

Answer Key & Solution

1. Ans. C

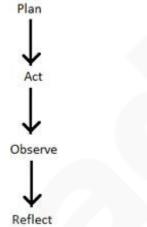
The principal of a school conducts an interview session of teachers and students with a view to explore the possibility of their enhanced anticipation in school programmes.

This endeavour is related to Action Research. Action research is an inquiry or research which is related with the focused efforts to improve or enhance the quality and the performance of a particular organization.

2. Ans. B

Action research strategy is a strategy to solve an immediate problem through the various steps. The cyclical process of research has the following sequence: Plan, Act, Observe, Reflect

(To remember, Use the acronym ${\bf PAOR})$



3. Ans. C

The correct sequence of research steps is as follows:

- a) Formulation of Problem
- b) Making of Hypothesis
- c) Development of a research design,
- d) Collection of data,
- e) Data analysis
- f) Formulation of generalizations and conclusions.

4. Ans. B

- Historical approach of any subject signifies an effort to recount some aspect of past life. It uses primary and secondary sources to collect the data.
- In descriptive survey method research, participants answer questions administered through interviews or questionnaires.

- Ex post facto research is a category of research design in which the investigation starts after the fact has occurred without interference from the researcher. It collects the data from the typical tests.
- The experimental method is a systematic and scientific approach to research in which the researcher manipulates and controls variables. It collects data through standardized test where test is already prescribed.

5. Ans. C

Research Ethics is the analysis of the ethical issues which are reported by the people or researchers involved in that research of the particular topic. The stage of data collection and interpretation can be considered as pertinent in the issue of research ethics.

6. Ans. A

Among the following options, doctoral level thesis has a prescribed format. One of the formats could be:

- i. Introduction
- ii. Literature Review
- iii. Objectives
- iv. Data Collection and Analysis
- v. Findings and Conclusions
- vi. References.

Rest of the options do not have a prescribed format.

7. Ans. B

According to the first few lines of the passage, "The last great war, which nearly shook the foundations of the modern world, had little impact on Indian literature beyond **aggravating the popular revulsion against violence** and adding to the growing disillusionment with the 'humane pretensions' of the Western World." This means that the last great war heightened the disgust against violence. Thus, option B is the correct answer.

8. Ans. B

The last great war had added "to the growing disillusionment with the 'humane pretensions' of the Western World." And this "was eloquently voiced in Tagore's later poems and his last testament, Crisis in Civilisation".



Hence, Tagore, in his last testament, articulated that the **'humane pretensions' of the Western World** had been exposed. Option B is the correct answer.

9. Ans. D

According to the passage during the period of great war, the human intelligentsia, "could not help sympathising with **England's dogged courage in the hour of peril"**. This means that they expressed sympathy towards England's courage during tough times. Thus, option D is the correct answer.

10. Ans. C

According to the given passage, "No doubt it (creative energy in Indian Literature) did, but unfortunately it was soon submerged in the **great agony of partition**, with its inhuman slaughter of the innocents..." Thus, the great agony of partition was responsible for the submergence of creative energy in Indian literature.

11. Ans. D

According to the latter half of the passage, "What reserves of enthusiasm and confidence survived these disasters (partition) have been mainly absorbed in the task of **national reconstruction** and economic development." Thus, option D is the correct answer.

12. Ans. B

The given passages discusses how bad times give birth to intense literatures. As also stated in the second last line of the passage, "Great literature has always emerged out of chains of convulsions". This is the message conveyed by the passage.

13. Ans. D

Effective communication pre-supposes understanding. The understanding of the subject and concept will help the students to understand better and assist the teacher to function the class smoothly. So, option D is correct.

14. Ans. C

When verbal and non-verbal messages are contradictory, it is said that most people believe in the non-verbal messages. The non-verbal messages include actions, gestures and movement of hands, face expression etc.

15. Ans. C

- <u>Sedentary</u> tends to spend much of the time seated; somewhat inactive.
- <u>Staggered</u> means things happen at different times or so that things are not positioned in a regular way, o walk or move awkwardly.
- <u>Factual</u> means using or consisting of facts, concerned with what is actually the case.
- <u>Sectoral</u> means relating to the particular area/topic.

So, the typical feature of an information-rich classroom lecture should be factual.

16. Ans. B

Expressive communication is driven by the encoder's personality characteristics. These characteristics help the other person to understand things in a much better way. As the communication is governed by the encoder, medium and decoder. So, if the encoder delivers well, decoding can be efficient too.

17. Ans. D

- <u>Coercion</u> refers to the action or practice of persuading someone to do something by using force or threats.
- <u>Submission</u> is a state of mind in which people cannot no longer do what they want to do because they have been influenced by someone else.
- <u>Confrontation</u> is a situation in which people or groups with opposing ideas or opinions disagree angrily:
- <u>Persuasion</u> is the act to influence someone to do something or to change their mind.

Therefore, positive classroom communication leads to persuasion.

18. Ans. A

Classroom communication is the basis of social identity. Social identity is the portion of an one's worn self-concept derived or received from the peer group in a relevant social group.

19. Ans. C

There are two series:

1st series: 1, 27, 125, 343

 $(1^3, 3^3, 5^3, 7^3)$

2nd series: 4, 16, 36

 $(2^2, 4^2, 6^2)$

So, 125 is the missing option.



20. Ans. B

$$Y + 2 = W$$

 $E + 1 = F$
 $B + 2 = D$
 $W + 2 = U$
 $F + 2 = H$
 $D + 3 = G$
 $U + 2 = S$
 $H + 3 = K$
 $G + 2 = I$
 $S + 2 = Q$
 $K + 4 = O$
 $I + 3 = L$

So, QOL is the next term in the series. 21. Ans. D

So, option D is correct.

22. Ans. D

Weight of students in a class is a continuous type of data. The measurements are continuous in nature. 23. Ans. D

- 1 Glass + 1 Pencil box + 1 Cup = 21 ---- (1)
- 1 Glass + 2 Pencil box + 1 Cup = 28 ----- (2)
- 2 Glass + 2 Pencil box + 1 Cup = 35 ---- (3)

1 Glass = Rs. 35 -28 = Rs. 7
Taking 1 and 2,
1 Glass + 1 Pencil box + 1 Cup = 21--- (1)
1 Glass + 2 Pencil box + 1 Cup = 28--- (2)

1 Pencil box = Rs. 28 - 21 = Rs. 7

Taking 1, 1 Glass (Rs. 7) + 1 Pencil box (Rs. 7) + 1 Cup = 21 - - - (4)

So, 1 Cup = Rs. 7
The cost of 10 cups will be 7 * 10
= Rs. 70/24. Ans. A
Except Lucknow, all the other places are near to Ganga.

25. Ans. A

In deductive reasoning, the conclusion is supported by the premises and must follow the premises is true. it is not based on observations and experiments. The argument may be valid or invalid is also true. Therefore, option A is correct.

26. Ans. C

If two standard form categorical propositions with the same subject and predicate are related in such a manner that if one is undetermined the other must be undetermined, then this phenomenon is called as contradictory.

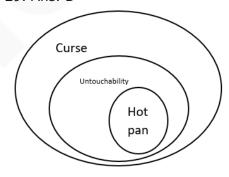
27. Ans. C

Here, man and woman reproductive strategies has been compared to bird's wings and fish's fins. Therefore, the argument is analogical in nature.

28. Ans. B

A (All) and E (No) propositions are **contrary**. They both cannot be true, but both can be false. Therefore, A proposition- Every student is attentive and E proposition- Students are never attentive are correct options.

29. Ans. D



From the above diagram, it can be concluded that (i) all hot pans are curse, (ii) some untouchables are hot pans and (iv) Some curses are untouchability.

Therefore, option D is correct.

30. Ans. B

If None but the brave wins the race' is false, it means brave do not win the race. According to AIEO Rule, the true statement must be a statement of Somenot (O statement). Therefore, option B is correct.

31. Ans. A

Total Revenue in year 2015: (44+51+78) = Rs. 173 lakhs

Revenue came from Books: Rs. 78 lakhs Required Percent = (78/173) * 100 = 45%



32. Ans. C

Let us look at the data of year **2013** and compare with the previous year 2012:

There is an increase in all three categories; Journals (from 46 to 47 lakh), Magazines (from 31 to 39 lakh) and Books (73 to 77 lakh).

Now, let us look at the data of year **2014** and compare with the previous year 2013:

There is an increase in two categories: Magazines (39 to 46 lakh) and Books (77 to 78 lakh)

In the year **2015**, there is increase only in one category i.e. Magazines from 46 to 51 lakh.

So, in years, 2013 and 2014 only is the increase in revenue from at least two categories of items.

33. Ans. D

Total revenue in the year 2014 = (45+46+78) = Rs. 169 lakhs

Total revenue in the year 2015 = (44+51+78) = Rs. 173 lakhs

Growth in the year 2015 compared to 2014 = (173 - 169) = 4 lakhs

Given that the year 2016 were to show the same growth then, total revenue in the year 2016 shall be: (173 + 4) = Rs. 177 lakhs.

34. Ans. A

Given that, 40% are females, then total students are: 32/40*100 = 80

Total no of males = 80-32 = 48

1/3 of the males given are average = 1/3 * 48 = 16

Also, Average + Good + Excellent (Males) = 48

Then, Good (Males) = 48 - (16+10)Good (Males) = 22

It is also given in the problem, that half the students were either excellent or good, it means the other half are average:

So, Average (Males + Females) = 80/2 = 40

Average Males + Average Females = 40 16 + Average Females = 40

So, Average Females = 40-16 = 24

In Total, Average + Good + Excellent (Males + Females) = 80

40 + 30 + Excellent (Males + Females) = 80

Excellent (Males + Females) = 80-70 = 10

Excellent Males + Excellent Females = 10 Given that Excellent Males = 10 So, 10 + Excellent Females = 10 Therefore, Excellent Females = 0

35. Ans. B

From the table in the solution above, we have:

Total female students = 32

Good females' students = 8

Required proportion = 8/32 = 0.25

36. Ans. B

Total good students = 30

Male good students = 22

Required proportion = 22/30 = 0.73

37. Ans. B

The decimal number 11 is larger than the hexadecimal number 11 is not true as both are same in the induvial systems.

S2: 1110.101 has fractional part i.e. 1 * $2^{-1} + 0 * 2^{-2} + 1 * 2^{-3} = \frac{1}{2} + 0 + \frac{1}{8} = \frac{5}{8}$ or 0.625.

So, only Statement 2 is true.

38. Ans. B

Information and Communication Technology is not considered as a subset of Information Technology. The 'right to use' a piece of software is not termed as copyright.

So, both the statements are not correct. 39. Ans. C

CPU Registers > Cache Memory > Main Memory (RAM) > Secondary Storage, is the correct order for computer memory types from highest to lowest speed.

40. Ans. B

Web2.0, a second stage of development of the Internet has different applications are focused that has the ability to collaborate and share information online for people.

41. Ans. C

With regard to a word processing software, the process of combining static information in a publication together with variable information in a data source to create one merged publication is called mail merge.

42. Ans. C

DVD technology uses an optical media to store the digital data. DVD stands for Digital Versatile Disc.

43. Ans. B

Sustainable development is critical to well-being of human society is definitely true, as any development brings some change to the well-being of humans.



Environmentally sound policies do not harm the environment or deplete the natural resources is also true, as these policies will save the environment.

Both (A) and (R) are correct, but (R) is not the correct explanation of (A).

44. Ans. A

The dominant source of pollution due to oxides of nitrogen (NOX) in urban areas is road transport.

45. Ans. D

Dengue is not a water borne disease.

46. Ans. B

Indian government's target for power production from small hydro projects by the year 2022 is 5 Giga-Watt.

47. Ans. A

The recent international agreement on phasing out Hydro Fluoro Carbons (HFCs) was signed in Rwanda.

48. Ans. D

Tsunami, a natural hazard is not hydrometeorological.

49. Ans. C

Demerits of globalization of higher education are as follows:

- Promotion of elitism in higher education
- Commodification of higher education (It has become as saleable commodity)
- Increase in the cost of education (not affordable by everyone to study abroad)

50. Ans. B

Some facts about deemed universities are:

- 1. They can design or have the authority to design their own syllabus and course work.
- 2. They can frame their own guidelines regarding the admission procedure and fees of the course.
- 3. They have the right to grant or award the degrees.

51. Ans. C

The purpose of value education is best served by focusing upon the concern for human values and these values can be achieved by following the various aims of education:

- a) to make individual to give moral value to each other.
- b) to prepare individuals for future challenges and to fulfil personal goals and achievements.

c) to prepare responsible youth for the society, nation and for the world.

52. Ans. B

Some true facts about the Rajya Sabha are:

- 1. Rajya Sabha does not represent the local interests of the States.
- 2. Members of the Rajya Sabha are not bound to vote at the dictates of the states they represent.
- 3. Union territory has a representative in the Rajya Sabha.

So, only option B is correct.

53. Ans. A

As and when the state is in under the President's Rule, the below listed consequences are not likely to happen:

- 1. The dissolution of the State Assembly.
- 2. Appointment of a new Chief Secretary. 54. Ans. B

Instead of holding the office during the pleasure of the President, Judges of the High Court hold office during good behaviour. So, option B is correct.

55. Ans. B

Teaching is a series of principles and methods through which a teacher tries to bring modification in students behavior.so, according to the question various are the efforts of a teacher:

- a) When students fail in a test it is the teacher who fails means it is the failure of a teacher's effort if he is unable to bring the improvement in students learning.
- b) every teaching must ensure at learning means the aim and objective of teaching is to modify the student's behaviour and ensures learning.
- c) There can be teaching without learning taking place states that if teacher put all his/her efforts in teaching process even if a student doesn't want to learn then no teaching can make him learn but teaching is in the process.
- d) During the process of teaching and learning it is not the students who is learning but it is the teacher also who learns a number of things like handling different types of student's behaviour, discovering new ways for making teaching more effective etc.

56. Ans. A

Learning is the acquisition of knowledge, and modification of behaviour. According to question both statements are correct because learning is the life long process because whole learning cannot be



acquired within certain or specified time but it is acquired by the individual throughout whole life by interacting with different environment and needs. Learning is useful if an individual links it with their life experiences and tries to avoid mistakes by learning from his/her mistakes.

57. Ans. C

Effectiveness of teaching and learning can be judged by the learning outcomes of students. And the learning outcomes of the students can be assessed by the process of evaluation or assessment.

58. Ans. D

Project method is a learning method where the participation of student is maximum in comparison to teacher and the students here is an active learner. Student here find the solution by themselves of assigned projects. Students learns how to solve real life problems with co-operation of each other. 59. Ans. D

Teaching effectiveness can be affected by the education system of the country. Education system of the country is divided into three main categories i.e. primary, secondary and tertiary. Primary education covers the elementary prospects of the education system, secondary covers 10th and 12th level while tertiary level of the education covers graduate, post graduate and doctorate level courses. If all the three levels of education functions well then only education system should be improved in our country.

60. Ans. C

Formative assessment accelerates the pace of learning because instant feedback is provided to the learner in turn of their performance. In this assessment learner makes changes in his behaviour and learning within the time. This assessment occurs over a short period of time. But summative evaluation considered to be most reliable because through this assessment the whole performance of the student can be judged. And the results are used by the teacher and school to identify strength and weakness of the curriculum as well as of students.