UGC NET Paper 1 – 30 June Morning

1. Read the following passage and answer the questions that follow.

The following table shows the percentage(%) of illiterate population of six cities (A-F). The ratio of the population of these six cities is 8 : 7 : 4 : 5 : 10 : 6. Based on the data in the table, answer the questions that follow.

City-wise Details of Illiterate Population

City	A	B	C	D	E	F
Percentage of Illiterate population	36%	40%	32%	45%	50%	30%

If the Illiterate population of City D is 1.8 lakh, then what is the population of City F (in lakh) ?
(1) 3.2
(2) 4.2
(3) 4.8
(4) 5.4

2. Read the following passage and answer the questions that follow.

The following table shows the percentage(%) of illiterate population of six cities (A-F). The ratio of the population of these six cities is 8 : 7 : 4 : 5 : 10 : 6. Based on the data in the table, answer the questions that follow.

City-wise Details of Illiterate Population

City	A	B	C	D	E	F
Percentage of Illiterate population	36%	40%	32%	45%	50%	30%

If the total population of all the six cities together is 80 lakh, then the population of City F is _____% of the population of City A.
(1) 60
(2) 75
(3) 80
(4) 120

3. Read the following passage and answer the questions that follow.

The following table shows the percentage(%) of illiterate population of six cities (A-F). The ratio of the population of these six cities is 8 : 7 : 4 : 5 : 10 : 6. Based on the data in the table, answer the questions that follow.

City-wise Details of Illiterate Population

City	A	B	C	D	E	F
Percentage of Illiterate population	36%	40%	32%	45%	50%	30%

If the total population of all six cities together is 96 lakh, then what is the literate population of City B (in lakh) ?
(1) 8.42
(2) 9.20
(3) 9.60
(4) 10.08

4. Read the following passage and answer the questions that follow.

The following table shows the percentage(%) of illiterate population of six cities (A-F). The ratio of the population of these six cities is 8 : 7 : 4 : 5 : 10 : 6. Based on the data in the table, answer the questions that follow.

City-wise Details of Illiterate Population

City	A	B	C	D	E	F
Percentage of Illiterate population	36%	40%	32%	45%	50%	30%

If the total population of City A and City C together is 6 lakh, then what is the illiterate population of City C ?
(1) 48000
(2) 64000
(3) 72000
(4) 80000

5. Read the following passage and answer the questions that follow.

The following table shows the percentage(%) of illiterate population of six cities (A-F). The ratio of the population of these six cities is 8 : 7 : 4 : 5 : 10 : 6. Based on the data in the table, answer the questions that follow.

City-wise Details of Illiterate Population

City	A	B	C	D	E	F
Percentage of Illiterate population	36%	40%	32%	45%	50%	30%

If the total population of City E is 2.5 lakh, then the illiterate population of City A is _____% more than the illiterate population of City C.
(1) 120
(2) 64
(3) 96
(4) 125

6. _____ is not the part of ICT based teaching.
(1) Chalk and talk
(2) Learning Management System (LMS)
(3) Smart Boards
(4) Presentation of Slides

7. Which of the following is not a level of teaching ?
(1) Memory Power
(2) Reflective
(3) Analytical
(4) Understanding

8. Rearrange the preplanning of teaching learning process :
A. Make a list of all the teaching aids that will be used in teaching-learning process
B. Clearly list all the resources and references that are used in whole teaching-learning process
C. Make the topics in a sequence manner such that students feel comfortable in the teaching-learning process
D. Carefully scrutinize the subject matter to be taught by the teacher
E. Make a list of the important topics that teacher will teach
Choose the **correct** answer from the options given below :
(1) D, E, C, A, B
(2) E, D, A, B, C
(3) A, B, C, E, D
(4) B, C, A, D, E

9. What among the following are known as Assessment instruments ?
A. Tests
B. Examinations
C. Rubrics
D. Work Sheets
E. Quizzes
Choose the **correct** answer from the options given below :
(1) A, B and E Only
(2) B, C, D and E Only
(3) D and E Only
(4) A, B, D and E Only

10. Match **List - I** with **List - II** :
List - I – (Stage)
A. Sensorimotor Stage
B. Intuitive Stage
C. Preoperational Stage
D. Operational Stage
List - II – (Years)
I. 2 to 7 years
II. 7 to 16 years
III. 0 to 2 years
IV. 4 to 7 years
Choose the **correct** answer from the options given below :
(1) A-III, B-IV, C-I, D-II
(2) A-III, B-IV, C-II, D-I
(3) A-IV, B-III, C-I, D-II
(4) A-IV, B-I, C-III, D-II

11. What is not a type of Scientific Research ?
(1) Exploratory, it attempts to gain better understanding of different dimensions of the problem
(2) Descriptive, which provides answer to the questions related to who, what, when and how
(3) Explanatory, it explains causes of problem
(4) Opinion based arguments, it collects facts or compile information without a clear purpose or analysis or transferring facts from one source to another

12. What is the main purpose of research question ?
(1) To define the scope of the research, i.e, to determine what is to be studied and to what extent it may be studied
(2) Research questions are not required to conduct a research
(3) Research questions are based on personal experience of the researcher
(4) Research questions give clarity about the respondents

13. Mean (M) and Variance (V) of different datasets are given in A – D below. Compute the coefficient of variation of each dataset and arrange in ascending order :
A. M = 80, V = 25
B. M = 70, V = 256
C. M = 60, V = 196
D. M = 90, V = 16
Choose the **correct** answer from the options given below :
(1) D, B, A, C
(2) B, C, D, A
(3) D, A, B, C
(4) C, A, B, D

14. Functions of Research Design are :
A. It does not discuss about any research plan
B. It provides a blueprint
C. It does not provide a blueprint
D. It limits (dictates) boundaries of research activity
E. It enables investigation to anticipate potential problems
Choose the **correct** answer from the options given below :
(1) A and C Only
(2) A, B and C Only
(3) B, D and E Only
(4) A, C and E Only

15. Match **List - I** with **List - II** :
List - I – (Research Type)
A. Quantitative Research
B. Pure Research
C. Applied Research
D. Longitudinal Research
List - II – (Meaning)
I. Quest for knowledge, developing hypothesis and theories
II. Search for ways of using scientific knowledge to solve practical problems
III. It involves the study of the problem or the same body of phenomenon over a period of time
IV. Based on measurement of quantity or amount
Choose the **correct** answer from the options given below :
(1) A-IV, B-I, C-II, D-III
(2) A-I, B-II, C-III, D-IV
(3) A-IV, B-III, C-II, D-I
(4) A-III, B-II, C-IV, D-I

16. When we do not use any words or speech while communicating, this type of communication is known as :
(1) Oral communication
(2) Group communication
(3) Inter-personal communication
(4) Non verbal communication

17. What is the disadvantage of oral communication ?
(1) Oral words spoken disappear into the air. The words are temporary
(2) Oral communication is spontaneous and natural
(3) Oral communication is easy for others to understand
(4) The communicator is always physically available

18. Arrange the following film-magazines in chronological order as per their year of publication (from earliest to the latest) :
A. 'Film World', Weekly (Mumbai)
B. 'Screen', Weekly (Mumbai)
C. 'Moving Picture', Monthly (Mumbai)
D. 'Cinemaya', Monthly (Delhi)
E. 'Stardust', Monthly (Mumbai)
Choose the **correct** answer from the options given below :
(1) A, B, C, D, E
(2) C, B, E, D, A
(3) E, D, C, B, A
(4) D, C, B, A, E

19. What among the following are different types of mass media ?
A. Newspaper
B. Photography
C. University
D. Face to face communication
E. Television
Choose the **correct** answer from the options given below :
(1) A, B and E Only
(2) C and D Only
(3) A, B and C Only
(4) C, D and E Only

20. Match **List - I** with **List - II** :
List - I – (Films)
A. Lanka Dahan
B. Pather Panchali
C. Garam Hawa
D. Pakeezah
List - II – (Directors)
I. Satyajit Ray
II. Dadasaheb Phalke
III. Kamal Amrohi
IV. M.S. Sathyu
Choose the **correct** answer from the options given below :
(1) A-I, B-III, C-II, D-IV
(2) A-II, B-I, C-IV, D-III
(3) A-I, B-II, C-III, D-IV
(4) A-IV, B-III, C-II, D-I

21. Find the number that can replace question mark(?) in the series given below :
1, 6, 15, 28, 45, ?
(1) 72
(2) 66
(3) 73
(4) 63

22. In a certain code language :
‘4 5 6’ means ‘pack green carpet’
‘7 3 6’ means ‘spread one carpet’
‘3 5 6’ means ‘one green carpet’
What is the code for ‘pack’ and ‘spread’ respectively ?
(1) 5 and 7
(2) 4 and 3
(3) 4 and 7
(4) 7 and 5

23. Mohan and Sohan can do a piece of work in 18 days, Sohan and Shyam can do the same work in 24 days and Mohan and Shyam can do the same work in 36 days. How long will Mohan, Sohan and Shyam will take to do the work working together ?
(1) 20 days
(2) 18 days
(3) 15 days
(4) 16 days

24. Match **List - I** with **List - II** :

List - I – (Question)

A. If $\left(x+\frac{1}{x}\right)=2$, then $\left(x^2+\frac{1}{x^2}\right)=?$

B. If $\frac{x-1}{x}=3$, then $\left(1+\frac{1}{x^2}\right)=?$

C. If $\left(x-\frac{1}{x}\right)=1$, then $\left(x^2+\frac{1}{x^2}\right)=?$

D. If $\frac{x^2-1}{x+1}=6$, then $x=?$

List - II – (Answer)

I. 7
II. 3
III. 5
IV. 2

Choose the **correct** answer from the options given below :

(1) A-III, B-II, C-IV, D-I
(2) A-IV, B-III, C-II, D-I
(3) A-I, B-II, C-III, D-IV
(4) A-II, B-I, C-III, D-IV

25. An amount of ₹ 4650 was lent partly at 5% and partly at 8% per annum at simple interest. The total interest received after 3 years was ₹ 900. Find the ratio of the money lent at 5% to that lent at 8%.

(1) 16 : 15
(2) 4 : 7
(3) 7 : 8
(4) 15 : 17

26. Which of the following can neither both be true nor can they both be false ?

A. All ducks are birds
B. No ducks are birds
C. Some ducks are birds
D. Some ducks are not birds

Choose the **correct** answer from the options given below :

(1) B and D Only
(2) B and C Only
(3) A and B Only
(4) C and D Only

27. If the statement “All birds are egg-laying animals” is given as true which of the following statements can be inferred to be false ?

A. No egg-laying animals are birds
B. Some birds are not egg-laying animals
C. No birds are egg-laying animals
D. Some birds are non-egg-laying animals

Choose the **correct** answer from the options given below :

(1) B and C Only
(2) B and D Only
(3) A and C Only
(4) A, B, C and D

28. Which logical fallacy is involved in the following statement :
"The word 'God' is not meaningless ; therefore it has a meaning." ?
(1) Hasty Generalization
(2) Slippery Slope
(3) Irrelevant Conclusion
(4) Begging the question

29. Arrange the following in order of decreasing connotation.
A. Natural Science
B. Physics
C. Science
D. Nano science
Choose the **correct** answer from the options given below :
(1) C, A, B, D
(2) A, C, B, D
(3) B, D, A, C
(4) D, B, A, C

30. According to the Classical Indian School of logic (Nyāya), which of the following instrument of knowledge (Pramāna) is defined in terms of sense-object concourse (Indriyārtha Sannikarṣa) ?
(1) **Pratyakṣa** (perception)
(2) **Anumāna** (inference)
(3) Upamana (analogy)
(4) **S'abda** (verbal testimony)

31. Which of the following is not a service of Internet ?
(1) Electronic mail
(2) Voice over IP (VoIP)
(3) HTML
(4) Chat

32. Which of the following is incorrect IP address ?
(1) 192.168.178.0
(2) 199.160.0.200
(3) 254.16.192.0
(4) 16.0.256.192

33. Which is the correct sequence of increasing memory storage cost per bit ?
A. Magnetic tapes
B. ROM
C. Magnetic disk
D. CPU Registers
Choose the **correct** answer from the options given below :
(1) A, D, B, C
(2) B, C, A, D
(3) C, B, D, A
(4) A, C, B, D

34. If $(L)_M$ represents a number L in base-M number system, which of the numbers A-D given below are equivalent to $(BD)_{16}$?

A. $(275)_8$

B. $(10111101)_2$

C. $(189)_{10}$

D. $(1223)_5$

Choose the **correct** answer from the options given below :

(1) A, C and D Only

(2) B and D Only

(3) A and B Only

(4) A, B and C Only

35. Match **List - I** with **List - II** :

List - I – (Malware)

A. Keyloggers

B. Adware

C. Trojan

D. Spyware

List - II – (Function)

I. Gathering information

II. Does not self replicate

III. Generate revenue for its developer

IV. Can be either hardware or software

Choose the **correct** answer from the options given below :

(1) A-IV, B-III, C-II, D-I

(2) A-III, B-II, C-I, D-IV

(3) A-II, B-III, C-IV, D-I

(4) A-I, B-II, C-IV, D-III

36. Which of the following are true about CO_2 present in natural waters ?

A. It comes from the atmosphere

B. It increases the pH of water

C. It comes due to decomposition of organic material in water by bacteria

D. It makes water acidic

E. It results into formation of bicarbonates

Choose the **correct** answer from the options given below :

(1) A, B, D and E Only

(2) A, C, D and E Only

(3) B, C and D Only

(4) A, B, C and E Only

37. Grit chamber is the part of which of the following Sewage Treatment process ?

(1) Primary Treatment

(2) Secondary Treatment

(3) Tertiary Treatment

(4) Biological Treatment

38. What was the correct sequence of the following gases in terms of their contribution (from maximum to minimum) to Global Warming upto the year 1990 ?

A. Methane (CH_4)

B. Nitrous Oxide (N_2O)

C. Carbon dioxide (CO_2)

D. Chlorofluoro carbons (CFCs)

Choose the **correct** answer from the options given below :

(1) C, A, D, B

(2) C, A, B, D

(3) D, C, B, A

(4) D, B, A, C

39. Which of the following is a Geologic Natural Hazard ?

(1) Drought

(2) Earthquake

(3) Cyclones

(4) Blizzards

40. Which of the following power plants is responsible for the significant release of methane (CH_4), a green house gas, in the atmosphere ?

(1) Nuclear Power Plants

(2) Wind Power Plants

(3) Hydroelectric Power Plants

(4) Solar Power Plants

41. DIKSHA, SWAYAM and SWAYAMPRABHA are the platforms which also have the provision of _____.

(1) Virtual library

(2) Virtual reality

(3) Virtual memory

(4) Virtual labs

42. The main objective of Rama Rao Committee was to enhance the quality of _____.

(1) Under graduate to post doctoral research

(2) Only doctoral research

(3) Science stream at Post-graduate level

(4) Post-graduate and doctoral research

43. Arrange the following developmental in order in view of the period they started functioning :

A. Sakshar Bharat

B. National Extension Service

C. National Adult Education Program

D. Community Development Program

E. National Literacy Mission

Choose the **correct** answer from the options given below :

(1) A, C, D, B, E

(2) D, B, C, E, A

(3) B, A, E, D, C

(4) C, D, A, E, B

44. Four guiding principles for planning with reference to higher education are :
A. Quality
B. Accountability
C. Equity
D. Assessment
E. Access
Choose the **correct** answer from the options given below :
(1) A, B, C and E Only
(2) B, C, D and E Only
(3) A, C, D and E Only
(4) A, B, C and D Only

45. Match **List - I** with **List - II** :
List - I – (Goals of Education)
A. National Integration
B. Development of values among the people
C. Development of physical resources
D. Sustainable Development
List - II – (Description)
I. It includes a spirit of large-hearted tolerance
II. Linked with productivity and work-experience
III. Ensure inclusive and equitable quality education
IV. Harmonizing religions, Language, Colour, caste and Creed etc.
Choose the **correct** answer from the options given below :
(1) A-I, B-II, C-III, D-IV
(2) A-II, B-III, C-IV, D-I
(3) A-IV, B-I, C-II, D-III
(4) A-III, B-IV, C-I, D-II

46. Read the following passage and then answer the question:

Over-eating is one of the most surprising practices among those who think they can afford it. In fact, authorities say that nearly all who can get as much as they desire, over-eat to their disadvantage. This class of people could save a great amount of food by missing one meal per week and at the same time they could improve their health. A heavy meal at night, the so-called ‘dinner’, is the fashion with many and is often taken shortly before retiring to bed. It is unnecessary and could be forgone, not only once a week but daily without loss of strength. Three to five hours are needed to digest food. While sleeping, this food not being required to give energy for work, is in many cases converted into excess fat, giving rise to excess weight. The evening meal should be light, taken three or four hours before retiring. This prevents over-eating, conserves energy, and reduces one’s expenditure on food.

Why should people who overeat refrain from doing so ?
(1) Because overeating leads to muscle gain
(2) Because overeating is detrimental to health
(3) Because overeating conserves food
(4) Because overeating is an unethical practice

47. Read the following passage and then answer the question:

Over-eating is one of the most surprising practices among those who think they can afford it. In fact, authorities say that nearly all who can get as much as they desire, over-eat to their disadvantage. This class of people could save a great amount of food by missing one meal per week and at the same time they could improve their health. A heavy meal at night, the so-called ‘dinner’, is the fashion with many and is often taken shortly before retiring to bed. It is unnecessary and could be forgone, not only once a week but daily without loss of strength. Three to five hours are needed to digest food. While sleeping, this food not being required to give energy for work, is in many cases converted into excess fat, giving rise to excess weight. The evening meal should be light, taken three or four hours before retiring. This prevents over-eating, conserves energy, and reduces one’s expenditure on food.

The writer wants the readers :
(1) to skip heavy dinner and take light evening meal instead
(2) not to eat anything at night
(3) to take food once a day
(4) to take meal before the sunset

48. Read the following passage and then answer the question:

Over-eating is one of the most surprising practices among those who think they can afford it. In fact, authorities say that nearly all who can get as much as they desire, over-eat to their disadvantage. This class of people could save a great amount of food by missing one meal per week and at the same time they could improve their health. A heavy meal at night, the so-called 'dinner', is the fashion with many and is often taken shortly before retiring to bed. It is unnecessary and could be forgone, not only once a week but daily without loss of strength. Three to five hours are needed to digest food. While sleeping, this food not being required to give energy for work, is in many cases converted into excess fat, giving rise to excess weight. The evening meal should be light, taken three or four hours before retiring. This prevents over-eating, conserves energy, and reduces one's expenditure on food.

What is the most appropriate time for having evening meal ?
(1) Two hours before the sunset
(2) Soon after the sunset
(3) Three or four hours before going to bed
(4) just before sleeping

49. Read the following passage and then answer the question:

Over-eating is one of the most surprising practices among those who think they can afford it. In fact, authorities say that nearly all who can get as much as they desire, over-eat to their disadvantage. This class of people could save a great amount of food by missing one meal per week and at the same time they could improve their health. A heavy meal at night, the so-called 'dinner', is the fashion with many and is often taken shortly before retiring to bed. It is unnecessary and could be forgone, not only once a week but daily without loss of strength. Three to five hours are needed to digest food. While sleeping, this food not being required to give energy for work, is in many cases converted into excess fat, giving rise to excess weight. The evening meal should be light, taken three or four hours before retiring. This prevents over-eating, conserves energy, and reduces one's expenditure on food.

According to the passage how many times in a day one is expected to have food ?
(1) Three times in a day
(2) Two times in a day
(3) Once in a day
(4) Not clearly specified

50. Read the following passage and then answer the question:

Over-eating is one of the most surprising practices among those who think they can afford it. In fact, authorities say that nearly all who can get as much as they desire, over-eat to their disadvantage. This class of people could save a great amount of food by missing one meal per week and at the same time they could improve their health. A heavy meal at night, the so-called 'dinner', is the fashion with many and is often taken shortly before retiring to bed. It is unnecessary and could be forgone, not only once a week but daily without loss of strength. Three to five hours are needed to digest food. While sleeping, this food not being required to give energy for work, is in many cases converted into excess fat, giving rise to excess weight. The evening meal should be light, taken three or four hours before retiring. This prevents over-eating, conserves energy, and reduces one's expenditure on food.

According to the passage, people overeat because _____.
(1) they can afford it
(2) they feel like eating
(3) they have to work more
(4) they want energy to be conserved