10	42	S	20						
20	H	3	40	S	$7\frac{1}{2}$									
23	C	$\frac{1}{2}$												
24	C	$\frac{1}{2}$												
28	K	$1\frac{1}{2}$												
TOTAL		$14\frac{1}{2}$			38			64			$15\frac{1}{2}$			8

Summary

K ( Knowledge )	$21\frac{1}{2}$ ( 15 % )
C ( Comprehension )	56 ( 40 % )
H ( Higher mental ability )	$6\frac{1}{2}$ ( 5 % )
S ( Skill )	56 ( 40 % )
T ( Total )	140

UNIT 1			UNIT 2			UNIT 3		
Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks
A <sub>1</sub>	K	$\frac{1}{2}$	A <sub>3</sub>	K	$\frac{1}{2}$	A <sub>10</sub>	H	$\frac{1}{2}$
A <sub>2</sub>	K	$\frac{1}{2}$	A <sub>4</sub>	K	$\frac{1}{2}$	A <sub>12</sub>	K	$\frac{1}{2}$
A <sub>11</sub>	H	$\frac{1}{2}$	A <sub>5</sub>	K	$\frac{1}{2}$	A <sub>13</sub>	H	$\frac{1}{2}$
B <sub>1</sub>	K	$1\frac{1}{2}$	A <sub>6</sub>	K	$\frac{1}{2}$	A <sub>14</sub>	K	$\frac{1}{2}$
B <sub>2</sub>	C	2	A <sub>7</sub>	K	$\frac{1}{2}$	A <sub>15</sub>	H	$\frac{1}{2}$
B <sub>3</sub>	K	$2\frac{1}{2}$	A <sub>8</sub>	K	$\frac{1}{2}$	A <sub>16</sub>	K	$\frac{1}{2}$
			A <sub>9</sub>	C	$\frac{1}{2}$	A <sub>17</sub>	K	$\frac{1}{2}$
			B <sub>4</sub>	K	$2\frac{1}{2}$	A <sub>18</sub>	C	$\frac{1}{2}$
			B <sub>6</sub>	K	2	B <sub>5</sub>	C	4
			B <sub>7</sub>	C	$1\frac{1}{2}$	B <sub>10</sub>	C	5
			B <sub>8</sub>	C	$\frac{1}{2}$	B <sub>17</sub>	C	1
			B <sub>9</sub>	C	1	B <sub>18</sub>	C	1
			B <sub>11</sub>	K	1	B <sub>19</sub>	K	$1\frac{1}{2}$
						B <sub>20</sub>	K	1
						B <sub>21</sub>	K	1
						B <sub>22</sub>	K	$\frac{1}{2}$
						B <sub>23</sub>	H	2
						B <sub>24</sub>	H	2
						B <sub>25</sub>	H	2
						C <sub>1/1</sub>	C	9
						C <sub>2/1</sub>	S	18
						C <sub>2/2</sub>	S	20
TOTAL		$7\frac{1}{2}$			12			72

UNIT 4			UNIT 5			UNIT 6		
On	Class	Marks	On	Class	Marks	On	Class	Marks
A19	K	$\frac{1}{2}$	A23	K	$\frac{1}{2}$	A21	K	$\frac{1}{2}$
A20	C	$\frac{1}{2}$	A24	K	$\frac{1}{2}$	A22	K	$\frac{1}{2}$
			C1/2	C	10	A25	H	$\frac{1}{2}$
						B12	C	$2\frac{1}{2}$
						B13	K	$1\frac{1}{2}$
						B14	C	1
						B15	K	1
						B16	C	1
						C1/4	C	12
						C1/3	C	7
						C2/3		14
						C2/4		24
TOTAL		1			11			$65\frac{1}{2}$

## Summary

K ( Knowledge )	:	$24\frac{1}{2}$ ( 15% )
C ( Comprehension )		60 ( 35% )
H ( Higher mental ability )		$8\frac{1}{2}$ ( 5% )
S ( Skill )		76 ( 45% )
T ( Total )		169

## COURSE TEST

321

MODULE 1			MODULE 2			MODULE 3			MODULE 4			MODULE 5		
Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks
1	C	1/2	22	C	1/2	42	C	1/2	95	K	1 1/2	51	K	1/2
2	K	1/2	23	H	1/2	43	K	1/2	96	K	1 1/2	60	K	1/2
3	K	1/2	24	C	1/2	44	C	1/2	110	C	1/2	97	K	1
4	K	1/2	25	C	1/2	45	C	1/2	111	C	5	98	K	1
5	H	1/2	26	C	1/2	46	K	1/2	112	C	10	99	K	1/2
6	K	1/2	27	C	1/2	47	C	1/2	115	C	2	100	K	1
7	K	1/2	28	H	1/2	48	K	1/2	116	C	2	109	K	1
8	H	1/2	29	C	1/2	49	C	1/2	127	C	2 1/2	117	H	1
9	H	1/2	30	C	1/2	50	C	1/2	128	S	2 1/2	118	H	1
10	H	1/2	31	C	1/2	52	H	1/2	129	S	7 1/2	119	H	1
11	H	1/2	32	K	1/2	53	H	1/2	134	C	7	120	C	4
12	K	1/2	33	K	1/2	54	H	1/2				130	C	7
13	C	1/2	34	C	1/2	55	H	1/2				131	S	14
14	C	1/2	35	C	1/2	56	H	1/2						
15	C	1/2	36	K	1/2	58	K	1/2						
16	C	1/2	37	C	1/2	59	K	1/2						
17	K	1/2	38	C	1/2	88	C	1/2						
18	C	1/2	39	H	1/2	89	C	1/2						
19	K	1/2	40	K	1/2	90	C	1/2						
20	H	1/2	41	C	1/2	91	K	1/2						
21	H	1/2	78	K	2 1/2	92	H	7						
57	H	1/2	79	K	2 1/2	101	K	1/2						
61	C	4	80	K	2 1/2	102	K	1/2						
62	H	1 1/2	81	K	2	103	K	1/2						
TOTAL		—			—			—			42			33

MODULE 1			MODULE 2			MODULE 3			MODULE 4			MODULE 5		
Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks	Qn	Class	Marks
63	K	8	82	K	2	104	K	$\frac{1}{2}$						
64	K	5	83	K	$1\frac{1}{2}$	105	K	$\frac{1}{2}$						
65	K	$2\frac{1}{2}$	84	K	$3\frac{1}{2}$	106	K	$\frac{1}{2}$						
66	C	$5\frac{1}{2}$	85	K	1	107	C	$\frac{1}{2}$						
67			86	K	1	113	C	10						
77	C	11	87	C	1	114	C	10						
			93	H	$5\frac{1}{2}$	123	C	$3\frac{1}{2}$						
			94	H	7	124	S	4						
			108	K	$\frac{1}{2}$	125	C	7						
			121	S H	4	126	S	10						
			122	S H	6	132	S	10						
						133	S	3						
TOTAL		$48\frac{1}{2}$			$52\frac{1}{2}$			78			42			33

## Summary

K ( Knowledge ) : 54 ( 21% )

C ( Comprehension ) : 108 ( 43% )

H ( Higher mental  
ability):  $35\frac{1}{2}$  ( 14 % )S ( Skill ) :  $56\frac{1}{2}$  ( 22% )

T ( TOTAL ) : 254