

# UGC NET PAPER-1

# GENERAL APTITUDE

# Solved Paper November 2017

Time Allotted: 1 Hour

Maximum Marks: 100

## Important Instructions:

1. Each question carries 2 marks.
2. This paper consists of fifty (50) multiple-choice type of questions.
3. Each item has four alternative responses marked (a), (b), (c) and (d). You have to darken the oval as indicated below on the correct response against each item.  
**Example:** where (c) is the correct response.
4. Your responses to the items are to be indicated in the **Answer Sheet**.
5. **Use of any calculator or log table etc., is prohibited.**
6. **Negative Marking: For each incorrect answer 0.5 marks shall be deducted.**

1. Which of the following set of statements best represents the nature and objective of teaching and learning?
  1. Teaching is like selling and learning is like buying.
  2. Teaching is a social act while learning is a personal act.
  3. Teaching implies learning whereas learning does not imply teaching.
  4. Teaching is a kind of delivery of knowledge while learning is like receiving it.
  5. Teaching is an interaction and is triadic in nature whereas learning is an active engagement in a subject domain.

(a) 1, 4 and 5                      (b) 2, 3 and 5  
(c) 1, 2 and 3                      (d) 1, 2 and 4
2. From the list given below identify the learner characteristics which would facilitate teaching learning system to become effective. Choose the correct code to indicate your answer.
  1. Prior experience of learner
  2. Learner's family lineage
  3. Aptitude of the learner
  4. Learner's stage of development
  5. Learner's food habits and hobbies
  6. Learner's religious affiliation

(a) 1, 3 and 4                      (b) 4, 5 and 6  
(c) 1, 4 and 5                      (d) 2, 3 and 6
3. **Assertion (A):** All teaching implies learning.  
**Reason (R):** Learning to be useful must be derived from teaching.  
Choose the correct answer from the following:

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).  
(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).  
(c) (A) is true, but (R) is false.  
(d) (A) is false, but (R) is true.
4. On the basis of summative tests, a teacher is interpreting his/her students' performance in terms of their wellness lifestyle evident in behaviour. This will be called:
  - (a) Formative testing
  - (b) Continuous and comprehensive evaluation
  - (c) Norm-referenced testing
  - (d) Criterion-referenced testing
5. Which one of the following is a key behaviour in effective teaching?
  - (a) Using student ideas and contribution
  - (b) Structuring
  - (c) Instructional variety
  - (d) Questioning
6. Which of the following research types focuses on ameliorating the prevailing situations?
  - (a) Fundamental Research
  - (b) Applied Research
  - (c) Action Research
  - (d) Experimental Research
7. A researcher attempts to evaluate the effect of method of feeding on anxiety - proneness of children. Which method of research would be appropriate for this?
  - (a) Case study method
  - (b) Experimental method
  - (c) Ex-post-facto method
  - (d) Survey method

8. In which of the following arrangements a wider spectrum of ideas and issues may be made possible?
- (a) Research Article      (b) Workshop mode  
(c) Conference            (d) Symposium
9. In finalizing a thesis writing format, which of the following would form part of supplementary pages?
- (a) List of tables and figures  
(b) Table of contents  
(c) Conclusions of the study  
(d) Bibliography and Appendices
10. Which of the following is susceptible to the issue of research ethics?
- (a) Inaccurate application of statistical techniques  
(b) Faulty research design  
(c) Choice of sampling techniques  
(d) Reporting of research findings

**Direction for questions 11 to 15:**

Read the passage carefully and answer the questions.

Climate change is considered to be one of the most serious threats to sustainable development, with adverse impacts on the environment, human health, food security, economic activity, natural resources and physical infrastructure. Global climate varies naturally. According to the Intergovernmental Panel on Climate Change (IPCC), the effects of climate change have already been observed, and scientific findings indicate that precautionary and prompt action is necessary. Vulnerability to climate change is not just a function of geography or dependence on natural resources; it also has social, economic and political dimensions which influence how climate change affects different groups. Poor people rarely have insurance to cover loss of property due to natural calamities i.e. drought, floods, super cyclones etc. The poor communities are already struggling to cope with the existing challenges of poverty and climate variability and climate change could push many beyond their ability to cope or even survive. It is vital that these communities are helped to adapt to the changing dynamics of nature. Adaptation is a process through which societies make themselves better able to cope with an uncertain future. Adapting to climate change entails taking the right measures to reduce the negative effects of climate change (or exploit the positive ones) by making the appropriate

adjustments and changes. These range from technological options such as increased sea defences or flood - proof houses on stilts to behavioural change at the individual level, such as reducing water use in times of drought. Other strategies include early warning systems for extreme events, better water management, improved risk management, various insurance options and biodiversity conservation. Because of the speed at which climate change is happening due to global temperature rise, it is urgent that the vulnerability of developing countries to climate change is reduced and their capacity to adapt is increased and national adaptation plans are implemented. Adapting to climate change will entail adjustments and changes at every level from community to national and international. Communities must build their resilience, including adopting appropriate technologies while making the most of traditional knowledge, and diversifying their livelihoods to cope with current and future climate stress. Local coping strategies and knowledge need to be used in synergy with government and local interventions. The need for adaptation interventions depends on national circumstances. There is a large body of knowledge and experience within local communities on coping with climatic variability and extreme weather events. Local communities have always aimed to adapt to variations in their climate. To do so, they have made preparations based on their resources and their knowledge accumulated through experience of past weather patterns. This includes times when they have also been forced to react to and recover from extreme events, such as floods, drought and hurricanes. Local coping strategies are an important element of planning for adaptation. Climate change is leading communities to experience climatic extremes more frequently, as well as new climate conditions and extremes. Traditional knowledge can help to provide efficient, appropriate and time-tested ways of advising and enabling adaptation to climate change in communities who are feeling the effects of climate changes due to global warming.

11. Given below are the factors of vulnerability of poor people to climate change. Select the code that contains the correct answer.
1. Their dependence on natural resources
  2. Geographical attributes
  3. Lack of financial resources
  4. Lack of traditional knowledge

- Code:**  
 (a) 1, 2 and 3                      (b) 2, 3 and 4  
 (c) 1, 2, 3 and 4                  (d) 3 only
12. Adaptation as a process enables societies to cope with:  
 1. An uncertain future  
 2. Adjustments and changes  
 3. Negative impact of climate change  
 4. Positive impact of climate change  
 Select the most appropriate answer from the following code:  
 (a) 1, 2, 3 and 4                  (b) 1 and 3  
 (c) 2, 3 and 4                      (d) 3 only
13. To address the challenge of climate change, developing countries urgently require:  
 (a) Imposition of climate change tax  
 (b) Implementation of national adaptation policy at their level  
 (c) Adoption of short-term plans  
 (d) Adoption of technological solutions
14. The traditional knowledge should be used through:  
 (a) Its dissemination  
 (b) Improvement in national circumstances  
 (c) Synergy between government and local interventions  
 (d) Modern technology
15. The main focus of the passage is on:  
 (a) Combining traditional knowledge with appropriate technology  
 (b) Coordination between regional and national efforts  
 (c) Adaptation to climate change  
 (d) Social dimensions of climate change
16. The interaction between a teacher and students creates a zone of proximal:  
 (a) Difference                      (b) Confusion  
 (c) Development                  (d) Distortion
17. The spatial audio reproduction in a classroom can reduce the students':  
 (a) Cognitive load in understanding  
 (b) Respect for the teacher  
 (c) Motivation for excellence  
 (d) Interest in technology - orientation
18. The classroom communication should essentially be:  
 (a) Contrived                      (b) Empathetic  
 (c) Abstract                         (d) Non-descriptive
19. A good communicator begins his/her presentation with a:  
 (a) Complex question    (b) Non-sequitur  
 (c) Repetitive phrase    (d) Ice-breaker
20. In a classroom, the probability of message reception can be enhanced by:  
 (a) Establishing a viewpoint  
 (b) Exposing the ignorance of students  
 (c) Increasing the information load  
 (d) Using high decibel audio tools
21. In the series 1, 6, 15, 28, 45, ..... the next term will be:  
 (a) 66                                  (b) 76  
 (c) 56                                  (d) 84
22. The next term in the series ABD, DGK, HMS, MTB, ..... is:  
 (a) NSA                                (b) SBL  
 (c) PSK                                (d) RUH
23. In certain code, "COVALENT" is coded as BWPDUOFM. The code of "ELEPHANT" will be:  
 (a) MFUIQRTW                      (b) QMUBIADH  
 (c) QFMFUOBI                      (d) EPHNTEAS
24. Ajay is a friend of Rakesh. Pointing to an old man Ajay asked Rakesh who he is? Rakesh said "His son is my son's uncle". The old man is related to Rakesh as:  
 (a) Grandfather                      (b) Father-in-law  
 (c) Father                              (d) Uncle
25. A postman walked 20 m straight from his office, turned right and walked 10 m. After turning left he walked 10 m and after turning right walked 20 m. He again turned right and walked 70 m. How far is he from his office?  
 (a) 50 m                                (b) 40 m  
 (c) 60 m                                (d) 20 m
26. It is Truism to say that no one was there when life first appeared on earth. Any assertion about life's origin, thus, should be treated as a theory. The above two statements constitute:  
 (a) A historical explanation  
 (b) A narrative  
 (c) An argument  
 (d) A conjecture
27. Given below are four statements. Among them two are related in such a way that they can both be true but they cannot both be false. Select the code that indicates those two statements:

**Statements:**

1. Honest people never suffer.
2. Almost all honest people do suffer.
3. Honest people hardly suffer.
4. Each and every honest person suffers.

**Code:**

- (a) 1 and 2                      (b) 1 and 3  
(c) 1 and 4                      (d) 2 and 3

28. A deductive argument is invalid if:
- (a) Its premises and conclusion are all true.
  - (b) Its premises and conclusion are all false.
  - (c) Its premises are all false but its conclusion is true.
  - (d) Its premises are all true but its conclusion is false.
29. Given below are two premises ((a) and (b)). From those two premises four conclusions (i), (ii), (iii) and (iv) are drawn. Select the code that

states the conclusion/conclusions drawn validly (taking the premises singularly or jointly).

- Premises:** (a) All bats are mammals.  
(b) No birds are bats.

- Conclusions:** (i) No birds are mammals.  
(ii) Some birds are not mammals.  
(iii) No bats are birds.  
(iv) All mammals are bats.

**Code:**

- (a) (i) only                      (b) (i) and (ii) only  
(c) (iii) only                      (d) (iii) and (iv) only

30. Just as melting ice - cubes do not cause a glass of water to overflow, melting sea - ice does not increase oceanic volume.

What type of argument is it?

- (a) Analogical                      (b) Hypothetical  
(c) Psychological                      (d) Statistical

**Direction for questions 31 to 35:**

Answer the questions based on the data given in the table below.

**Table: Number of registered vehicles in India and India's population**

Year	Total vehicles (Lakhs)	Two wheelers (Lakhs)	Cars, Jeeps, Taxis (Lakhs)	Buses (Lakhs)	Goods vehicles (Lakhs)	Others (Lakhs)	Population (India) (Millions)
1961	6.65	0.88	3.1	0.57	1.68	0.42	439.23
1971	18.65	5.76	6.82	0.94	3.43	1.70	548.15
1981	53.91	26.18	11.60	1.62	5.54	8.97	683.32
1991	213.74	142.00	29.54	3.31	13.56	25.33	846.42
2001	549.91	385.56	70.58	6.34	29.48	57.95	1028.73
2011	1417.58	1018.65	191.23	16.04	70.64	121.02	1210.19

31. The maximum decadal growth in population of India is registered in the period:
- (a) 1961-1971                      (b) 1991-2001  
(c) 2001-2011                      (d) 1981-1991
32. In which year the decadal growth (%) in number of cars surpassed that of the two wheelers?
- (a) 1991                      (b) 2001  
(c) 1981                      (d) 2011
33. What was the average decadal growth in the number of cars during 1961-2011?
- (a) ~131%                      (b) ~68%  
(c) ~217%                      (d) ~157%
34. In the year 2001, out of total number of vehicles, the number of passenger vehicles (4 wheelers) accounted for:
- (a) ~14%                      (b) ~24%  
(c) ~31%                      (d) ~43%
35. What was the per capita ownership of two wheelers in India in the year 2011?
- (a) ~0.084%                      (b) ~0.0084%  
(c) ~0.84%                      (d) ~0.068%
36. What is the name for a webpage address?
- (a) Domain                      (b) Directory  
(c) Protocol                      (d) URL
37. The data storage hierarchy consists of:
- (a) Bytes, bits, fields, records, files and databases  
(b) Bits, bytes, fields, records, files and databases  
(c) Bits, bytes, records, fields, files and databases  
(d) Bits, bytes, fields, files, records and databases

38. Which of the following domains is used for - profit businesses?  
 (a) .org (b) .net  
 (c) .edu (d) .com
39. What is the full form of USB as used in computer related activities?  
 (a) Ultra Security Block  
 (b) Universal Security Block  
 (c) Universal Serial Bus  
 (d) United Serial Bus
40. Which of the following represents a billion characters?  
 (a) Terabytes (b) Megabytes  
 (c) Kilobytes (d) Gigabytes
41. Which of the following pollutants is the major cause of respiratory diseases?  
 (a) Suspended fine particles  
 (b) Nitrogen oxides  
 (c) Carbon monoxide  
 (d) Volatile organic compounds
42. **Assertion (A):** In urban areas, smog episodes occur frequently in winters.  
**Reason (R):** In winters, a lot of biomass is burnt by people for heating purposes or to keep themselves warm.
- Choose the correct answer from the code given below:  
 (a) Both (A) and (R) are true and (R) is the correct explanation of (A)  
 (b) Both (A) and (R) are true but (R) is not the correct explanation of (A)  
 (c) (A) is true and (R) is false  
 (d) Both (A) and (R) are false
43. Occurrence of natural hazards is affected by:  
 1. Land use changes  
 2. Drainage and construction  
 3. Ozone depletion  
 4. Climate change
- Choose the correct answer from the code given below:  
 (a) 1, 3 and 4 (b) 1, 2 and 3  
 (c) 1, 2 and 4 (d) 2, 3 and 4
44. Which of the following pollutant gases is not produced both naturally and as a result of industrial activity?  
 (a) Chlorofluorocarbons  
 (b) Nitrous oxide  
 (c) Methane  
 (d) Carbon dioxide
45. Among the following fuels of energy, which is the most environmentally friendly?  
 (a) Ethanol (b) Biogas  
 (c) CNG (d) Hydrogen
46. Which of the following are the goals of higher education in India?  
 1. Access  
 2. Equity  
 3. Quality and Excellence  
 4. Relevance  
 5. Value based education  
 6. Compulsory and free education
- Select the correct answer from the code given below:  
 (a) 1, 2 and 5 only (b) 1, 2, 5 and 6  
 (c) 1, 2, 3, 4 and 5 (d) 1, 2, 3, 4, 5 and 6
47. Which of the following has been ranked the best college in the country (2017) as per the National Institutional Ranking Framework (NIRF)?  
 (a) Miranda House, Delhi  
 (b) St. Stephen's College, Delhi  
 (c) Fergusson College, Pune  
 (d) Maharaja's College, Mysore
48. Which of the following universities has received the Visitor's Award for the best Central University in India in Feb. 2017?  
 (a) Jawaharlal Nehru University  
 (b) Banaras Hindu University  
 (c) Tezpur University  
 (d) University of Hyderabad
49. Who among the following can be removed by the President without Parliament's resolution?  
 (a) Judge of a High Court  
 (b) Governor of a State  
 (c) Chief Election Commissioner  
 (d) Comptroller and Auditor-General
50. Which of the following come(s) within the ambit of the term 'corruption'?  
 1. Misuse of official position  
 2. Deviation from rules, laws and norms  
 3. Non-action when action is required  
 4. Harm to public good
- Select the correct answer from the code given below:  
 (a) 1 only (b) 1 and 2 only  
 (c) 1, 2 and 4 (d) 1, 2, 3 and 4

## Answer Key

Q.No.	Answer	Topic's Name	Chapter's Name
1	b	Teaching and learning	Teaching aptitude
2	a	Learner characteristics	Teaching aptitude
3	c	Teaching and learning	Teaching aptitude
4	d	Evaluation system	Teaching aptitude
5	c	Factors affecting teaching	Teaching aptitude
6	c	Types of research	Research aptitude
7	c	Methods of research	Research aptitude
8	c	Research	Research aptitude
9	d	Thesis and article writing	Research aptitude
10	d	Research ethics	Research aptitude
11	a	Fact Based	Comprehension
12	a	Fact Based	Comprehension
13	b	Fact Based	Comprehension
14	c	Fact Based	Comprehension
15	c	Inference based	Comprehension
16	c	Non-verbal communication	Communication
17	a	Classroom communication	Communication
18	b	Classroom communication	Communication
19	d	Effective communication	Communication
20	a	Classroom communication	Communication
21	a	Number series	Logical reasoning
22	b	Letter series	Logical reasoning
23	c	Codes	Logical reasoning
24	c	Relationships	Logical reasoning
25	a	Time and distance	Logical reasoning
26	c	Arguments	Logical reasoning
27	d	Syllogism	Logical reasoning
28	d	Deductive reasoning	Logical reasoning
29	c	Syllogism	Logical reasoning
30	a	Type of argument	Logical reasoning
31	a	Data interpretation	Data interpretation
32	d	Data interpretation	Data interpretation
33	a	Data interpretation	Data interpretation
34	a	Data interpretation	Data interpretation
35	a	Data interpretation	Data interpretation
36	d	Terminology	Information and communication technology
37	b	Hierarchy of data storage	Information and communication technology
38	d	Domains	Information and communication technology
39	c	Abbreviations	Information and communication technology
40	d	Terminology	Information and communication technology

41	a	Environmental issues	People, development and environment
42	b	Anthropogenic activities	People, development and environment
43	c	Natural hazards	People, development and environment
44	a	Anthropogenic activities	People, development and environment
45	d	Environmental friendly resource	People, development and environment
46	c	Governance and administration	Higher education system
47	a	Governance and administration	Higher education system
48	a	Governance and administration	Higher education system
49	b	Governance and administration	Higher education system
50	d	Corruption	Governance and administration

**ANSWERS WITH EXPLANATIONS**

1. **Option (b) is correct.**

Basis of difference	Teaching	Learning
Meaning	Process of impacting behaviour of learners	Gaining knowledge, skills, values etc.
Inter-connected	Teaching implies learning	Learning does not require teaching always
Knowledge	Delivering	Receiving
Process	Two way	One way
Act	Social	Social and personal

2. **Option (a) is correct.**

Learner's prior experience, Aptitude of the learner and stage of development facilitates teaching learning process.

3. **Option (c) is correct.**

Learning can be derived from any source and teaching is one of those sources.

4. **Option (d) is correct.**

Criterion-referenced testing is evaluation conducted based on the comparison of the performance of learners with the pre-defined rules or standards. Comparison is not done with other learners.

5. **Option (c) is correct.**

Instructional variety means the ability of the teacher to use various methods of teaching and being able to shift from one method to another easily.

6. **Option (c) is correct.**

Action research is a research type, which is cyclic in nature and focused on immediate solutions.

Process of action research → P.A.O.R.

Plan → Act → Observe → Reflect

7. **Option (c) is correct.**

Ex post Facto method of research is a process where a researcher studies the fact or an event which has already occurred, to study and understand the cause and effect of that event.

8. **Option (c) is correct.**

Conferences provide a platform where people working on a similar area of study can meet, and discuss their opinions and learnings on the area of study.

9. **Option (d) is correct.**

Bibliography and Appendices are included at the end of any thesis. They provide the information which is not entirely necessary to understand the findings of the thesis, but can be referred to if required by the reader.

10. **Option (d) is correct.**

Research ethics mainly influence the part where the researcher is reporting the findings of the study. Researchers cannot be biased at this part of thesis writing.

11. **Option (a) is correct.**

Poor people are dependent on natural resources and their financial resources are limited. Geographical attributes are also a factor that affect this situation.

12. **Option (a) is correct.**

Adaptation as a process helps society to adapt to uncertainties, climate changes, negative and positive impact of changes.

13. **Option (b) is correct.**

To address climate change developing countries need to implement the policies for adaptation at national levels.



**14. Option (c) is correct.**

Traditional knowledge should be used in synergy with the local and government methods and tool.

**15. Option (c) is correct.**

The main focus of the passage is on the adoption of climate change.

**16. Option (c) is correct.**

Proximal development refers to the area of difference between what a student can achieve without the guidance of the teacher, and what the student cannot achieve without the help of the teacher.

**17. Option (a) is correct.**

Spatial audio reproduction refers to creation of an imagined or original sound effect in the classroom.

**18. Option (b) is correct.**

Classroom communication should always be empathetic. Teachers should try to understand the skills and experience of the learners before imparting any idea.

**19. Option (d) is correct.**

Ice breaker techniques are used by speakers to make the audience comfortable and involved in the discussion. This makes the teaching learning process effective.

**20. Option (a) is correct.**

In a classroom, teachers should try to establish a viewpoint to ensure that the message is received by learners.

**21. Option (a) is correct.**

The difference between the two consecutive numbers of given are 5, 9, 13, 17.

The difference between the numbers of the second series is 4 (5-9-13-17).

Hence, adding 4 to 17 is 21.

Adding 21 to 45 is 66.

**22. Option (b) is correct.**

Calculating the difference between the Alphabets of the series:

A0B1D

D2G3K

H4M5S

M6T7B

So, the next term can be S8B9L

**23. Option (c) is correct.**

COVALENT is coded as BWPDUOFM.

If we break COVA-LENT and BWPDUO-FM in two parts, it can be noted that these parts are related when the parts of the second alphabet are flipped.

COVA-DPWB

LENT-MFOU

The alphabets are in sequences, like CD, OP, VW, AB, LM, EF, NO, TU.

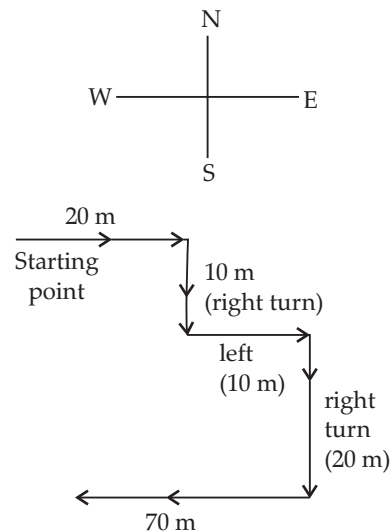
Hence, ELEPHANT will be QFMFUOBI.

**24. Option (c) is correct.**

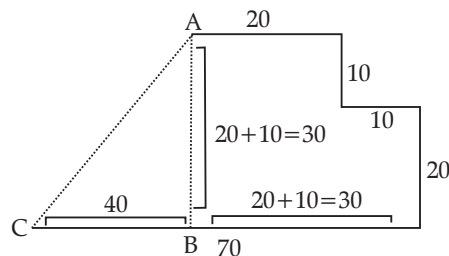
Uncle of Rakesh's son will be Rakesh's brother.

Hence, his father will be Rakesh's father.

**25. Option (a) is correct.**



These type of questions are based on practically imagination that will be required for understanding left and right turn.



By theorem  $AC^2 = AB^2 + CB^2$

$AC^2 = 40^2 + 30^2$

$AC^2 = 1600 + 900$

$AC = \sqrt{2500}$

$AC = \boxed{50}$

He is 50 m far from starting point.

**26. Option (c) is correct.**

Argument is a reason which is given in support of a theory or an idea.

**27. Option (d) is correct.**

Almost all honest people do suffer and Honest people hardly suffer, can be true together but cannot be false together.

**28. Option (d) is correct.**

A deductive argument will be invalid if its conclusion is false but the premise is true.

**29. Option (c) is correct.**

All bats are mammals

No birds are Bats.

Hence, only conclusion- No bats are Birds can be drawn from it validly.

**30. Option (a) is correct.**

Analogical reasoning compares two statements in a way that if one statement is correct then the other will be correct.

**31. Option (a) is correct.**

Growth in population in 1961-71 =  $108.92/439.23 \times 100 = 24.79$

Growth in population in 1971-81 =  $135.17/548.15 \times 100 = 24.75$

Growth in population in 1981-91 =  $163.1/683.32 \times 100 = 23.86$

Growth in population in 1991-2001 =  $182.31/846.42 \times 100 = 21.53$

Growth in population in 2001-2011 =  $181.46/1028.73 \times 100 = 17.639$

**32. Option (d) is correct.**

Year	Car growth (%)	Two-wheeler growth (%)
1971	120	554
1981	70.08	354
1991	154.6	442
2001	138	171
2011	170.94	164.2

**33. Option (a) is correct.**

Growth in 1961-71 =  $3.72/3.1 \times 100 = 120$

Growth in 1971-81 =  $4.78/6.82 \times 100 = 70.08$

Growth in 1981-91 =  $17.94/11.6 \times 100 = 154.65$

Growth in 1991-2001 =  $41.04/29.54 \times 100 = 138.93$

Growth in 2001-2011 =  $120.65/70.58 \times 100 = 170.94$

Average growth rate =  $655.32/5 = 131$

**34. Option (a) is correct.**

Total vehicles in 2011 = 549.91

No. of passenger vehicles (4 wheelers) = Car and Buses =  $70.58 + 6.34 = 76.92$

$\therefore$  Required % =  $76.92/549.91 \times 100 = 14\%$

**35. Option (a) is correct.**

Two wheelers in 2011 = 1018.65 lakhs

Population in 2011 = 1210.19 millions

1 million = 10 lakh

Population in lakhs =  $1210.19 \times 10 = 12101.9$  Lakh

Per capita ownership =  $1018.65/12101.9 = 0.084$

**36. Option (d) is correct.**

URL is an address of the webpage. It specifies the location of the file on the network or internet.

**37. Option (b) is correct.**

8 bit = 1 bytes

Bit < Byte < Field < Record < Files < Database

**38. Option (d) is correct.**

Domain ".com" is normally used for profit making businesses.

**39. Option (c) is correct.**

The full form of USB is Universal Serial Bus.

**40. Option (d) is correct.**

1 Gigabyte is equal to one billion bytes.

**41. Option (a) is correct.**

Suspended fine particles are the major cause of respiratory diseases.

**42. Option (b) is correct.**

Smog occurs due to vehicle emissions, coal emissions, burning of agriculture material, fireworks, etc. Biomass is the waste from animals.

**43. Option (c) is correct.**

Ozone layer depletion does not affect occurrence of natural hazards. Depletion of ozone layer increases the UV radiation level on earth which can affect human health.

**44. Option (a) is correct.**

Chlorofluorocarbon is an artificial gas which is used in equipment like air conditioners, refrigerators, etc.

**45. Option (d) is correct.**

Hydrogen is the most environment friendly fuel in the given list, as it produces only water as the by-product. Production and storage of hydrogen is a difficult process.

**46. Option (c) is correct.**

Compulsory and free education is not the goal of higher education in India.

**47. Option (a) is correct.**

Miranda House, Delhi has been ranked as the best college in the country in 2017.

**48. Option (a) is correct.**

Jawahar Lal Nehru university has received the visitor's award for best central university in 2017.

**49. Option (b) is correct.**

Governor of the state can be removed by the president, without the consent of parliament.

**50. Option (d) is correct.**

Corruption means misuse of power, not following rules and any action that is harmful for the common public.

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