

**DEC 2020 JUNE 2021 SHIFT-2 PAPER 1 NTA UGC NET SOLVED PAPER**

Consider the following table which contain number of blood samples given in bracket collected by a hospital to identify blood group in a particular month Based on the date in the table answer question (1-5)

Reported Blood group	Hospital W (1000)	Hospital X (500)	Hospital Y (1000)	Hospital Z (500)
	A Positive	300	150	350
B Positive	350	100	300	100
A Negative	150	50	150	50
B Negative	100	50	50	150

Q.1. What is the percentage of A-Negative from the total number of blood samples collected?

- (1) 14.22
- (2) 18.00
- (3) 13.33
- (4) 14.33

Answer: 3

Q.2. Which hospital reported highest negative blood group

- (1) Hospital Y
- (2) Hospital X
- (3) Hospital Z
- (4) Hospital W

Answer: 4

Q.3. What is the percentage of blood group reported in the table?

- (1) 82.12
- (2) 83.33
- (3) 84.33
- (4) 84.12

Answer: 2

Q.4. What is the percentage of B-positive cases from the total positive cases reported?

- (1) 48.57
- (2) 47.57
- (3) 49.51
- (4) 46.11

Answer: 1

Q.5. What is the ratio of A-positive cases to A-Negative cases?

- (1) 5:3
- (2) 9:4
- (3) 9:5
- (4) 5:4

Answer: 2

Q.6. Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R)

Assertion (A): There are regional variations in the quality of education provided by the institutions of higher education

Reasons (R): Institutions of higher education cannot be compared as they cater to the needs of different social groups of students.

In the light of the above statements, choose the most appropriate answer from the options given below:

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)

(2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)

(3) (A) is correct but (R) is not correct

(4) (A) is not correct but (R) is correct

Answer: 2

Q.7. To characterize hazardous waste following characteristics are taken into account

(A) Conductivity

(B) Ignitability

(C) Corrosivity

(D) Magnetic susceptibility

(E) Reactivity

Choose the correct answer from the options given below:

(1) (A), (B), (C) and (E) only

(2) (B), (C) and (E) only

(3) (A), (C) and I only

(4) (B), (C), (D) and E) only

Answer: 2

Q.8. Various kinds of thinking are enhanced by particular models of teaching Concept formation is one such model which trains to solve problems inductively Identify the correct sequence of stages for concept formation.

(A) Grouping items into categories with common attributes of members

(B) Identifying the topic / problem

(C) Developing labels for categories

(D) Enumerating the data relevant to topic/problem

Choose the correct answer from the options given below:

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

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

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

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

Answer: 3

Q.9. Which among the following are the types of Universities existing in India currently?

(A) Community University

(B) Deemed University

(C) Research University

(D) Central University

(E) Private University

Choose the correct answer from the options given below:

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

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

(3) (B), (D) (E) only

(4) (A), (C), (D) only

Answer: 3

Q.10. Match List I with Last II

List I

Scholar

(A) Adi Shankara

(B) Bharatha Muni

(C) Panini

(D) Ramanuja

List II

Communication variable

- (I) Importance of grammar
- (II) Concept of 'rasa'
- (III) Use of native language
- (V) Intra personal communication

Choose the correct answer from the options given below:

- |     | (A) | (B) | (C) | (D) |
|-----|-----|-----|-----|-----|
| (A) | IV  | II  | I   | III |
| (B) | II  | III | IV  | I   |
| (C) | III | IV  | I   | II  |
| (D) | I   | II  | III | IV  |

Answer: 1

Q.11. The Environment (protection) Act, 1086 was the result of India's commitment to take appropriate action for the protection and improvement of environment, at the:

- (1) 1985 Vienna convention for protection of one layer
- (2) Convention on long range trans boundary air pollution, 1983
- (3) Convention on international trade in endangered species. 1975 (CITES)
- (4) United Nation's Conference on the human environment, Stockholm. 1972

Answer: 4

Q.12. Given below are two statements:

Statement I: To convert a speed given in m/s into a speed in km/h, we multiply with 5/18

Statement II: To convert a speed given in km/h into a speed in m/s, we multiply with 18/5.

In the light of the above statements, choose the most appropriate answer from the options given below

- (3) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect

(4) Statement I is incorrect but Statement II is correct

Answer: 2

Q.13. The golden rules that communicators should follow are:

- (A) They should be aloof
- (B) They should take sides
- (C) They must be heard
- (D) They must be understood
- (E) They must be appreciated

Choose the correct answer from the options given below:

- (1) (A) (B) (C) only
- (2) (B), (C), (D) only
- (3) (D), (E), (A) only
- (4) (C), (D), (E) only

Answer: 4

Q.14. A reputed company employed Mr. Harsh to manage and maintain their networking architecture and wide area connectivity: Which of these best describes his job profile?

- (1) Programmer
- (2) Architect
- (3) Networking engineer
- (4) Web designer

Answer: 3

Q.15. When is a series of terms said to be in the order of increasing extension

- (A) When each term in the series (except the first) denotes a class having more members than class denoted by the term preceding it.
- (B) When the class size gets larger with each successive term

(C) When each term in the series (except the first denotes a class having less members than the class denoted by the term preceding it.

(D) When the class size gets smaller with each successive term

Choose the most appropriate answer from the options given below:

(1) Only (A) and (B) e correct

(2) Only (B) and (D) e correct

(3) Only (C) and (D) are correct

(4) Only (A) and (D) are correct

Answer: 1

Q.16. The sequence of elements in a classroom speech is

(A) Introduction

(B) Description

(C) Feedback

(D) Clarification

(E) Conclusion

Choose the correct answer from the options given below:

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

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

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

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

Answer: 4

Q.17. The principle ‘Students learn together, but perform alone’ is an example of :

(1) Individual accountability

(2) Positive interdependence

(3) Face-to-face interaction

(4) Group processing

Answer: 1

Q.18. Given below are two statements:

Statement I: A Webinar allows a speaker from the hosting organization to share multimedia content with audiences that can be located anywhere.

Statement II: A Webinar allows speaker and participants to share multimedia content located any where

In the light of the above statements, choose the most appropriate answer from the options given below:

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

Answer: 3

Q.19. Poly crystalline silicon often used in Photovoltaic cells as semiconductors are

- (1) Many individual crystals with different orientations
- (2) Many individual crystals with similar orientations
- (3) Amorphous silicon converted to crystal silicon
- (4) Crystal silicon grown in laboratory

Answer: 1

Q.20. Given below are two statements:

Statement I: Relationship of invariable concomitance (vyapti) can be claimed to exist between two things if they are causally related

Statement II: Relationship of invariable concomitance can be claimed to exist between two things if they are related as species-genus.

In the light of the above statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false



(8) Statement I is true but Statement II is false

(4) Statement I is false but Statement II is true

Answer: 1

Q.21. Which among the following is NOT the responsibility of UGC?

(1) To regulate quality of higher education.

(2) To maintain discipline in campuses of institutions of higher education

(3) To find research projects of faculty

(4) To suggest model curriculum to the universities

Answer: 2

Q.22. In case of anumana (inferences) identify the sequences of five steps of syllogistic argument according to Nyaya:

(A) The mountain has fire

(B) The mountain also has smoke accompanied by fire, like kitchen

(C) Therefore the mountain has fire

(D) Because of smoke

(E) Wherever there is smoke, there is fire, as in the kitchen

Choose the correct answer from the options given below:

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

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

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

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

Answer: 4

Q.23. The number which is nearest to 3105 and exactly divisible by 21 is

(1) 3101

(2) 3108

(3) 3187

(4) 3107

Answer: 2

Q.24. Which among the following is not related to the characteristics of co-operative learning?

- (1) Experiences that develop good learning and social skills
- (2) Students feel overloaded with too much work in groups
- (3) Building positive relationships with students
- (4) Provide individual attention and assistance to one another

Answer: 2

Q.25. When a respondent is aware of being measured then its effect on his behaviour is identified as

- (1) Self-consciousness
- (2) Reactivity
- (3) Artificiality
- (4) Identity effect

Answer: 2

Q.26. Match List I with List II:

List I

- (A) Supplementary angles
- (B) Complementary angles
- (C) Acute angles
- (D) Obtuse angles

List II

- (I) Angles less than  $90^\circ$
- (II) Two angles whose sum is  $180^\circ$
- (III) Angles greater than  $90^\circ$  but less than  $180^\circ$

(V) Two angles whose sum is  $90^\circ$

Choose the correct answer from the options given below:

- |     | (A) | (B) | (C) | (D) |
|-----|-----|-----|-----|-----|
| (A) | III | II  | I   | IV  |
| (B) | IV  | II  | III | I   |
| (C) | II  | IV  | I   | III |
| (D) | II  | IV  | III | I   |

Answer: 3

Q.27. Which of the following methods are learner-centered teaching methods?

- (A) Active learning
- (B) Cooperative learning
- (C) Inductive teaching and learning
- (D) Passive learning

Choose the most appropriate answer from the options given below:

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

Answer: 1

Q.28. Which of the following are characteristics/properties of permanent hardness in water?

- (A) Presence of bicarbonates of calcium and magnesium
- (B) Presence of sulphates of calcium and magnesium
- (C) Forms good lather when comes in contact with soap
- (D) Presence of chloride of calcium and magnesium
- (E) Can be removed by boiling the water

Choose the correct answer from the options given below:

- (1) (B), (C) and (D) only
- (2) (A) and (D) only
- (3) (A), (B), (D) and (E) only
- (4) (B) and (D) only

Answer: 4

Q.29. What is the correct sequence of prescribed limits in residential areas of 24 hourly averaged following pollutants by Central Pollution Control Board of India?

- (A) PM 2.5
- (B) PM10
- (C) SO<sub>x</sub>
- (D) Pb

Choose the correct answer from the options given below:

- (1) Pb > SO<sub>x</sub> > PM10 > PM 2.5
- (2) PM10 > PM 2.5 > SO<sub>x</sub> > Pb
- (3) PM2.5 > PM10 > Pb > SO<sub>x</sub>
- (4) PM10 > SO<sub>x</sub> > PM 2.5 > Pb

Answer: 4

Q.30. Given below are two statements: One is labelled as Assertion (A) and the other in labelled as Reason (R):

Assertion (A): Unique case orientation is possible in qualitative research which may later lead to cross-case analysis.

Reasons (R): Design flexibility is the hallmark of qualitative research as it is open to situational changes.

In the light of the above statements, choose the correct answer from the options given below:

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are correct but (R) is NOT the correct explanation of (A)

(3) (A) is correct but (R) is not correct

(4) (A) is not correct but (R) is correct

Answer: 1

Q.31. Which of the following techniques are used to control extraneous variables in research?

(A) Change of instrument

(B) Randomization

(C) Matching

(D) Removing variables

(E) Changing the research method

Choose the correct answer from the options given below:

(1) (A), (B), (C) only

(2) (B), (C), (D) only

(3) (B), (C), (D) only

(4) (A), (B), (E) only

Answer: 2

Q.32. Given below are two statements:

Statement I: Operating system is a set of program necessary to carry out operation for a specified application.

Statement II: Hardware represents the physical and tangible parts of the computer.

In the light of the above statements, choose the correct answer from the options given below:

(1) Both Statement I and Statement II are true

(2) Both Statement I and Statement II are false

(3) Statement I is true but Statement II is false

(4) Statement I is false but Statement II is true

Answer: 4

$$\sqrt{5\sqrt{5\sqrt{5\sqrt{5\dots}}}} \quad (\infty \text{ times})$$

Q.33. The value of .

- (1) 5
- (2) 6
- (3) 4.5
- (4) 6.78

Answer: 1

Q.34. Summarising and interpreting primary studies related to the identified research question or objective in a qualitative manner is called:

- (1) Qualitative review
- (2) Realistic review
- (3) Narrative review
- (4) Meta review

Answer: 3

Q.35. Multimedia files are the documents that contain a confirmation of:

- (A) Text
- (B) Photograph
- (C) Video
- (D) Computer
- (E) Audio

Choose the correct answer from the options given below:

- (1) (A), (C), (D) only
- (2) (A), (B), (C), (E) only
- (3) (A), (B), (C), (D) only

(4) (B), (C), (D). (E) only

Answer: 2

Q.36. Match List I with List II:

List I

Personality

(A) Rabindranath Tagore

(B) S. Chandrahekor

(C) Manjul Bhargava

(D) Amartya Sen

List II

Domain

(I) Physics

(II) Literature

(III) Economics

(IV) Mathematics

Choose the correct answer from the options given below:

- | (A)             | (B)             | (C)             | (D)             |
|-----------------|-----------------|-----------------|-----------------|
| (A) II I IV III | (B) IV III I II | (C) I II IV III | (D) III I IV II |

Answer: 1

Q.37. Given below are two statement:

Statement I: There is greater stress laid on the material aspects of inference by the exponent of Nyaya system.

Statement II: There is greater stress laid on the format aspect of the syllogistic expression in western logic.

In the light of the above statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

Answer: 1

Q.38. In computers ASCII stands for

- (1) Algorithm Selection Code Information Interchange
- (2) Asymptotic Sorting Code Intermediate Interface
- (3) American Standard Control Information Interchange
- (4) American Standard Code for Information Interchange

Answer: 4

Q.39. Match List I with List II

List I

Type of validity

- (A) Face Validity
- (B) Concurrent validity
- (C) Construct
- (D) Predictive

List II

Reflection

- (I) Indicates adequacy of instrument
- (II) Indicates the extent to which the measurement is used



(III) Compares a new test to an already established test.

(IV) The extent to which a score on a scale forecasts scores on same criterion measure

Choose the correct answer from the options given below:

- |     | (A) | (B) | (C) | (D) |
|-----|-----|-----|-----|-----|
| (A) | I   | II  | III | IV  |
| (B) | II  | III | IV  | I   |
| (C) | III | IV  | I   | II  |
| (D) | I   | III | II  | IV  |

Answer: 4

Q.40. Match List I with List II

List I

Model of Teaching

- (A) Positive Interdependence
- (B) Structured inquiry
- (C) Role playing
- (D) Jurisprudential inquiry

List II

Developer

- (I) Fannie Shaftel
- (II) David Johnson
- (III) Donal Oliver and James Shaver
- (IV) Robert Slavin

Choose the correct answer from the options given below:

- | (A) | (B) | (C) | (D) |
|-----|-----|-----|-----|
|-----|-----|-----|-----|

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

Answer: 2

Q.41. 'This is me' aspect of communication reflects:

- (1) The audience preference
- (2) The speaker's personality
- (3) The ego-centric attitude
- (4) The low level of confidence

Answer: 2

Q.42. Given below are two statements:

Statement I: Modern Universities in India were established first during colonial period.

Statement II: The British government were genuinely interested in expanding the institutions of higher education in India.

In the light of the above statements, choose the most appropriate answer from the options given below:

- (1) Both Statement I and Statement II are correct
- (2) Both Statement I and Statement II are incorrect
- (3) Statement I is correct but Statement II is incorrect
- (4) Statement I is incorrect but Statement II is correct

Answer: 3

Q.43. Given below are two statements:

Statement I: The evaluation of an argument involves two steps namely evaluating the link between premises and conclusion and evaluating the truth of the premises.

Statement II: Deductive arguments in which the conclusion actually follows from the premises are said to be valid, and those that also have true premises are said to be sound.

In the light of the above statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

Answer: 1

Q.44. Given below are two statements: One is labelled as Assertion (A) and the other is labelled as Reason (R):

Assertion (A): Communication competence is related to the power of knowledge in a classroom.

Reasons (R): Communication competence permits choices of communicating as required in the classroom context.

In the light of the above statements choose the most appropriate answer from the options given below:

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
- (2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A)
- (3) (A) is true but (R) is not false
- (4) (A) is false but (R) is true

Answer: 1

Q.45. How many terms are there in the following sequences?

1, 2, 4, 8, ....., 4096

- (1) 12
- (2) 13
- (4) 14
- (4) 15

Answer: 2

Read the passage and answer questions. (46-50)

The world over, leisure time has increased tremendously since World War II. In this time period social problems and maladies have also increased. Frustrations, nervous break downs, broken marriages, alcoholism and crime rates are directly related to too much time with nothing to do. Combine this with the permissiveness that has permeated our culture and the attitude of doing just enough to get by, and the problems are multiplied workers often lose pride in their workmanship and their performance begins to go down. When performance goes down, shoddy merchandise is produced and shoddy Merchandise does no find a ready market because consumers anywhere demand quality. They turn to foreign imports and the local producer is caught in the squeeze by lowered sales volume. Every nation must resell the idea of performance and honest effort for an honest day's pay. Surely the world owes us a living, but we have to work for it. We have to reverse the philosophy of doing little and collecting much or we will be caught in the pinch of pricing ourselves out of quality products and services. The only plan that is going to work over the long haul is an internal change in our philosophy. We must produce the quality merchandise people. demand at the right price or the consumer will turn more and more to imported products, Fortunately, we can do this, we say this without any mental reservation, because the local worker, under controlled tests, has consistently out produced his counterparts on project after project. Better quality means better price. Honest efforts, not higher tariffs in the solution to the problem.

Q.46. Too much leisure time will result in:

- (1) More productivity
- (2) Scope for creation
- (3) More social issues to solve
- (4) Increased permissiveness

Answer: 3

Q.47. When the local products are of sub-standard quality, the consumers will prefer

- (1) Imported goods
- (2) Paying more for quality products
- (3) To indulge in more leisure activities
- (4) To avoid the intended buying

Answer: 1

Q.48. The issue of low quality products can be addressed through:

- (1) Honest workmanship

- (2) Imposition of higher tariffs on imported goods
- (3) Lowering the production volume
- (4) Hiring of non-local workers

Answer: 1

Q.49. How can we move towards quality products that people demand?

- (1) Importing more and more foreign goods
- (2) By working for longer hours
- (3) Maintaining our existing philosophy of work
- (4) Produce quality products and price them properly

Answer: 1

Q.50. The idea of honest performance is linked to:

- (1) Higher Prices for local products
- (2) Earning an honest day's pay
- (3) Less work and more returns
- (4) Pricing out quality products and services

Answer: 1