

UGC NET Dec 2019 5th December Morning Shift

Comprehension:

The table below embodies data on the number of students admitted in three different colleges (A, B and C) during six different years from 2014 to 2019. Based on the data contained in the table, answer the questions 1-5:

Year- Wise Number of Admitted students in different colleges:

College Year	A	B	C
2014	8000	14000	11000
2015	15000	17000	13000
2016	17000	23000	19000
2017	13000	27000	23000
2018	22000	26000	24000
2019	27000	18000	16000

1.) In which college was the number of students admitted in the year 2016 second lowest and the number of students admitted in the year 2018 minimum respectively?

- (A) College C and College B
- (B) College B and College A
- (C) College C and College A
- (D) College A and College B

2.) What is the approximate percent (%) increase in the number of students admitted in college A in the year 2016 as compared to previous year?

- (A) 23%
- (B) 123%
- (C) 113%
- (D) 13%

3.) Total number of students admitted in college C over all the years was approximately what percent (%) of total number of students admitted in all the three colleges together in the year 2017?

- (A) 168%
- (B) 162%
- (C) 158%
- (D) 175%

4.) What is the average number of students admitted in college A in the year 2015, in college B in the year 2016, and in college C in the year 2019 together?

- (A) 18000
- (B) 24000
- (C) 17000
- (D) 28000

5.) What is the difference between the total number of students admitted in college A overall the years together and the total number of students admitted in college C in the year 2018 and 2019 together?

- (A) 6400
- (B) 62000
- (C) 64000
- (D) 61000

6.) In the word TEACHER is coded as TCJACCV and the word SURGEON is coded as PMGETSU in a certain code language, then which of the following will represent the word CONCORD in that language?

- (A) FTQEPQE
- (B) EQPEQTF
- (C) FPQAPME
- (D) EMPAQPF

7.) Which one of the following factors does not contribute to learning mathematical concepts?

- (A) Real life events
- (B) Assessing the existing mathematical knowledge of the learner before deciding the syllabi
- (C) Teaching mathematics and history together
- (D) Narrating the life experience of the mathematician who has given the concept

8.) Academic performance of students is determined by:

- (a) Intelligence
 - (b) Motivation
 - (c) Physique
 - (d) Gender
- (A) (a) and (d) only
 - (B) (a) and (b) only
 - (C) (b) and (c) only
 - (D) (c) and (d) only

9.) Given below are two statements – one is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: In the afternoon of a hot sunny day during the summer season, the tropospheric ozone levels in a city like Delhi are expected to be lower as compared to morning and evening.

Reasons R: In the afternoon period, atmosphere is unstable and its dilution potential is higher as compared to mornings and evenings.

In the light of the above stated two statements, choose the correct option from the choices given below:

- (A) Both A and R are true and R is the correct explanation of A
- (B) Both A and R are true and R is not the correct explanation of A
- (C) A is true, but R is false
- (D) A is false, but R is true

10.) Given below are two statements – one is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: The Governor has the power to ask for any information from the chief Minister regarding the administration of the State.

Reasons R: The Governor is the real Head of the State administration.

In the context of the above two statements, choose the correct option:

- (A) Both A and R are true and R is the correct explanation of A
- (B) Both A and R are true and R is not the correct explanation of A
- (C) A is true, but R is false
- (D) A is false, but R is true

11.) Which of the following statements is/are correct in the context of 'Digital India' Initiative of Government of India?

- (a) National Digital Library of India (NDL India) is a 24 × 7 online store house of all academic awards duly digitized and lodged by academic institutions.
- (b) National Academic Depository (NAD) is an all – digital library that stores information (metadata) about different types of digital contents relevant to the citizens.

Choose the correct option

- (A) a only
- (B) b only
- (C) Both a and b
- (D) Neither a nor b

12.) A solid is in form of a cylinder with hemispherical ends. The diameter of the cylinder is $\frac{1}{3}$ of its height (excluding the hemispherical ends). The total length of the solid including the hemispherical ends is 56cm. What is the surface area of the solid?

- (A) 3080 cm^2
- (B) 2464 cm^2
- (C) 2772 cm^2
- (D) 2156 cm^2

13.) Which one of the following groups of commission on education has been chronologically in an order of year in which they were constituted?

- (A) Kothari Commission, Mudaliar Commission, Radhakrishnan Commission
- (B) Radhakrishnan Commission, Mudaliar Commission, Kothari Commission
- (C) Mudaliar Commission, Kothari Commission, Radhakrishnan Commission
- (D) Radhakrishnan Commission, Kothari Commission, Mudaliar Commission

14.) In grounded theory, researchers collect data using theoretical sampling until theoretical saturation is achieved. This process can be summarized in the following sequence.

- (A) Sample theoretically decided → Collect data → Analyse data → Theoretical Saturation
- (B) General research question → Collect data → Sample theoretically decided → Analyse data → Theoretical Saturation
- (C) Sample theoretically decided → General research question → Collect data → Theoretical Saturation
- (D) General research question → Sample theoretically decided → Collect data → Analyse data → Theoretical Saturation

15.) Which one of the following combination of propositions is considered to be contraries in the classical square of opposition?

- (A) Universal affirmative and universal negative
- (B) Universal affirmative and particular affirmative
- (C) Particular affirmative and universal negative
- (D) Particular affirmative and particular negative

16.) Consider the following statements with reference to categorical propositions:

- (a) "Some birds are mammals" is a particular affirmative proposition and it distributes subject term alone.
- (b) "Some birds are mammals" is a particular affirmative proposition and it distributes predicate term alone.
- (c) "Some birds are mammals" is a particular affirmative proposition and it distributes both subject and predicate terms.
- (d) "Some birds are mammals" is a particular affirmative proposition and it distributes neither subject nor predicate term.

Choose your answer from the following options:

- (A) Only (a) and (d) are correct
- (B) Only (c) and (d) are correct
- (C) Only (b) is correct
- (D) Only (d) is correct

17.) Match the following classes of chemicals with their descriptions:

(Chemical Class)

- (a) Allergens
- (b) Mutagens
- (c) Carcinogens
- (d) Teratogens

(Description)

- (i) Chemicals that alter or damage the genetic material (DNA) cells
- (ii) Substances that activate the immune system
- (iii) Chemicals that specifically cause abnormalities during embryonic growth and development
- (iv) Substances that cause invasive out of control cell growth resulting in malignant tumors

Choose your answer from the following options:

- (A) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)
- (B) (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)
- (C) (a)-(ii), (b)-(i), (c)-(iv), (d)-(iii)
- (D) (a)-(iii), (b)-(i), (c)-(ii), (d)-(iv)

18.) Which among the following is NOT an alternative to traditional assessments?

- (A) Multiple Choice Questions
- (B) Performance Test
- (C) Portfolios
- (D) Exhibitions

19.) Match correctly the contribution/concept of Column II with the name of the thinkers given in Column I

- (a) Karl popper

- (b) T.S. Kuhn
- (c) Paul Feyerabend
- (d) Francis Bacon

Column II

- (i) Inductive method
- (ii) Against the method
- (iii) Paradigm
- (iv) Falsification

Choose your answer from the following options:

- (A) (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)
- (B) (a)-(iii), (b)-(i), (c)-(iv), (d)-(ii)
- (C) (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)
- (D) (a)-(iv), (b)-(iii), (c)-(i), (d)-(ii)

20.) Which of the following activities are performed by the researcher in an ethnographic research?

- (a) Conducts structured interview with the members of the community
- (b) Gets immersed in a social setting for an extended period of time
- (c) Listens to and engages in conversation
- (d) Tries to educate people about the harms of some evil practices

Choose the correct answer:

- (A) (a) and (b) only
- (B) (a) and (c) only
- (C) (b) and (d) only
- (D) (b) and (c) only

21.) Which one of the following is not a part of immediate deductive inference?

- (A) Conversion
- (B) Obversion
- (C) Syllogism
- (D) Contraposition

22.) Which two among the following factors are responsible for transgression of ethical principle in research?

- (a) Harm to the participants
- (b) Lack of informed consent
- (c) Not greeting the participants after the experiment is over
- (d) Asking difficult questions

Choose the correct answer:

- (A) (a) and (c) only
- (B) (b) and (c) only
- (C) (a) and (d) only
- (D) (a) and (b) only

23.) Pointing towards a man, a woman said, "His wife's father is the husband of my mother's only daughter". How is the woman related to the man?

- (A) Daughter
- (B) Sister-in-law

- (C) Sister
- (D) Mother-in-law

24.) Identify the ways that would be followed by a public sector organization to communicate with public by organizing an open house:

- (a) Publicity
- (b) Lobbying
- (c) Public relations
- (d) Image building

Choose your answer from the following options:

- (A) (a), (c) and (d)
- (B) (b), (c) and (d)
- (C) (a), (b) and (d)
- (D) (a), (b) and (c)

25.) Which of the following numbers would occur next in the series

2, 6, 30, 60, 130, 210_____?

- (A) 330
- (B) 350
- (C) 370
- (D) 378

26.) The compound interest on a certain sum of money for 3years at the rate of 10% per annum is RS. 993,00. The simple interest on the same sum at the rate of 8% per annum for 4 years would be equal to which of the following?

- (A) Rs. 900,00
- (B) Rs. 930,00
- (C) Rs. 960,00
- (D) Rs. 990,00

27.) Match correctly the items of Column I with the Column II

Column I

- (a) Dyslexia
- (b) Dysgraphia
- (c) Dyscalculia
- (d) ADHD

Column II

- (i) Difficulty in doing mathematics
- (ii) Difficulty in reading
- (iii) Difficulty in writing
- (iv) Difficulty in concentrating

Choose your answer from the following options:

- (A) (a)-(i), (b)-(iii), (c)-(iv), (d)-(ii)
- (B) (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)
- (C) (a)-(iv), (b)-(i), (c)-(iii), (d)-(ii)
- (D) (a)-(i), (b)-(iv), (c)-(ii), (d)-(iii)

28.) Noise levels at a traffic site are recorded for one hour at a sampling interval of 1 second and percentile indices of noise L_1 , L_{10} , L_{60} , L_{90} are computed from the data. The indices are then arranged in increasing order in terms of their values starting from minimum to maximum. Which of the following options represents their correct order?

- (A) L_1 , L_{10} , L_{60} , L_{90}
- (B) L_{10} , L_{60} , L_{90} , L_1
- (C) L_{60} , L_{90} , L_{10} , L_1
- (D) L_{90} , L_{60} , L_{10} , L_1

29.) A college teacher conducts a quiz session with a view to accelerate the tempo of motivational participation. This will form part of which type of evaluation?

- (A) Summative evaluation
- (B) Criterion based evaluation
- (C) Formative evaluation
- (D) Diagnostic evaluation

30.) Given below is question 'Q' followed by three statements. Identify the statements (a, b, c) that are necessary to answer the question.

Question: What is the average age of 30 students studying in a class?

- (a) Boys and girls in the class are in the ratio 7:8
- (b) The average age of boys and girls is 12.2 years and 11.4 years, respectively.
- (c) The number of boys in the class is two less than the number of the girls in the class

Choose the correct answer:

- (A) (a) and (b) only
- (B) (b) and (c) only
- (C) (a) and (c) only
- (D) (b) and either (a) or (c)

31.) Who among the following, first took the initiative for appointing a University Education Commission during pre-independence period?

- (A) Lord Curzon
- (B) Lord Ripon
- (C) Lord Wellesley
- (D) Lord Bentick

32.) Match the following communication channels with their distinguishing type:

(Communication Channel)

- (a) Blogging
 - (b) Television
 - (c) Periodicals
 - (d) Collection sites
- (Distinguishing Type)
- (i) Electronic Media
 - (ii) Print Media
 - (iii) Social Media
 - (iv) World wide web

Choose the correct option from the following options:

- (A) (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)

- (B) (a)-(ii), (b)-(iv), (c)-(iii), (d)-(i)
- (C) (a)-(i), (b)-(iii), (c)-(iv), (d)-(ii)
- (D) (a)-(iii), (b)-(i), (c)-(ii), (d)-(iv)

33.) Which of the following groups of electronic scientists has been given in an order chronologically?

- (A) Guglielmo (G.) Marconi, Lumiere Brothers, Lee forest, John Fleming and John Logic Baird
- (B) John Logic Baird, Lumiere Brothers, Guglielmo (G.) Marconi, Lee forest and John Fleming
- (C) Lee forest, John Fleming, Lumiere Brothers, Guglielmo (G.) Marconi and John Logic Baird
- (D) Lumiere Brothers, Guglielmo (G.) Marconi, Lee forest, John Fleming and John Logic Baird

34.) Which among the following is NOT the principle associated with Positivism?

- (A) Phenomenalism
- (B) Deductivism
- (C) Inductivism
- (D) Interpretivism

35.) Identify the communication which is valid as documentary evidence from the following:

- (A) Written Communication
- (B) Verbal Communication
- (C) Gestural Communication
- (D) Non-verbal Communication

36.) Assumption of an unperceived fact in order to reconcile two apparently inconsistent perceived facts is known in Indian Logic as:

- (A) *Anumana* (Inference)
- (B) *Upamana* (Comparison)
- (C) *Arthapatti* (Implication)
- (D) *Anupalabdhi* (Non-apprehension)

37.) Match the following types of communication with their distinguishing examples

(Types of communication)

- (a) Formal Communication
- (b) Informal Communication
- (c) Outward Communication
- (d) Inward Communication

Distinguishing examples

- (i) Government agencies
- (ii) Circular
- (iii) Memos
- (iv) Group chain

Choose your answer from the following options:

- (A) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)
- (B) (a)-(ii), (b)-(iii), (c)-(iv), (d)-(i)
- (C) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)
- (D) (a)-(iv), (b)-(i), (c)-(ii), (d)-(iii)

38.) Choose the institutions which are not authorized to confer degree according to UFC Act 1956:

- (a) Institutions established under linguistic minority
- (b) Deemed to be Universities
- (c) Constituent Colleges
- (d) Affiliated Colleges

Choose the correct answer:

- (A) (a), (b) and (d) only
- (B) (a), (b) and (c) only
- (C) (b), (c) and (d) only
- (D) (a), (c) and (d) only

39.) In a group setting which of the following factors hinder creativity of its members?

- (a) Norm to maintain consensus at any cost
- (b) To think without any fear of being ridiculed
- (c) To respect one another's ideas
- (d) To criticize if somebody's idea is not correct

Choose the correct answer:

- (A) (a) and (c) only
- (B) (b) and (d) only
- (C) (c) and (b) only
- (D) (d) and (a) only

40.) Given below are two statements – one is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Information Technology is fast becoming a very important field of activity in India.

Reasons R: Software is one of the major exports of India and further India has a very strong base in hardware

In the light of the above stated two statements, choose the correct option from the choices given below:

- (A) Both A and R are true and R is the correct explanation of A
- (B) Both A and R are true and R is not the correct explanation of A
- (C) A is true, but R is false
- (D) A is false, but R is true

41.) Which of the following statements is/are correct?

- (a) WWW is a network of networks that first started with four computer nodes
- (b) WWW is a service that runs on the Internet

Choose the correct option

- (A) a only
- (B) b only
- (C) Both (a) and (b)
- (D) Neither (a) nor (b)

42.) Spread of forest fires is influenced by

- (a) Slope
- (b) Soil Moisture
- (c) Wind

Choose the correct answer:

- (A) (a) and (b) only
- (B) (b) and (c) only
- (C) (a) and (c) only
- (D) (a), (b) and (c)

43.) Select the option that contains only optical storage media

- (A) USB memory stick, Blu-Ray disk, CD-ROM, DVD
- (B) DVD, CD-ROM, USB memory stick, CD-RW
- (C) Hard disk, USB memory stick, CD-ROM, DVD
- (D) DVD, CD-R, Blu-Ray Disk, CD-RW

44.) Math List I with List II

List I

- (a) 50 in decimal
- (b) 102 in decimal
- (c) Real – time video conferencing
- (d) SMS texting

List II

- (i) 0110010 in binary
- (ii) 1100110 in binary
- (iii) Synchronous communication
- (iv) Asynchronous communication

Choose your answer from the following options:

- (A) (a)-(ii), (b)-(i), (c)-(iii), (d)-(iv)
- (B) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)
- (C) (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)
- (D) (a)-(i), (b)-(ii), (c)-(iv), (d)-(iii)

45.) Which one of the following is signified by the term '*hetu*' in the process of *Anumana* (inference) in classical Indian School of Logic?

- (A) Example Provided
- (B) Statement of reason
- (C) Proposition to be proved
- (D) Conclusion Proved

Read the following passage and answer questions which follow:

I do not wish to suggest that the humanistic elements in education are less important than the utilitarian elements. To know something of great literature, something of world history, something of music and painting and architecture, is essential if the life of imagination is to be fully developed. And it is only through imagination that men become aware of what the world might be; without it, 'progress' would become mechanical and trivial. But science, also, can stimulate the imagination. Psychology was, until fairly lately, a merely academic study, with very little application to practical affairs. This is all changed now. We have, for instance, industrial psychology, clinical psychology, educational psychology, all of the greatest practical importance. We may hope and expect that the influence of psychology upon our institutions will rapidly increase in the near future. In education, at any rate, its effect has already been great and beneficent.

- 46.) In the passage, the author is optimistic about
- (A) The utilitarian elements in education
 - (B) Decrease in the role of imagination in education
 - (C) The role of psychology in laboratories
 - (D) Increase in the influence of psychology upon institutions.

- 47.) As per the passage, people become aware of “What the world might be”? only through
- (A) Literature
 - (B) History
 - (C) Imagination
 - (D) Music

- 48.) According to the passage psychology until recently was of very little
- (A) Academic orientation
 - (B) Application in academics
 - (C) Application to practical affairs
 - (D) Application to imagination

49.) As per the passage, if the life of imagination is to be fully developed, some exposure to the following is required:

- (a) Literature
- (b) World history
- (c) Music
- (d) Politics

Choose the correct answer:

- (A) (a) and (b) only
- (B) (a) and (c) only
- (C) (a), (b) and (d) only
- (D) (a), (b) and (c) only

- 50.) As per the passage, without imagination the ‘progress’ would become
- (A) Humanistic
 - (B) Mechanical
 - (C) Creative
 - (D) Realistic