



## Appendix II

### Research Aptitude Test

1. People should not be praised for their virtue if they lack the energy to be wicked; in such cases, goodness is merely the effect of laziness. Which of the following sentences closely resemble in meaning with the above sentence?
  - a. Goodness shown by people is not really their intention to be good.
  - b. Good character shown by most of the people is actually their lack of courage to be wicked.
  - c. People who are lazy and coward appear to be good
  - d. People who appear to be good are actually wicked.
2. It is important to teach students to use computers effectively. Therefore, students should be taught computer programming in school. Which of the following statements if true most weakens the above argument.
  - a. Only people who use computers effectively are skilled at computer programming.
  - b. Only people skilled at computer programming use computers effectively.
  - c. Some people who use computers effectively cannot write computer programs.
  - d. Some schools teach computer programming more effective than others.
  - e. Most people who are able to program computers use computers effectively.
3. We lost confidence in him because he never \_\_\_\_\_ the grandiose promises he had made.
  - a. Forgot about;
  - b. Reneged on
  - c. Delivered on
  - d. Retreated from
4. The officers threatened to take \_\_\_\_\_ if the lives of their men were \_\_\_\_\_ by the conquered natives.
  - a. liberties ... irritated;
  - b. measures...enhanced;
  - c. pains ... destroyed;
  - d. reprisals...endangered;
  - e. affront ... enervated

### Reading Comprehension

Visual recognition involves storing and retrieving memories. Neural activity, triggered by the eye, forms an image in the brains memory system that constitutes an internal representation of the viewed object. When an object is encountered again, it is matched with its internal representation and thereby recognized. Controversy surrounds the question of whether recognition is a parallel, one-step process or a serial, step-by-step one. Psychologists of the Gestalt school maintain that objects are recognized as wholes in a parallel procedure; the internal representation is matched with the retinal image in a single operation. Other psychologists have proposed that internal representation features are matched serially with an object's features; although some experiments show that, as an object becomes familiar, its internal representation becomes more holistic and the recognition process correspondingly more parallel, the weight of evidence seems to support the serial hypothesis, at least for objects that are not notably simple and familiar.

5. According to the passage, Gestalt psychologists make which of the following suppositions about visual recognition?
  - a. A retinal image is exactly the same form as its internal representation.

- b. An object is recognized as a whole without any need for analysis into component parts.
- c. The matching of an object with its internal representation occurs in only one step.
- A) b only; B) c only; C) a and b only; D) b and c only; E) a, b, and c
6. It can be inferred from the passage that the matching process in visual recognition is
- not a neural activity
  - not possible when an object is viewed for the very first time
  - not possible if a feature of a familiar object is changed in some way
  - only possible when a retinal image is received in the brain as a unitary whole
  - now fully understood as a combination of the serial and parallel processes
7. In terms of its tone and form, the passage can best be characterized as
- a biased exposition
  - a speculative study
  - a dispassionate presentation
  - an indignant denial
  - a dogmatic explanation
8. A balanced diet should include fish and fowl as well as red meat. Which of the following words closely resemble the underlined word in the sentence
- fruit;
  - vegetables;
  - birds;
  - cheese and milk
9. Milk is purified by heating it at 60°C for thirty minutes. Which of the following words is exactly opposite of the underlined word in the sentence.
- cleansed;
  - mixed;
  - spoiled;
  - packaged
10. Identify the incorrect part in the following sentence.
- (i) When one experiences a change in diet by / for example, moving to a new location, / (ii)
- (iii) you may also experience / temporary problems with the digestive tract. (iv)
- i
  - ii
  - iii
  - iv
11. Identify the pair of words that exactly match the relation with the relation of the given pair of words.
- GOOSE: GANDER ::
- Duck: Drake;
  - Hen:Chicken;
  - Sheep: Flock;
  - Dog:Kennel;
  - Horse: Bridle
12. **Garba** is to Gujarat and **Bihu** is to
- Nagaland
  - Manipur
  - Assam
  - Andhra Pradesh
13. Arrange the following sentences in correct order
- Searching for possible solutions
  - Identifying the relevant solution

3. Knowledge of extent of solving the problem
4. Survey of sources of information
5. Identification of problem
6. Implementing the solution
7. Identifying the relevant sources of information

a. 4521736    b. 5471623    c. 5124367    d. 5471263

14. Which of the following is the first step in starting the research process
  - a. searching sources of information to locate problem
  - b. survey of related literature
  - c. identification of problem
  - d. searching for solutions to the problems
15. A teacher has identified that his students are facing difficulties in solving mathematics problems. In order to solve this problem, the teacher first has to –
  - a. consult other teachers in order to find solutions
  - b. decide on a program and implement it on his own
  - c. identify the difficulties related to solving mathematics in specific terms and design a program
  - d. survey literature to identify the solution to the problem
16. Government has identified the following problems hindering the process of using computers by teacher in the learning process from a survey of different schools.
  1. Lack of infrastructural facilities
  2. Teachers refusing to take up the task
  3. No training given to teachers
  4. Principal not supporting the task

Which of the problems first need to be tackled in order to improve the situation?

a. only 3    b. both 2&3    c. only 4    d. only 2

17. Inductive reasoning is - coming to conclusion by considering examples first. Which of the following is the example of inductive reasoning?
 

<ol style="list-style-type: none"> <li>1. All men are mortal</li> <li>Rama is a man</li> <li>So, Rama is mortal</li> </ol>	<ol style="list-style-type: none"> <li>2. Shyam is intelligent</li> <li>Shyam is born to intelligent parents</li> <li>Therefore, all those born to intelligent Parents are intelligent</li> </ol>
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a) Only 1    b) only 2    c) both 1 & 2    d) none of the two

18. A researcher wants to take up study on problems of management of medical colleges run through self financing mode. In his quest to strengthen his reasons for taking up the study he has stated that he found no study has been conducted on management problems of medical institutions so far, so he was interested in taking up the study. Which of the following statements would weaken his statement if found true.
  1. There are many researches conducted on teaching and learning problems of medical institutions.
  2. Researches on management of medical colleges run by grant-in-aid also revealed of some improvements in the process
  3. Several researches were undertaken on management of Engineering colleges run through self-financing mode.
  4. There are many comparative studies conducted on problems of management of self-financing and Grant-in-Aid Technical Institutions.

- a. 1&3                      b. 1&2                      c. 3&4                      d. 2&3

19. A researcher wanted to take up a case study of a Science Center. He is interested in studying the way the Science Center is promoting Science learning. He wanted to take help from researches conducted in the same area, in order to design the study to collect data. Which type of the relevant sources of research studies from the following will help him in proper designing of his study?

1. Researches conducted on Science Centers from different parts of the country.
2. Case studies conducted on any aspect of education.
3. Researches conducted on learning science through exposure to Zoo, Gardens, Science Clubs and Museums.
4. Various researches conducted on teaching of any subject in schools, colleges and teacher training institutes

- A. 1 & 3                      B. 1 & 2                      C. 2 & 4                      D. all of the above

20. Research is –

1. Searching again and again
2. Finding solution to any problem
3. Working in a scientific way to search for solution of any problem
4. Conducting experiments

- a. 1, 2 & 3                      b. 1&2                      c. Only 3                      d. 1, 2 & 4

21. Below are given two statements. Identify their relation.

**Argument:** Man is Rational

**Reason:** Man is Social

- a. Both statements are true and Statement II is a true explanation of Statement I
- b. Statement I and II are true, but one is not the explanation of other
- c. Both statements are true. But Statement II is not a proper explanation of Statement I
- d. None of the above

22. A person, who is interested to conduct a study on status of Environment Education in schools, went to library to search literature in order to get an overview of the problem. There he found a study which is similar to his line of thinking, but conducted ten years back. Now he is in a dilemma whether to proceed with the same study or not. Which of the following statements can give support to him for conducting study?

- a. He cannot continue his study as it is already worked out
- b. He can continue with the study, as it will reveal the status after ten years of previous study.
- c. He can continue his study if the previous researcher given him permission to do so
- d. None of the above

23. A researcher wants to conduct a study on selected psychological parameters on school students. In the process of preparation of his tools, he came across a tool that is matching with his own study. But the tool is prepared forty years back in a foreign context. What is the proper option for the researcher?

- a. He can adopt the same tool as it is prepared according to his objectives

- b. He cannot use the tool as it is prepared long back for a different context
  - c. He can bring in necessary changes in the tool and can implement it
  - d. Before implementing the tool he has to obtain the permission
24. While defending his research in the open seminar, a researcher is helped out by his colleagues in presenting answers/ideas on the ground that the researcher has no command over English language. Some of the participants objected to this. Which of the following statements support the stand of participants?
- a. Researcher can explain in regional language at some places
  - b. Developing language command is necessary for researcher, as facing defense is a part of research
  - c. At times of difficulty participants can help the researcher
  - d. It is an unethical process to take help of others in defense
25. A researcher was not able to come to the conclusion on the problem he has decided to work upon. After six months his research guide advised him to concentrate on other topic and suggested the way to proceed with working on the problem. The act of research guide is –
- a. Not acceptable.
  - b. Proper
  - c. Correct
  - d. Unethical
26. A researcher wanted to find problems related to implementation of Sarva Siksha Abhiyan Program in the state of Andhra Pradesh. Which of the following is the best way of conducting the study?
- a. He can identify one village and study the problems in detail
  - b. He can conduct a survey of entire state
  - c. He can identify areas where problems are reported and conduct a survey
  - d. None of the above
27. A research study is focusing on conducting remedial program to improve academic achievement of students. The study is planned as – identifying the problems related to achievements, designing remedial program according to identified problems, implementing the program and analyzing the results. Which of the following titles better suits the study?
- a. A study on remedial programs to improve academic achievement
  - b. A study on effectiveness of Remedial Program on academic achievement of school students
  - c. Developing, implementing a Remedial Program for Secondary level students to enhance their academic achievement
  - d. Effectiveness of a Remedial Program on academic achievement of Secondary level students
28. A doctor working in a village hospital found that people are suffering with problems related to knee joints. Neck region of the person is also swollen. However the problem is not seen in new born babies and young children, but in adults around 25 year's and above age. Basing on the description identify the possible reasons for occurrence of disease in the village?
- a. The disease is occurring because of genetic problems
  - b. The disease cause may be related to faulty habits of living
  - c. The disease cause may be lying in the environment of the village
  - d. The reason cannot be identified with the given description

29. The findings of a study on achievement of students, using an innovative teaching method revealed only an average increase of 2 marks. By what ways this increase can be stated as authentic and is due to effectiveness of used strategy?
- Again conducting the study and assessing the average increase
  - By assessing the test results of each and every student again
  - By using a statistical technique that can prove the authenticity of increase in marks
  - Revising the teaching strategy
30. Identify the chronological sequence of the following studies?
- A survey conducted on implementation aspects of DPEP
  - An evaluative study on achievements of SUPW Program
  - A report on achievements of Sarva Shiksha Abhiyan after five years of implementation
  - A Ph.D. work finished during the year 2006
- a. 1342                      b. 2143                      c. 4312                      d. 1432
31. You are working seriously on PC to finish of the assigned work on time, suddenly light went off. What is your immediate reaction?
- You look for candles or other artificial light for help
  - You immediately call electricity office to enquire about the situation
  - You continue your work as UPS is providing help
  - You maintain your coolness to continue with your work
32. On his way back from office to home, Samir found that his mobile is not with him. He is not sure where he left it, in the office or at home. In order to find the status of the mobile what could be the immediate action?
- He can ask one of his colleagues to help by calling his mobile from their mobile
  - He can take the help of his family members to locate the phone in the house
  - He can search his briefcase once again
  - He can go back to office to search for the mobile
33. Entering into his office cabin, Anand found that something is messy with the organization of things there. Papers on the table are scattered and water is splashed on the papers and water-jug is lying on floor. He generally keeps his office window open for ventilation. What could be the better guess for this situation?
- Some person might have entered the room in his absence
  - One of his colleague who is jealous might have done this
  - A monkey or bird might have come in through the open window
  - Air coming in through the open window might be the cause
34. A mother found that her daughter's eyes caught infection. Her eyes became red with itching sensation. However, the problem is severe at home and considerably reduces when the girl goes to school. What could be the possible remedy for this solution?
- By using protective eye glasses the infection can be reduced
  - Using the drugs prescribed by eye doctor
  - By reducing the intensity of allergic substance causing severe infection at home
  - By not sending her school for one week