

**TET\_JULY\_2024\_2A\_Maths&Science\_ENGLISH**  
**16.10.2024\_Afternoon\_Session-2**

1. Ego operates based on this principle
  1. Morality
  2. Reality
  3. Pleasure
  4. Pain
  
2. The ability of an individual to act purposefully, to think rationally and to deal effectively with the environment is
  1. Interest
  2. Attitude
  3. Intelligence
  4. Aptitude
  
3. The early childhood stage is regarded as the age of
  1. Exploratory
  2. Gang age
  3. Imitation
  4. Fantasy
  
4. The following individual is a proponent of heredity as the exclusive factor influencing growth and development
  1. Watson
  2. Freeman
  3. Bagley
  4. Galton

5. Bharathi wants to do Engineering, but she is afraid of failure. This type of conflict is
  1. Approach - Approach
  2. Approach - Avoidance
  3. Avoidance - Avoidance
  4. Double Approach - Avoidance
  
6. 'Object permanence' formed in this stage
  1. Sensory motor stage
  2. Pre operational stage
  3. Concrete operational stage
  4. Formal operational stage
  
7. According to Erikson the following stage of psycho-social developmental crisis found at the age of 12 to 20 years
  1. Autonomy Vs Doubt
  2. Initiative Vs Guilt
  3. Identity Vs Role Confusion
  4. Industry Vs Inferiority
  
8. Correct statement with regard to development
  1. Quantitative
  2. Changes are based on heredity
  3. Related to physical changes
  4. Comprehensive & wider
  
9. One of the following is not a Projective Test
  1. Ink blot Test
  2. Thematic Apperception Test
  3. Children's Apperception Test
  4. Bhatia Battery Test

10. 'Chatter Box' stage of child development
  1. Infancy
  2. Early childhood
  3. Late childhood
  4. Adolescence
  
11. Base for the proverb "We can lead a horse to the water but we cannot make it drink" is
  1. Law of Readiness
  2. Law of Effect
  3. Law of Exercise
  4. Law of Continuity
  
12. Learning is
  1. Simple and Goal oriented
  2. Simple and Universal
  3. Complex and Inactive
  4. Complex and Active
  
13. The person who feels lying is bad, won't lie. This kind of motivation is
  1. Intrinsic Motivation
  2. Achievement Motivation
  3. Extrinsic Motivation
  4. Artificial Motivation

14. The concepts of Latitudes and Longitudes are the examples of these concepts
- a) Simple
  - b) Concrete
  - c) Abstract
  - d) Complex
1. a & b
  2. a & c
  3. b & d
  4. c & d
15. This theory states that similarity of contents or similarity of methods promotes transfer of learning
1. Theory of formal discipline
  2. Theory of Identical elements
  3. Theory of Transposition
  4. Theory of Ideals
16. Termination of the unconditional stimulus after conditioning leads to
1. Reinforcement
  2. Spontaneous recovery
  3. Extinction
  4. Generalization
17. The psychologist who first described the figure – ground relationship
1. Edgar Rubin
  2. C.L. Morgan
  3. Richard
  4. Jerome Bruner

18. Traces formed in the brain during the memory process
  1. Neurograms
  2. Neuro muscular grams
  3. Polysomno grams
  4. Neuro imaging grams
  
19. Type of learning involves in learning 'States and Capitals'
  1. Rules learning
  2. Generalization learning
  3. Procedural learning
  4. Factual learning
  
20. One of the following does not belong to affective domain
  1. Responding
  2. Valuing
  3. Understanding
  4. Characterization
  
21. The author of the book 'Home – Schooling'
  1. Gijubai
  2. John Holt
  3. Makerenko
  4. Paulo Freire
  
22. "An infant boy's recognition of his mother among other family members." This learning belongs to
  1. Verbal Learning
  2. Perceptual Learning
  3. Conceptual Learning
  4. Discrimination Learning

23. The Prime Minister of India, who launched the 'Digital India' programme
1. Manmohan Singh
  2. Vajpayee
  3. Narendra Modi
  4. Indira Gandhi
24. One of the following is not an abstract concept
1. Justice
  2. Honesty
  3. Second
  4. Green colour
25. One of the following belongs to first generation computers
1. EDVAL
  2. CDC 1604
  3. IBM 1401
  4. IBM 1620
26. 1 PB =
1. 1024 GB
  2. 1024 TB
  3. 1024 ZB
  4. 1024 EB
27. Year of launch of 'VSNL' services in India
1. 1990
  2. 2000
  3. 1995
  4. 1984

28. The term 'MOOC' stands for
1. Massive Open Online Courses
  2. Mass Online Open Courses
  3. Mass Online Oriented Courses
  4. Massive Online Opening Courses
29. As per RTE - 2009, the number of teachers in a school of 40 strength is
1. 1
  2. 2
  3. 3
  4. 4
30. As per NEP - 2020, the first 5 years of schooling is known as
1. Foundational
  2. Preparatory
  3. Middle
  4. Primary

31. Read the following passage carefully.

*The old manuscript, locked away for centuries, contained a single line: "Beware the one who reads this last." The scholars, eager for knowledge, dismissed the warning, only to find its meaning too late.*

The manuscript contains the following:

1. A hidden treasure map
2. A mysterious warning
3. A list of names
4. Instructions for a ritual

32. Read the following passage carefully.

*In the deserted library, the only sound was the soft rustling of a single book. Its cover, covered in dust, hinted at a forgotten tale, which, when finally opened, revealed a map to an unknown realm.*

Something was unusual about the book in the library.  
Identify it.

1. It was glowing
2. It had no title
3. It contained a map
4. It was missing pages



33. Read the following poem carefully.

*A blush of pink upon the sky,  
As the night bids its soft goodbye.  
The first light whispers through the trees,  
Bringing day with gentle ease.*

The "blush of pink" in the poem is a metaphor for:

1. A sunset
  2. The early morning sky
  3. The evening clouds
  4. The reflection of the sun
34. Read the following poem carefully.

*Waves murmur tales of ancient shores,  
Where time stands still and wisdom soars.  
In the moon's soft glow, secrets flow,  
To depths where only dreams can go.*

The waves in the poem symbolize the following.

1. Modern events
  2. Ancient tales and wisdom
  3. Future predictions
  4. Physical obstacles
35. During a meeting, you want to get clarification on a point someone made.

Identify the best way to ask for clarification.

1. "I didn't understand a thing you just said. Your speech is boring."
2. "I don't need clarification; I know everything. I am able to understand everything."
3. "Your point doesn't make sense to me. Better luck next time."
4. "Could you please explain that point again? I want to make sure I understand."

36. In a product review, you read:

*"While the phone's battery life is excellent, the camera quality could be improved, especially in low-light conditions."*

The review suggests the following about the phone.

1. The phone has a great camera but poor battery life.
2. The phone is not recommended at all because of its low battery life.
3. The phone's battery life is good, but the camera is not ideal in low light.
4. The camera is perfect, and the battery life is poor.

37. You read in a job description:

*"Candidates must have at least three years of experience in project management and be proficient in Microsoft Office Suite. Experience with digital marketing is a plus, but not required."*

Identify the mandatory qualification for this job:

1. Experience in a three-year project
2. Three years of experience in digital marketing.
3. Experience in digital marketing and Microsoft management.
4. Three years of experience in project management.

38. You are reading a research paper abstract that says:

*"This study explores the effects of remote learning on student performance. The results suggest that while remote learning has benefits in flexibility, it poses challenges in maintaining student engagement."*

Identify one of the challenges mentioned in the study:

1. Students have no flexibility in remote learning.
2. Remote learning makes it hard to keep students engaged.
3. Remote learning has engaged students meaningfully and beneficially.
4. Student performance is unaffected by remote learning and it has no flexibility.

39. You are reading a contract that says:

*"The service provider will not be held liable for any damages resulting from client misuse of the services. The client agrees to follow all terms of use as specified in the attached guidelines. The agreement will automatically renew unless canceled by either party 30 days prior to the renewal date."*

Identify what happens if the client does not cancel the contract 30 days before the renewal date:

1. The contract will automatically renew.
2. The contract will be cancelled automatically.
3. The service provider will cancel the contract.
4. The client will need to pay a penalty.

40. You are writing a report for your company.

Identify the best way to organize the report:

1. Include random information as you think of it and mention all important points in conclusion.
2. Start with an introduction, followed by a section for the main points, and end with a conclusion.
3. Start with the conclusion and end with your name.
4. List all the information without any structure at the end.

41. You are writing an opinion essay on the importance of education.

Identify the best way to support your argument from the following.

1. "Everyone knows education is important, so I don't need to explain anything to anybody."
2. "Education is important because it improves career prospects, increases knowledge, and fosters personal growth."
3. "I think education is important, but not everyone agrees so I need not write an opinion essay."
4. "Education is important because I said so."

42. Identify an example of 'assimilation' from the following.
1. The /t/ in "butter" pronounced as a flap
  2. The omission of a sound in "family"
  3. The /n/ in "input" changing to /m/ before /p/
  4. The vowel in "sofa" pronounced as a schwa
43. What does vowel reduction refer to? Choose your answer from the following.
1. The change of vowels to a less distinct sound in unstressed syllables
  2. The omission of a sound or syllable in speech
  3. The process where a sound changes to become more like a neighboring sound
  4. The replacement of one vowel with another vowel sound
44. Identify the feature of a minimal pair.
1. Two words that differ by one phoneme and have different meanings
  2. Two words that have different meanings and different vowel sounds
  3. Two words that share the same consonant sounds
  4. Two words that are pronounced the same but spelled differently
45. Identify the free morpheme from the following.
1. "-ed" in "walked"
  2. "un-" in "undo"
  3. "-s" in "cats"
  4. "book" in "books"

46. The following is an example of zero derivation (conversion):
1. "unhappy" (from "happy")
  2. "smog" (from "smoke" + "fog")
  3. "email" (noun) and "email" (verb)
  4. "toothbrush" (tooth + brush)
47. The following morphological process involves adding prefixes or suffixes to a base word:
1. Conversion
  2. Affixation
  3. Compounding
  4. Blending
48. Identify the sentence with a subject complement:
1. "She is happy."
  2. "They elected him the winner."
  3. "She gave him a gift."
  4. "He is reading a book."
49. The compositional semantics focuses on the following.
1. The meanings of individual words
  2. How words and phrases combine to create meaning
  3. The historical development of words
  4. The social aspects of language use
50. Identify the sentence that is an example of lexical ambiguity:
1. "I saw the man with the telescope."
  2. "We live in New Delhi."
  3. "The bank was closed."
  4. "The cat is on the mat."

51. **The following** function of communication is used to maintain social relationships through small talk:
1. Directive
  2. Phatic
  3. Informative
  4. Persuasive
52. **One of the following** is an example of the **directive function** of communication:
1. Giving advice or instructions
  2. Expressing emotions
  3. Telling a joke
  4. Reporting an event
53. In a formal presentation, you begin with a personal story to engage the audience emotionally before transitioning into the main topic.
- Identify the purpose of the initial communication above.**
1. To share information
  2. To entertain
  3. To express emotions
  4. To build rapport
54. In a job interview, the interviewer asks about a difficult situation you faced at work and how you resolved it.
- Identify the primary communication purpose** behind the interviewer's question given above.
1. To share information
  2. To influence or persuade
  3. To evaluate problem-solving skills
  4. To build rapport

55. During a conversation, a friend says:

*"I'm not sure if I can make it to the party. I have a lot of work to do, but I'll try to come by later."*

Identify what the speaker means:

1. He is definitely coming to the party and he will not come later.
2. He will not come to the party at all.
3. He is unsure if he can attend, but will try to come later.
4. He is coming to the party early.

56. During a podcast interview, the guest says:

*"If I had known how complex the project was, I would have approached it differently. But at that point, we were too deep into it to make major changes."*

The guest implies that:

1. The project was well-planned from the start.
2. The project succeeded despite being complex.
3. They didn't fully understand the project's complexity at first.
4. They made significant changes to the project midway.

57. You overhear a colleague say to another:

*"I'm not thrilled about the new office layout. It's supposed to boost collaboration, but I feel like it's made things more chaotic."*

Identify the speaker's opinion on the new office layout:

1. The speaker thinks the new layout is beneficial.
2. The speaker dislikes the new layout and finds it disruptive.
3. The speaker feels the layout has improved collaboration.
4. The speaker has no strong feelings about the new layout.

58. Imagine you are Harish. You're at a networking event and want to start a conversation with a stranger.

Identify the best possible approach from the following.

1. "Hi, my name is Harish. It's nice to meet you. What brings you to this event?"
2. "Hey, I don't know you, but I need to talk to someone."
3. "I don't like talking to strangers. I am Harish. Why don't you tell me your name?"
4. "Can I have your business card right now? Can I find your name on the card?"

59. After the accident, Tom had to gather his wits together before he could explain what happened.

**Identify the meaning of the idiom 'gather his wits together' in the sentence above.**

1. Take a break from work.
2. Become calm and think clearly.
3. Get medical help immediately.
4. Call someone for advice.

60. During a conversation, someone says, "It's getting late," while looking at their watch.

What is the speaker implying? Choose your answer from the following.

1. They are just stating the time of day.
2. They want the conversation to continue.
3. They want to leave the conversation or end the meeting.
4. They are excited about the current time.



61. While Einstein was solving the most difficult problems in Physics, his private life was unravelling.

Identify the synonym of ‘unravelling’.

1. entangling
2. twisting
3. confusing
4. solving

62. One day she noticed a girl playing a xylophone and decided that she wanted to play it too.

Identify the antonym of ‘noticed’ in the context of the sentence.

1. overlooked
2. observed
3. participated
4. removed

63. The movie \_\_\_\_\_ by the critics as one of the best of the year.

Identify the best option that fits the blank.

1. is been praised
2. was praised
3. praises
4. has praised

64. Choose the correct prefix for the word 'connect' to mean 'not connect'.
1. in -
  2. dis -
  3. re -
  4. over -
65. Her performance was amazing; she really hit the nail on the head with her portrayal of the character.
- Identify the meaning of 'hit the nail on the head' in the above sentence.
1. to describe something accurately
  2. to miss an opportunity
  3. to be physically accurate
  4. to solve a problem quickly
66. Choose what 'get along' means:
1. to tight
  2. to ignore
  3. to have a good relationship
  4. to disagree
67. Identify the word that comes first in an alphabetically ordered dictionary:
1. Elevator
  2. Elephant
  3. Elegant
  4. Election

68. Identify the sentence that correctly uses commas to separate items in a list:
1. We need milk, bread and, eggs.
  2. We need, milk, bread, and, eggs.
  3. We need milk, bread, and eggs.
  4. We, need, milk bread and eggs.
69. Despite the train being late, Preetha waited for the train.  
Choose the sentence that correctly converts the simple sentence into a compound sentence:
1. The train was late, though Preetha waited for it.
  2. Preetha waited for the train because it was late.
  3. Preetha not wait for the train despite it being late.
  4. The train was late, but Preetha waited for it.
70. Identify the grammatically correct sentence:
1. Each of the cars are fast.
  2. Each of the cars is fast.
  3. Each of the car are fast.
  4. Each the car is fast.
71. Choose the sentence that provides factual information:
1. Can you help me with this project?
  2. The sun rises in the east
  3. Wow, that was fun!
  4. Please turn off the lights.

72. Identify the correct spelling of the word
1. rhythm
  2. rythm
  3. rhythim
  4. rhythm
73. She said, "I went to the market yesterday." Choose the correct indirect speech:
1. She said that she had gone to the market the previous day.
  2. She said that she goes to the market yesterday
  3. She said that she has gone to the market the previous day.
  4. She said that she goes to the market the previous day
74. If you don't follow the traffic rules, you will be punished.  
Choose the correct type of conditional clause:
1. Zero conditional
  2. First conditional
  3. Second conditional
  4. Third conditional
75. One of the following is the term for a person who believes in the presence of God:
1. Atheist
  2. Theist
  3. Agnostic
  4. Pantheist

76. Abstract nouns and uncountable nouns are considered \_\_\_\_\_ subjects.

Choose the option that fits the blank.

1. dual
2. multiple
3. singular
4. plural

77. Choose the correct example of a declarative sentence:

1. Are you going to the store?
2. Please pass the book.
3. The sky is clear today.
4. What a beautiful view!

78. The company is expanding its operations.

\_\_\_\_\_, it is hiring more staff to meet the demand.

Choose the linker that fits the blank.

1. Despite
2. Similarly
3. Hence
4. Nevertheless

79. Select the sentence where the definite article is used before nouns of news papers and magazines.

1. The Indian Express
2. The Indian Railways
3. The boy who is reading a magazine.
4. The girl who is selling newspapers.

80. “\_\_\_\_\_ you let me know if you’re coming?”
1. Should
  2. Must
  3. Could
  4. Can
81. Identify the sentence that correctly uses a predicate nominative.
1. He is a fast runner.
  2. They quickly ran to the shore.
  3. The winner of the race is she.
  4. The cake tastes sweetly.
82. Identify the sentence that uses an adjective to modify a noun correctly.
1. She sang the song beautifully.
  2. The beautiful garden is full of flowers.
  3. The quickly fox jumped over the fence.
  4. He runs every morning.
83. To reflect on what you have learned from the day’s events, you should include \_\_\_\_\_ in your diary entry.
1. a list of people you met.
  2. Personal reflections and lessons learned.
  3. details about upcoming events
  4. a summary of your work achievements.

84. One of the following should be included in the heading of an invitation. Choose your option.
1. RSVP details
  2. contact information
  3. venue address
  4. event purpose or title
85. Identify the sentence in the present perfect tense:
1. She is singing a song.
  2. They will arrive soon.
  3. He has written a letter.
  4. I was reading a book.
86. She will be waiting for you at the station.  
Identify the tense of the sentence:
1. Simple future tense
  2. Future Continuous tense
  3. Future Perfect tense
  4. Future Perfect Continuous tense
87. The cat is \_\_\_\_\_ the house.  
Choose the option that fits the blank.
1. due to
  2. outside of
  3. on behalf of
  4. on account of

88. The concert was cancelled \_\_\_\_\_ bad weather.

Choose the preposition that fits the blank.

1. owing to
2. in view of
3. in back of
4. out of

89. Read the passage carefully.

Public transportation in India faces challenges such as overcrowding, underfunding, and poor infrastructure, particularly in growing urban areas. Inadequate transportation affects daily commuting and economic opportunities, especially for low-income individuals. Enhancing public transportation systems and investing in infrastructure improvements are crucial for better mobility and accessibility.

Identify a key issue with public transportation in India.

1. overfunding
2. effective management
3. poor infrastructure
4. reduced demand



90. Read the passage carefully.

Public transportation in India faces challenges such as overcrowding, underfunding, and poor infrastructure, particularly in growing urban areas. Inadequate transportation affects daily commuting and economic opportunities, especially for low-income individuals. Enhancing public transportation systems and investing in infrastructure improvements are crucial for better mobility and accessibility.

Investing in \_\_\_\_\_ improvements is crucial for better public transportation

Choose the option that fits the blank.

1. technology
2. legal
3. environment
4. infrastructure

91.  $\triangle ABC \sim \triangle DEF$  and their areas are respectively  $64\text{cm}^2$  and  $121\text{cm}^2$ ,  $EF=15.4\text{cm}$ , then  $BC =$  (in cms)
1. 11
  2. 8
  3. 11.2
  4. 8.4
92. If  $\frac{1+\sin\theta}{\cos\theta} = 1 + \sqrt{2}$  then the value of  $\sec\theta(1 - \sin\theta)$  is
1.  $1 - \sqrt{2}$
  2.  $\sqrt{2} - 1$
  3.  $-1 - \sqrt{2}$
  4.  $1 + \sqrt{2}$
93. Sum of roots of quadratic equation  $2x^2 - 2\sqrt{2}x + 1 = 0$  is
1. 2
  2.  $\sqrt{2}$
  3.  $-\sqrt{2}$
  4. -2
94. The least number which when divided by 15, 16 and 18 leaves a remainder 4 in each case is
1. 556
  2. 564
  3. 716
  4. 724

95.  $\tan(A-B) = \frac{1}{\sqrt{3}}$  and  $\sin(A+B) = \cos(A+B)$ .

$A-B$  and  $A+B$  are acute angles, then the angle  $A$  is

1.  $7\frac{1}{2}^\circ$
2.  $15\frac{1}{2}^\circ$
3.  $29\frac{1}{2}^\circ$
4.  $37\frac{1}{2}^\circ$

96. If the following pair of linear equations have infinitely many solutions then  $p =$  \_\_\_\_\_

$$px + 3y - (p - 3) = 0; 12x + py - p = 0$$

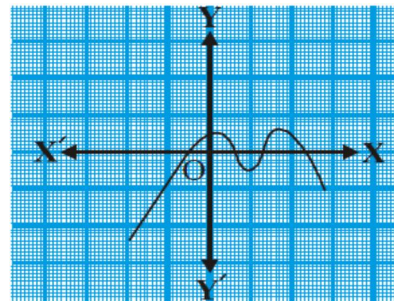
1.  $-6$
2.  $6, -6$
3.  $6$
4.  $36$

97. The sum of either pair of opposite angles of a cyclic quadrilateral is \_\_\_\_\_

1.  $2\pi$
2.  $\pi$
3.  $\frac{\pi}{3}$
4.  $\frac{\pi}{4}$

98. Number of zeroes of the polynomial represented by the adjacent graph is

1. 4
2. 3
3. 2
4. 1



99. The complementary angle of  $(x+3)^\circ$  is  $(2x)^\circ$ . Then  $x =$
1.  $28^\circ$
  2.  $29^\circ$
  3.  $31^\circ$
  4.  $33^\circ$
100. Identify the FALSE statement
1. The two points  $(-a,b)$  and  $(a,-b)$  are equidistant from origin
  2. The distance of the point  $(a,b)$  from  $y$ -axis is 'b' units
  3. If  $x < 0$  and  $y > 0$  then  $(-x,y)$  lies in Quadrant-I
  4. Equation of  $x$ -axis is " $y = 0$ "
101.  $2, 2\sqrt{2}, 4, \dots$  is a Geometric progression. In this GP,  $10^{\text{th}}$  term is \_\_\_\_\_
1.  $32\sqrt{2}$
  2. 32
  3.  $16\sqrt{2}$
  4. 16
102. The smallest natural number by which 3136 must be multiplied to get a perfect cube is
1. 2
  2. 3
  3. 5
  4. 7

103. A circle with radius 'a' units inscribed in a square. Suppose a die dropped on the square region then the probability that it will land inside the circle is (take  $\pi = \frac{22}{7}$ )

1.  $\frac{11}{7}$

2.  $\frac{11}{14}$

3.  $\frac{2}{7}$

4.  $\frac{7}{22}$

104. A cone of height 10cm and radius of base 5cm is made up of modeling clay. A child reshapes it in the form of a hemisphere. Then the radius of hemisphere is

1. 3cm

2. 4cm

3. 5cm

4. 6cm

105. Identify the FALSE statement

1. 1 lakh = 1000 hundreds

2. 1 crore = 1000 thousands

3. 1 million = 10 lakhs

4. 1 crore = 10 million

106. The value of  $12\frac{1}{2}\%$  of 64

1. 7

2.  $\frac{25}{2}$

3. 16

4. 8

107. Mode of certain observations is  $K$ . If each observation is decreased by 2, then the mode of the new data is
1.  $K$
  2.  $K-2$
  3.  $2K$
  4.  $K+2$
108. The perimeter of a rectangle is 10cm and length is 2.4cm, then breadth is
1. 7.6cm
  2. 5.2cm
  3. 2.6cm
  4. 5cm
109. Three points  $(4,p)$ ,  $(5,6)$  and  $(6,8)$  are collinear. Then value of 'p' is \_\_\_\_\_
1.  $-2$
  2.  $-4$
  3. 4
  4. 2
110. The mean of 11 observations is 40. If the mean of first six observations is 35 and the mean of last six observations is 42 then the sixth observation is
1. 37
  2. 33
  3. 47
  4. 22

111. The area of a rhombus is  $(x^2+5x+6)\text{cm}^2$  and one of the diagonal is  $(x+2)\text{cm}$ , then the second diagonal is

1.  $2(x+1)\text{cm}$
2.  $(x+2)\text{cm}$
3.  $2(x+3)\text{cm}$
4.  $(x+3)\text{cm}$

112. Match the following

- (a)  $\frac{2}{5} \times \left(\frac{3}{2} + \frac{5}{7}\right) = \frac{2}{5} \times \frac{3}{2} + \frac{2}{5} \times \frac{5}{7}$  (i) Associative law
- (b)  $\frac{5}{3} + \left(\frac{-5}{3}\right) = 0 = \left(\frac{-5}{3}\right) + \frac{5}{3}$  (ii) Distributive law
- (c)  $\frac{3}{5} \times \frac{7}{2} = \frac{7}{2} \times \frac{3}{5}$  (iii) Additive inverse property
- (d)  $\frac{2}{3} + \left(\frac{7}{2} + \frac{5}{6}\right) = \left(\frac{2}{3} + \frac{7}{2}\right) + \frac{5}{6}$  (iv) Commutative law

1. a-ii, b-i, c-iii, d-iv
2. a-iii, b-ii, c-i, d-iv
3. a-ii, b-iii, c-iv, d-i
4. a-iii, b-i, c-ii, d-iv

113.  $15\%$  of  $20 + 20\%$  of  $30 = x\%$  of  $50$  then  $x =$

1. 16
2. 17
3. 19
4. 18

114. If two dice are rolled simultaneously then the probability of getting odd numbers on both dice is
1.  $\frac{1}{4}$
  2.  $\frac{3}{4}$
  3.  $\frac{1}{9}$
  4.  $\frac{2}{9}$
115. “The knowledge of numbers, mass and measurement is the mathematics”. This definition is given by
1. Bell
  2. Pascal
  3. Russel
  4. Peirce
116. “Among different closed figures having same perimeter, circle has the highest area”. This is proved by
1. Euclid
  2. Archimedes
  3. Ptolemy
  4. Pythagoras
117. ‘The learner, understands the method of solving problems’. This belongs to the following academic standard
1. Problem-solving
  2. Reasoning - proofs
  3. Communication
  4. Connection



118. According to Herbart's, this step should take place before 'Generalization' in lesson plan preparation.

1. Application
2. Presentation
3. Association
4. Recapitulation

119. Assessment is

- a) Quantitative
  - b) Qualitative
1. Only (a) correct
  2. Only (b) correct
  3. (a) and (b) are not correct
  4. (a) and (b) both are correct

120. One of the following is related to Inductive approach

1. Abstract to concrete
2. From general to specific
3. Generalization from observations
4. Tests Formulae

121. To measure the length of the curved line, the materials needed are
1. Thread and stop clock
  2. Common balance and scale
  3. Thread and scale
  4. Stop clock and common balance
122. On shaking the branch of a tree, the fruits fall down due to
1. Inertia of motion
  2. Inertia of direction
  3. Inertia of rest
  4. Pressure
123. Work done will be zero, when the angle between force and displacement is
1.  $0^\circ$
  2.  $45^\circ$
  3.  $180^\circ$
  4.  $90^\circ$
124. Four identical tin cans are painted with different types of paint. They are heated to the same temperature and left in vacuum. Among the following the can which loses heat most quickly is
1. rough black painted tin can
  2. shiny white painted tin can
  3. shiny black painted tin can
  4. rough white painted tin can

125. The time in the analog clock shows 10h.10m.10s. It's image in plane mirror shows

1. 01.49.50
2. 02.49.50
3. 02.50.50
4. 10.10.10

126. DC generator : commutator :: AC generator:

?

1. Carbon brush
2. Coil
3. Resistor
4. Slip rings

127. Match the element in SET-A with its ore given in SET-B

- | <b>SET-A</b> |    | <b>SET-B</b> |           |
|--------------|----|--------------|-----------|
| A.           | Ca | P.           | Gypsum    |
| B.           | Mg | Q.           | Magnetite |
| C.           | Fe | R.           | Zincite   |
| D.           | Zn | S.           | Magnesite |
1. A-P, B-Q, C-S, D-R
  2. A-P, B-S, C-R, D-Q
  3. A-P, B-S, C-Q, D-R
  4. A-R, B-S, C-Q, D-P

128. The incorrect statement about suspension.

1. It is a homogeneous mixture.
2. The particles of suspension can be seen with naked eye.
3. The particles of suspension can scatter the light.
4. The solute particles settle down when suspension is not disturbed.

129. The masses of potassium, carbon and oxygen are 39,12 and 16 units respectively. The formula unit mass of potassium carbonate will be
1. 99u
  2. 138u
  3. 122u
  4. 83u
130. If a molecule has three covalent bonds around the nucleus of the central atom without any lone pairs, then the bond angle would be
1.  $180^\circ$
  2.  $109^\circ.28'$
  3.  $120^\circ$
  4.  $104^\circ.31'$
131. Assertion(A): During heavy rains, earth warms come out from soil for respiration.  
Reason(R): When it rains heavily, water fills up all the spaces occupied by the air in the soil.  
Choose the correct answer
1. Both 'A' & 'R' correct and 'R' is the correct explanation of 'A'
  2. Both 'A' & 'R' correct but 'R' is not correct explanation of 'A'
  3. 'A' incorrect, 'R' correct
  4. 'A' correct, 'R' incorrect

132. If the hydrogen ion concentration of a solution is  $10^{-4}$  moles/ lit, then the hydroxyl ion concentration would be
1.  $10^{-4}$  moles/lit
  2.  $10^{-14}$  moles/lit
  3.  $10^{-10}$  moles/lit
  4.  $10^{-7}$  moles/lit
133. The “Gait of Animals” book was written by
1. Aristotle
  2. William Harvey
  3. Leeuwen hoek
  4. Theophrastus
134. The chemical used in black reaction in tracing the processes and most delicate ramification of cells is
1. Ammonium Hydroxide
  2. Sodium Carbonate
  3. Copper Sulphate
  4. Silver Nitrate
- 135 Assertion(A): Excess intake of antibiotics can kill useful microorganisms in our body  
Reason(R): Antibiotics are made from Fungi and Bacteria  
Choose the correct answer
1. A is correct: R is incorrect
  2. A is incorrect; R is correct
  3. A and R both are correct; R is correct explanation of A
  4. A and R both are correct; R is not correct explanation of A

136. Identify the crops grown between October to March
1. Linseed & Maize
  2. Soyabean & Maize
  3. Maize & Mustard
  4. Mustard & Linseed
137. The food item that is rich in vitamin 'C' is
1. Mirchi
  2. Liver
  3. Wheat
  4. Paneer
138. This occurs during exhalation
1. The ribs move forward and diaphragm contracts
  2. The ribs move forward and diaphragm relaxes
  3. The ribs move backward and diaphragm contracts
  4. The ribs move backward and diaphragm relaxes
139. The rate of heart beat in infants of 3-6 months age
1. 100-150
  2. 90-120
  3. 80-120
  4. 60-100

140. Find the correctly matched pairs

- A) Flame cells - Annelida
- B) Nephridia - Platyhelminthes
- C) Renette cells - Nematoda
- D) Meta nephridia - Mollusca

- 1. A and B
- 2. C and D
- 3. A and C
- 4. B and D

141. The parts of hind brain are

- A) Diencephalon
- B) Medulla Oblongata
- C) Cerebrum
- D) Cerebellum

- 1. A and C
- 2. B and D
- 3. A and D
- 4. B and C

142. Match the following

- |               |                                     |
|---------------|-------------------------------------|
| A) Prophase   | i) Chromosomes moves to equator     |
| B) Metaphase  | ii) Duplication of chromosomes      |
| C) Anaphase   | iii) Nuclear membrane disappears    |
| D) Interphase | iv) Chromatids pulled towards poles |

- 1. A-iii, B-i, C-iv, D-ii
- 2. A-i, B-ii, C-iii, D-iv
- 3. A-iii, B-iv, C-ii, D-i
- 4. A-iv, B-ii, C-i, D-iii

143. The gases that causes Greenhouse effect
- |                    |                 |
|--------------------|-----------------|
| A) Sulphur dioxide | B) Water vapour |
| C) Nitrous oxide   | D) CNG          |
1. A and D
  2. B and D
  3. A and C
  4. B and C
144. Areas reserved for wild life where they can freely use the habitats and natural resources are
1. National park
  2. Biosphere reserve
  3. Zoo
  4. Wild life sanctuary
145. Incorrect statement regarding 'nature of science' among the following is
1. It is a unique way of observing nature
  2. It is a rapid expansion of knowledge hub
  3. It believes in international comprehensive efforts
  4. All proposed theories are permanent
146. This is not considered while preparing year plan
1. Text book
  2. Teaching Learning Material
  3. Additional classes
  4. Number of periods



147. Weightage allotted to the academic standard ‘questioning and making hypothesis’ is
1. 10%
  2. 15%
  3. 40%
  4. 25%
148. The cognitive process involved in “Presenting oral, written information through diagrams” is
1. Creating
  2. Analyzing
  3. Applying
  4. Understanding
149. A test is giving same results, when it is conducted for several times or corrected by different people. But it is not fulfilling the purpose for which it was designed. Then the test
1. has reliability, validity but not objectivity
  2. has reliability, objectivity but not validity
  3. has validity and objectivity but not reliability
  4. does not have reliability, validity and objectivity
150. ‘Micro Teaching is a scaled-down teaching encounter in class size and time’ this was stated by
1. David B. Young
  2. D.W. Allen
  3. B.K. Passi
  4. M.S. Lalitha