APPENDIX - 'E'

TERMINAL LEVEL TIME

TIME : 45 Minutes

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TO THE STUDENT

This evaluation test is dived into two sections. Section A contains 14 questions that require you to go to a specific laboratory seat. perform a task and then record an answer on the space provided in the answer sheet or respond to a multiple choice que-stion Be careful you mark the multiple choice response against the right question number on your answer sheet.

Section B contains _ _ _ _ _ _ _ _ 27 multiple type of question. If you skip a question to return later, remember to skip that question number on the answer sheet as well. All questions in both sections are numbered consecutively starting with 1 and continuing upto 41.

Do not write in this cyclostyled booklet

SAMPLE QUESTION — Sample Answer

32. Three plus two equals 32. A B C D

(A) Three

(B) Two

(C) Five

(D) Six

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PART - 'A'

1. Go to Seat 1 and examine the colour of the pigment on the whatmans filter paper The colour of the pigment is, tick the correct alternative.

(A) Yellow (B) Green (C) Red (D) Blue

2. Go to seat 2 and examine the odour of the gas provided in the gas jar. The ocour of the gas is, Tick the correct alternative.

(A) Rotten Eggs (B) Pungent (C) Burning Sulphur
(D) Odourless.

3. Go to seat 3 and examine the different pieces of matals marked I - IV. The piece of copper is Tick the correct alternative.

(A) I (B) III (C) IV (D) II

4. Go to seat 4, you are provided with specimens of Ferrous Ammonium Sulphate and Potash Alum marked I & II. Which one of them is bigger in size ? Tick the correct alternative.

(A) I (B) II

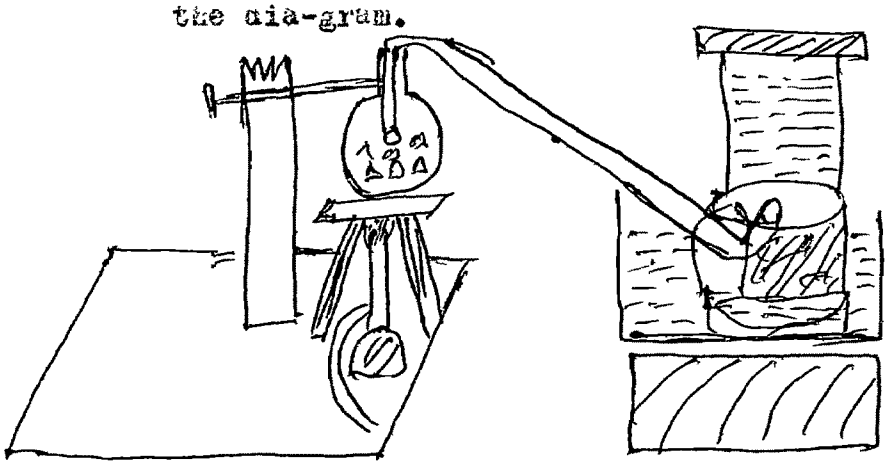
5. Go to seat 5 and you are provided with a filter paper on which there are two shapes of pigmnets deposited on it marked I & II. Which one of them is ring like ? Tick the correct alternative.

(A) I (B) II

6. Go to seat 6 and you are provided with two wooden pieces marked I & II. Which one of them has a rough texture? Thick the correct alternative.

(A) I (B) II

7. Go to seat 7 and assemble the apparatus as shown in the dia-gram.



All the equipment is provided at the table.
Dismantle the appartus before you leave the seat.

8. Go to seat 8 and insert the thermometer and a stirrer in a cork. Insert the cork along with the thermometer and stirrer in a test tube. Insert then the whole test tube in a bigger cork. Insert the cork with the test tube in a boiling tube.

9. Go to seat 9 and examine the four cylindrical glass tubes marked I - IV (closed at one end and having wide mouth at the other end) which one of them is a boiling tube? Tick the correct alternative.

(A) I (B) III (C) IV (D) II

10. Go to seat 10 and examine the two graduated burettes I & II containing colourless and coloured solutions. Note down the volumes in each case in the answer sheet against item No.10.

11. Go to seat 11 and you are provided with two test tubes having different solutions marked I & II. With the help of a P^H paper find which one is an acidic solution C. Tick the correct alternative.

(A) I (B) II

12. Go to seat 12 and determine the weight of the object provided. Record the weight in the answer sheet against item No.12.

13. Go the seat 13 and measure the length of the glass tube provided with the help of measuring scale also provided. Record the length of the glass tube in the answer sheet against item No.13

14. Go to seat 14 and pipette out 25.0 ml of ferrous Ammonium Sulphate Solution from the beaker in a conical flask & add 10.0 ml of dilute Sulphuric acid to it. Swiril the solution and titrate it against potassium Permanganate Solution till the colour of the solution changes to pink. The Volume of potassium permanganate used is. Tick the correct alternative

(a) 11.2ml (b) 10.9ml (c) 11.0 ml (d) 11.1ml

PART - B

15. The most suitable vessel for measuring 11 ml of liquid most accurately is. Tick the correct alternative.

(A) 25 ml graduated cylinder (B) 50 ml graduated burette (c) 25ml graduated beaker (D) 25 ml conical flask.

16. The most suitable solvent for the seperation of coloured pigments from the grass juice by chro-matography is. Tick the correct alternative.

(A) Kerosene Oil (B) Alcohol (C) Acetone
(D) Water.

17. The molarity of a dibasic acid solution is, Tick the correct alternative.

(a) Same as normality of a dibasic acid solution.
(b) is twice as normality of a dibasic acid solution
(c) is half as normality of a dibasic acid solution.
(d) None of the above.

18. The amount of pottassium permanganate to be required for the preparation of 250ml of N/10 solution is: Tick the correct alternative.
(The atomic wights are K = 39, Mn=55, O=16)

(A) 0.97 g (B) 0.79 g (C) 7.9 g (D) 31.6 g

19. The quality of chemicals to study the effect of concentration and temperature on the rate of reaction between Sodium thiosulphate and hydrochloric acid should be, Tick the correct alternative.

(A) Laboratory Quality. (B) Local pack quality
(C) Industrial quality. (D) Analar quality.

20. Saturation point in a Saturated solution of any substance is, Tick the correct alternative.

(A) When more substance can be dissolved at a particular temperature in a particular volume.

(B) When no more substance can be dissolved at a particular temperature.

(C) When no more substance can be dissolved in a particular volume.

(D) When no more substance can be dissolved at a particular temperature in a particular volume.

21. For preparing emlusions of different oils with water, the process of shaking should be, tick the correct alternative.

A) The test tubes should be shaken uniformly.

B) The test tubes should be shaken equal number of ~~items~~ times

C) The test tubes should be shaken uniformly and equal number of times.

D) None of the above.

22. The correct sequence of cleaning glass-ware in a laboratory is.

(I) Cleaning with hot water (II) Cleaning with Sodium carbonate and water (III) Cleaning with chromic acid and water (IV) Cleaning with cold water. Tick the correct alternative.

(A) I, II, III, IV. (B) I, III, IV,II,

(C) I, IV, II, III. (D) IV, I, II, III

23. Boiling point of a liquid is indicated by, tick the correct alternative.

(A) The temperature at which the maximum Vapour pressure of the liquid is equal to the external pressure.

(B) The temperature at which the liquid boils.

(C) The temperature at which the maximum vapour pressure of the liquid is equal to the external pressure and the liquid boils freely under that pressure.

(D) None of the above.

24. The melting point of a solid in a pure from is. Tick the correct alternative.

(A) Fixed (B) Varying (C) Average of different temperatures (D) None of the above.

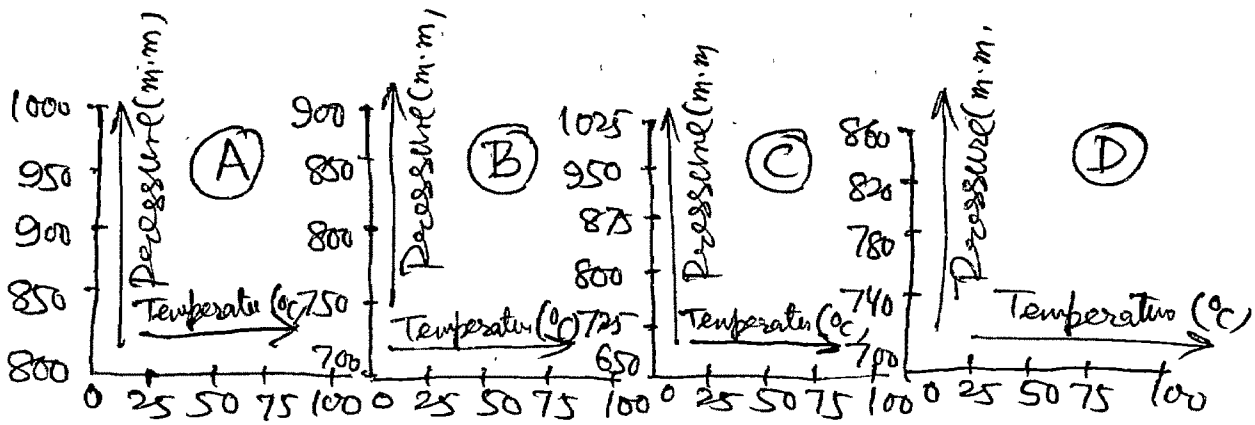
25. In the experiment 'Comparision of the precipitates & the coagulating power of the Aluminium, Barium and Sodium ions is in the order. Tick the correct alternative.

(A) $Na^{+} > Ba^{2+} > Al^{3+}$ (B) $Ba^{2+} > Na^{+} > Al^{3+}$
(C) $Na^{+} > Al^{3+} > Ba^{2+}$ (D) $Al^{3+} > Ba^{2+} > Na^{+}$

26. Below given are the values of temperature and pressure of a gas.

Temperature (C^{0})	0.0	25.0	50.0	75.0	100.0
Pressure (mm)	723	792	858	917	993

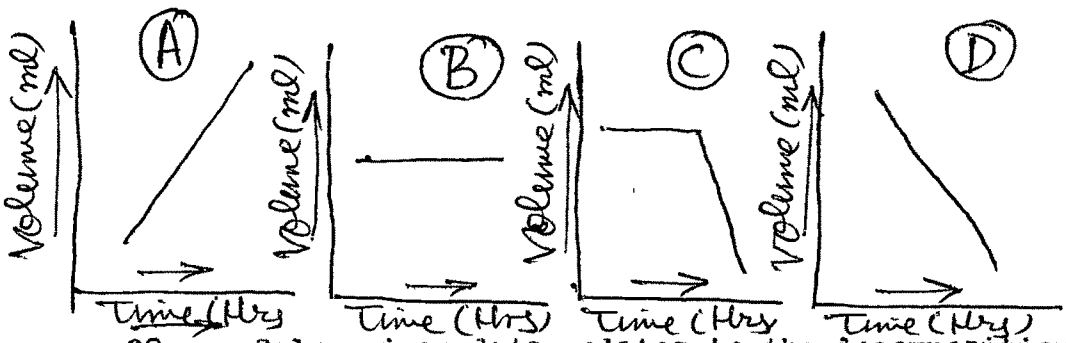
If you were to graph these data, which set of co-ordinate sclaes would you choose to obtain the most information from the graph.



Objective : Testing the [illegible] of plotting graph.

27. Below given is the data of a chemical substances undergoing a chemical change. Which graph given below represents the relationship between time & volume of that chemical change. Tick the correct alternative.

Time (Hours)	0	1	2	3
Volume (ml's)	49.3	35.6	25.75	18.50



28. Below given data relates to the decomposition of Nitrous Oxide.

Temperature	15	30	53	65	80	100
% decomposed	16.5	32	50	57	65	73

Tick the correct alternative about the interference of the above data.

(A) With the increase in temperature the percentage of decomposition decreases.

(B) With the increase the temperature the percentage of decomposition remains constant.

(C) With the increase in temperature the percentage decomposition first increases and then decreases.

(D) With the increase in temperature the percentage of decomposition increases.

29. Sodium extract for the analysis of anions is prepared a indicating the correct sequence. Tick the correct alternative.

(I) Take 1 gm of the salt mixture in a boiling tube.
(II) Stirr and boil the contents for 10 minutes.
(III) Mix about 2 grams of solid sodium carbonate and add 10.0 ml of distilled water to it.
(IV)

(A) I, II, III, IV (B) I, IV, III, II
(C) I, III, II, IV (C) I, II, IV, III.

30. The skill to prepare an original solution of a salt/ salt mixture is : Tick the correct alternative.

(A) Taking the right quantity of salt/salt mixture.
(B) The right solvent in appropriate quantity.
(C) The right temperature.
(D) All of them.

31. In the qualitative analysis of salt mixtures the cations of the IVth group are precipitated, Tick the correct alternative.

(A) Alkaline medium.
(B) Acidic Medium
(C) Neutral medium
(D) None of the above.

32. Liquid Ammonium Hydroxide is added in the fourth group detection of cations in order to, Tick the correct alternative.

(A) Decrease the rate of ionisation.
(B) Stabilise the rate of ionisation.
(C) Enhance the rate of ionisation.
(D) None of the above.

33. Acidify the solution containing Aluminium Cation with dilute hydrochloric acid. Add a drop or two of blue limus solution. To the resulting red solution now add diluted Ammonium hydroxide solution dropwise and shake gently. A crystaline precipitate is floating in the clear liquid having the colour.

Tick the correct alternative.

(A) Green (B) Yellow (C) Blue (D) Red.

34. In order to perform th confirmatory test of zinc, take a little of precipitate of zinc.dissolve the precipitate in dil. HCL and boil off H_2S gas. To this solution add NH_4OH solution till it is neutralized and then add to it $K_4(Fe(CN)_6)$ solution. A precipitate is formed having the colour. Tick the correct alternative.

(A) White (B) Red (C) Yellow (D) Blue.

35. Hydrogen sulphide gas is boiled off from the salt solution by constant heating and its removal is tested by. Tick the correct alternative.

(A) Lead Chloride paper (B) Lead Accetate Paper.
(C) Sodium Nitrate Paper (D) Lead Chromate Paper.

36. In order to remove acidity in a solution, we add different chemicals so that the PH of the solution is. Tick the correct alternative.

(A) Below 7 (B) Above 7 (C) 7 (D) 14.

37. In order to remove alkalnity in a solution we add different chemical so that the pH of the solution is. Tick the correct altnerative.

(A) Below 7 (B) Above 7 (C) 1 (D) 7.

38. Take about 5ml of $FeCl_3$ regant from the shelf and to it add dropwise dilute Ammonia Solution. Until a slim precipitate appears. Warm gently to make the solution clear. Add more of dilute Ammonia and Warm alternately a number of times. The solution acquires the following colour. Tick the correct alternative.

(A) Brown (B) Black (C) Dark Brown (D) Red.

39; While analysing a barium salt, flame test for it shows a colour with naked eye. Tick the correct alternative.

(A) Blue (B) Green (C) Bottle Green (D) White.

40. While analysing an Aresenic Salt, Charcoal Cavity test for it shows a coloured residue. Tick the correct alternative.

(A) Yellow (B) White (C) Red (D) Brown.

41. While analysing an iron salt, borax bead test for it shows the following colouration in a reducting flame. Tick the correct alternative.

(A) Green (B) Blue (C) Yellow (D) Bottle Green.