

Answer Key & Solution

1. Ans. C.

Greater the handicap of the students coming to the educational institutions, greater the demand on the teacher. A teacher is the one who will understand the problems of the students and as the number of students increases in the educational institution, the demand of teacher also increases.

2. Ans. D.

Continuous and Comprehensive Evaluation (CCE) aims to lower the workload on the students. This method includes continuous evaluation by taking number of small tests throughout the year in place of single test, which was conducted at the end of the academic session. In this, only grades are provided to the students. This helps the students who are not good in the academics to showcase their talent in other activities and also helps to motivate the students and reduce the examination fear.

So, the option (a) doesn't follow.

Option (b), (c), (d) includes CCE.

3. Ans. B.

Teaching is that guiding force that motivate the students to achieve their dreams. Good strength of the teacher includes quoting good examples, willingness to put assumptions to the test and acknowledging mistakes denote of the students that will help in their great overall development and strength.

4. Ans. A.

Firstly, multiple choice questions don't include subjective questions. So, option (c) and (d) doesn't follow. Also, the essay type questions are too lengthy to become multiple choice questions. So, option (b) is also eliminated. Now, it is clear that the multiple – choice type questions will have more objective than true false type questions. So, option (a) follows.

5. Ans. C.

Jacques Delors is the Chairman of the International Commission on Education. The report which was submitted to UNESCO was titled as "Learning: The Treasure Within". In this report, Jacques Delors proposes that the society should aim to move towards the situation where the talent of the people should not go untapped.

6. Ans. A.

For good teaching, diagnosis/inspection is required to understand the nature of the students, remedy is required for dealing with the problem or any difficulty faced by the candidates, proper direction or guidance is also needed for their future decisions and the most important is feedback so that it can be used as a basis for improvement.

7. Ans. D.

Participatory research is an approach to research in different communities that emphasizes participation and action. This research recognize knowledge as power, it also emphasis on people and consider them as experts. This research is a collective process of enquiry.

So, production of knowledge is not the correct aspect of participatory research.

8. Ans. B.

The Hypothesis is a mere assumption that needs to be proven. This assumption is set before the research in the form of propositions that need to investigated and may or may not be fully accepted after the analysis of the research. Only the null hypothesis is tested in the context of testing of a hypothesis. The null hypothesis is a hypothesis in which the researcher tries to reject or nullify the hypothesis. So, option (b) is correct.

9. Ans. B.

APA (American Psychological Association) style of referencing format includes the inverting authors' names (last name first), to italicize the titles of longer works as books and journals and alphabetically index reference list. In APA style of referencing format, we never italicize the titles of essay part. So, part (a) is wrong. That's why option (B) is correct.

10. Ans. D.

Seminar never includes large group of individuals. It can be a part of academic instructions, questioning or debates. It also involves skilled persons. So (a), (b) and (d) is correct.

11. Ans. C.

A researcher is interested in studying the prospects of a particular political party in an urban area. Then he should prefer a questionnaire for the study. A

questionnaire is a group of printed or written questions with the different choice of answers, devised with the motive for a survey or statistical study. So, the researcher will give multiple choice questions to the people for studying the prospects of a political party in a particular area.

12. Ans. A.

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. Ethical norms in research do **not** include guidelines for thesis format.

13. Ans. A.

When confronted with signing a big card, the author felt like "a rabbit in the headlight". It was the state of confusion and we can clearly get that after reading the second sentence of the paragraph.

14. Ans. D.

According to author, reading is not the most creative outlet of pursuit as mentioned in the last line of the paragraph.

(Reference line: "Handwriting is one of the most creative outlets we have and should be given the same importance as other art forms such as sketching, painting or photography.")

15. Ans. B.

The entire existences of author revolve around mobile phone, laptop, computer but not typewriter. So, option (B) is correct.

(Reference line: My entire existence is "tap letters into computer". My shopping lists are hidden in the notes function of my phone. If I need to remember something I send an e-mail to myself. A pen is something I chew when I'm struggling to think. Paper is something I pile beneath my laptop to make it a more comfortable height for me to type on.)

16. Ans. D.

100 teens, as per the Bic survey, do not own a pen.

(Reference line: A poll of 1,000 teens by the stationers, Bic found that one in 10 don't own a pen, a third have never written a letter, and half of 13 to 19 years - old have never been forced to sit down and write a thank you letter.)

17. Ans. D.

According to author, the teens keep busy in their Facebook, emails mobile phones, laptops. Due to which they have forgotten the paper work or their art of handwriting.

(Reference line: Bic, have you heard of mobile phones? Have you heard of e-mail, Facebook and snap chatting? This is the future. Pens are dead. Paper is dead. Paper is dead. Handwriting is a relic.)

18. Ans. B.

The main objective of evaluation of teachers by student includes with helping the teachers to adopt the innovative method of teaching, also assist the teacher in identifying their area of improvement. The student can evaluate the teacher on their teaching skills. But to gather information about student weaknesses cannot be the objective. So, option (a) is not at all. Other 3 options can be there.

19. Ans. D.

The central point of the classroom communication as a beginning of dynamic pattern is mind mapping. It captures information and ideas, helping us to improve our brainstorming sessions and become more organized and productive.

20. Ans. C.

Aspects of the voice, other than the speech are known as Paralanguage. Paralanguage is a component of communication in which the user may change meaning, or convey emotion, such as prosody, pitch, volume, intonation etc. In this, the voice must have some properties like change in pitch, speaking behaviours or change in gestures.

21. Ans. D.

Every type of communication is affected by its context. Contexts can be similar, which sometimes might be confusing or overlapping. Communication will not be affected by reception or transmission.

22. Ans. B.

Attitudes, actions and appearances in the context of classroom communication are considered as non-verbal communication. *Nonverbal communication* denotes our facial expressions, gestures, eye contact, posture, and tone of voice that we speak. It is the procedure in which the messages are sent and received without using words, either spoken or written.

23. Ans. C.

The teacher – student communication is Utilitarian. Utilitarian is the practice which states that best action is the one that maximizes utility, which produces the well-being for the greater number of people.

24. Ans. D.

In a classroom, a communicator’s trust level is determined by the eye contact. It brings out the confidence in the person to ask or present his/her opinions in a much better way.

25. Ans. A.

$$+3 \quad +5 \quad +7 \quad +9 \quad +11 \quad +13$$

$$2 \rightarrow 5 \rightarrow 10 \rightarrow 17 \rightarrow 26 \rightarrow 37 \rightarrow 50$$

So, option A is the right answer.

26. Ans. D.

$$1/3 \text{ of } 210 \text{ students} = 70$$

$$\text{Mean of } 70 \text{ students} = 60$$

So, total of 70 student
 $= 70 * 60 = 4200$

$$\text{Mean of } 140 \text{ students} = 78$$

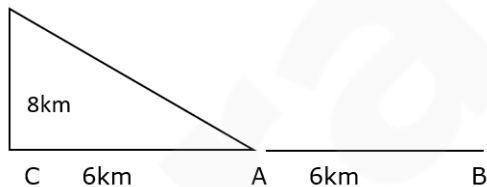
So, total of 140 students
 $= 140 * 78 = 10920$

$$\text{Total of } 210 \text{ student}$$

$$= 4200 + 10920 = 15120$$

So, mean of whole group
 $= 15120 / 210 = 72$

27. Ans. D.



$$AD = (8^2 + 6^2)^{1/2}$$

$$AD = 10 \text{ km}$$

28. Ans. D.

Taking the first alphabet,

$$B+2=D, D+2=F, F+2=H, H+2=J$$

Taking the number,

$$2*2+1=5, 5*2+2=12, 12*2+3=27,$$

$$27*2+4=58$$

Taking the last alphabet,

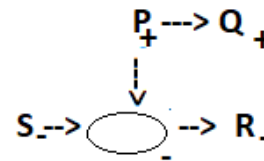
$$E+3=H, H+3=K, K+3=N, N+3=Q$$

So, the next term = J58Q.

29. Ans. B.

$$1 \text{ grandmother (1) + 1 mother (1) + 4 son's wife (4) + 2 daughters to every son (8) = 14. So, total number of females = 14}$$

30. Ans. C.



Q is the uncle of R because son of P is the brother of S.

31. Ans. B.

This is analogical type of argument because this type of thinking relies on analogy or comparison. As the pre-employment test which is for teachers is giving good results, in the same way this test will be done for doctors, architects and engineers.

32. Ans. D.

Proposition (a) and (d) are related in such a way that they can both be true although they cannot both be false.

Some priest can be cunning or some priest cannot be cunning. Both can be possible but they cannot be false.

33. Ans. B.

A cluster of propositions with a structure that exhibits, some inference is called as an argument. An argument is any group of assumptions which is claimed to follow from the others work, that are regarded as providing some common ground for the truth of that research.

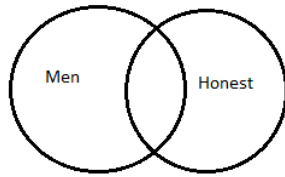
34. Ans. A.

Reason is not sufficient for the assertion. As both the statements are true but the reason i.e. Some men are not perfect, does not satisfy the assertion i.e. No men is perfect, as some men might be perfect.

35. Ans. C.

A definition that has a meaning which is deliberately assigned to some symbol is called stipulative. A stipulative definition is the one in which a new or currently-existing term is given a new meaning for the purpose of argument or discussion in the given context. One can introduces a new symbol or free to stipulate, to the given term. Even an old term in a new context may also have its present meaning stipulated. Stipulative definitions are sometimes referred to as nominal or verbal definitions.

36. Ans. B.
If 'No men are honest' is taken as false, then some men are honest will definitely be claimed to be true.



37. Ans. A.

$$1961-71, \% \text{ population change} = \frac{\text{population in 1971} - \text{population in 1961}}{\text{population in 1961}}$$

$$= \frac{24-21}{21} * 100\% = 14.2\%$$

$$1971-81, \% \text{ population change} = \frac{\text{population in 1981} - \text{population in 1971}}{\text{population in 1971}}$$

$$= \frac{27-24}{24} * 100\% = 12.5\%$$

$$1991-2001, \% \text{ population change} = \frac{\text{population in 2001} - \text{population in 1991}}{\text{population in 1991}}$$

$$= \frac{32-30}{30} * 100\% = 6.66\%$$

$$2001-11, \% \text{ population change} = \frac{\text{population in 2011} - \text{population in 2001}}{\text{population in 2001}}$$

$$= \frac{35-32}{32} * 100\% = 9.375\%$$

So, Maximum growth rate (%) of population registered on 1961-71.

38. Ans. B.

$$1951-61, \% \text{ population change} = \frac{\text{population in 1961} - \text{population in 1951}}{\text{population in 1951}}$$

$$= \frac{21-20}{20} * 100\% = 5\%$$

$$1961-71, \% \text{ population change} = \frac{\text{population in 1971} - \text{population in 1961}}{\text{population in 1961}}$$

$$= \frac{24-21}{21} * 100\% = 14.2\%$$

$$1971-81, \% \text{ population change} = \frac{\text{population in 1981} - \text{population in 1971}}{\text{population in 1971}}$$

$$= \frac{27-24}{24} * 100\% = 12.5\%$$

$$1981-91, \% \text{ population change} = \frac{\text{population in 1991} - \text{population in 1981}}{\text{population in 1981}}$$

$$= \frac{30-27}{27} * 100\% = 11.11\%$$

$$1991-2001, \% \text{ population change} = \frac{\text{population in 2001} - \text{population in 1991}}{\text{population in 1991}}$$

$$= \frac{32-30}{30} * 100\% = 6.66\%$$

$$2001-11, \% \text{ population change} = \frac{\text{population in 2011} - \text{population in 2001}}{\text{population in 2001}}$$

$$= \frac{35-32}{32} * 100\% = 9.375\%$$

Average decadal growth rate of population

$$= (5+14.28+12.5+11.11+6.67+9.38)/6 = 9.82\%$$

39. Ans. B.

Average decadal growth rate of population

$$= (5+14.28+12.5+11.11+6.67+9.38)/6 = 9.82\%$$

Projected Population in 2021

$$= 35 + (35 \times 9.82/100)$$

$$= 35 + 3.4$$

$$= 38.4 \text{ million}$$

40. Ans. D.

$$\frac{10 * 1000 \text{ million watt}}{20 \text{ million}} = 500 \text{ watt}$$

41. Ans. C.

Average Power availability per person in decade

$$1981-91: (40 + 50)/2 = 45 \text{ (Average Power Production)}$$

$$(27 + 30)/2 = 28.5 \text{ (Average Population)}$$

Average power availability per person in 1981-91 =

$$\frac{\text{Average Power Production}}{\text{Average Population}}$$

$$= 45/28.5 = 1.579 * 1000 \text{ W} = \mathbf{1579W}$$

$$1991-2001: (50 + 80)/2 = 65 \text{ (Average Power Production)}$$

$$(30 + 32)/2 = 31 \text{ (Average Population)}$$

Average power availability per person in 1981-91 =

$$\frac{\text{Average Power Production}}{\text{Average Population}}$$

$$= 65/31 = 2.097 * 1000 \text{ W} = \mathbf{2097W}$$

$$2001-2011: (80 + 100)/2 = 90 \text{ (Average Power Production)}$$

$$(32 + 35)/2 = 33.5 \text{ (Average Population)}$$

Average power availability per person in 1981-91 =

$$\frac{\text{Average Power Production}}{\text{Average Population}}$$

$$= 90/33.5 = 2.686 * 1000 \text{ W} = \mathbf{2686W}$$

$$1971-81: (25 + 40)/2 = 32.5 \text{ (Average Power Production)}$$

$$(24 + 27)/2 = 25.5 \text{ (Average Population)}$$

Average power availability per person in 1981-91 =

$$\frac{\text{Average Power Production}}{\text{Average Population}}$$

$$= 32.5/25.5 = 1.274 * 1000 \text{ W} = \mathbf{1274W}$$

So, Average Power availability per person was maximum in 2001-2011.

42. Ans. D.

Percentage (%) increase in power production from 1951 to 2011

$$= \frac{(\text{Power Production in 2011}) - (\text{Power Production in 1951})}{(\text{Power Production in 1951})} * 100\%$$
$$= \frac{(100 - 10)}{10} * 100\%$$
$$= 900\%$$

43. Ans. A.

NMEICT stands for National Mission on Education through Information and Communication Technology. This mission is centrally sponsored scheme to leverage the potential of Information and Technology, in the process of teaching and learning that will benefit all the learners in the higher education institutions anytime, anywhere.

44. Ans. D.

WhatsApp, Google talk and viber all are instant messaging application. Instant messaging (IM) technology is a type of online chat which offers real-time transmission of the texts over the internet.

45. Ans. B.

The byte is a unit of digital information that most commonly consists of eight bits.

1 Byte = 8 bits.

46. Ans. D.

Microphone, Keyboard and Joystick, all are input devices. These devices help the user to input the data into the machine through different ways. Monitor is an output device, it displays the data.

47. Ans. C.

Mozilla Firefox is an open source software that can be easily modified or share by any people because its design is publicly accessible.

48. Ans. D.

Mail merge is used to send the same mail to different persons in MS Word. Mail merge is a way to create personalized letters and pre-addressed mailing labels. Microsoft Word can insert content from a database, spreadsheet into Word documents.

49. Ans. D.

In rural homes, the main sources of Nitrogen Oxide Pollution can be unvented gas stoves, wood stoves or kerosene heaters.

50. Ans. A.

Pesticides are the only toxic substances that are released into our environment to destroy the living things. They are

sprayed on agricultural fields and wood lots. Pesticides are the home to many diseases like cancer in humans.

51. Ans. A.

People population control measures do not necessarily help in checking environmental degradation as many environmental degradation problems are natural like floods, landslides, erosion etc. So, the relationship between population growth and environmental degradation is rather complex.

52. Ans. D.

All the wildfire, lightning and landslide are mostly caused by the natural factors, as there is no manmade involvement. But chemical contamination is not a natural hazard.

53. Ans. D.

As a part of National Climate Change Policy, Indian government is planning to raise the installed capacity of renewable energy to 350 GW by the year 2030.

54. Ans. C.

Countries in increasing order for per capita energy consumption are:

Russia > China > Brazil > India

Russia - 7,481 kWh

China - 4,000 kWh

Brazil - 2,601 kWh

India - 806 kWh

55. Ans. B.

The objectives of Rastriya Uchchar Shiksha Abhiyan RUSA are:

- To improve the quality of *state institutions* by ensuring *conformity* to laid norms and standards.
- To adopt accreditation as a *quality assurance framework*. It aims to provide equal development to all higher institutions and to rectify the weaknesses or loopholes in the *higher education* system.
- To create new institutes by upgrading the existing autonomous colleges.

56. Ans. B.

Article 29(2) states: "No citizen shall be denied *admission* into any *educational institution* maintained by the State or receiving aid out of State funds on *grounds* only of religion, race, caste, language or any of them." Article 29(2) deals with a particular topic, viz., *admission to educational institutions*.

So, option (B) is correct.

57. Ans. A.

There is limit in the size of Lok Sabha and always First- Past- Post electoral system is followed. The speaker can cast vote in case of equality of votes. The shape and size of the Parliamentary Constituencies is determined by independent delimitation commission.

58. Ans. B.

The State List is a list of 61 items (previously the list had 66 items) in Seventh Schedule of the Constitution

of India and the public order is one of an item in this list.

59. Ans. D.

The term of office of Advocate General is not fixed by the constitution.

60. Ans. A.

Maharashtra: 48, Rajasthan: 25, Tamil Nadu: 39, West Bengal: 42. So, Maharashtra has the highest number of seats among the given states in the Lok Sabha. Otherwise, Uttar Pradesh has the highest number of seats in Lok Sabha.
