TET-211-EM/TM

Time: 2 Hours, 30 Minutes
Max. Marks: 150

Instructions to the candidates:

1. Write your Hall Ticket number in the box provided at the left side of the booklet immediately after receiving the Test Booklet.

2. Check whether the Test Booklet contains as many pages as are printed on the top of this page.

3. Check whether all pages are printed properly. Do not remove any pages from the Test Booklet.

4. Indicate your answers on the given OMR answer sheet only. Read the instructions given on both sides of the OMR answer sheet and follow them accordingly. Do not write the answers in the Test Booklet.

5. This Test Booklet consists of 150 multiple choice questions. Answer all questions. Each question carries one (1) mark only.

6. Do not do any rough work in the Test Booklet. Use only the white paper provided at the end of the question booklet for rough work.

7. After completion of the examination, hand over the OMR answer sheet to the Hall Superintendent without fail.

8. Candidate will not be permitted to leave the examination hall till the completion of the stipulated examination time.
PART I
CHILD DEVELOPMENT AND PEDAGOGY

1. A school teacher planned to study the development of children over a period of 5 years from class I to V. The appropriate method for conducting this study is .................
   (1) cross-sectional study
   (2) longitudinal study
   (3) developmental study
   (4) case study

2. The memory traces formed in the mind are called .................
   (1) Encephalogram
   (2) Engram
   (3) Memogram
   (4) Cardiogram

3. One of the developmental tasks during the period of infancy is ...........
   (4) emotional maturity
   (2) socially responsible behavior
   (3) to walk
   (4) to learn to read and write

4. Attention, retention, reproduction and reinforcement are the steps of this theory.
   (1) Social learning
   (2) Insight learning
   (3) Operant conditioning
   (4) Trial and error
5. Aptitude test is meant for measuring the _____________.

(1) interests
(2) achievements
(3) intelligence
(4) abilities

6. More effective one among the following is _____________.

(1) learning from a tuition master
(2) learning to learn
(3) learning from school teacher
(4) learning from textbooks

7. One of the performance tests of intelligence is _____________.

(1) Raven's progressive matrices test
(2) Binet–Simon test
(3) Bhatia test battery
(4) Army alpha test

8. The concept/characteristic observed in the sensorimotor stage of Piaget's cognitive development is _____________.

(1) object permanence
(2) unidimensional thinking
(3) logical thinking
(4) problem solving
9. Usually, the assessment of learning is done during this phase of teaching.
   (1) Pre-active phase
   (2) Post-active phase
   (3) Any phase
   (4) Motivative phase

10. Adolescents are not .......... 
    (1) sensitive to criticism
    (2) influenced by friends
    (3) involved in hero-worship
    (4) stable

11. Gradual fading means .......... 
    (1) continuing the help irrespective of the progress of the child
    (2) reducing the help on the basis of the progress of the child
    (3) enhancing the help on the basis of the progress of the child
    (4) developing the intelligence of the child

12. As per the National Curriculum Framework—2005, teaching is for ..... 
    (1) the completion of the syllabus
    (2) information giving
    (3) construction of knowledge
    (4) development of technological skills
13. Law of Effect was proposed by ...........
   (1) E. L. Thorndike
   (2) I. P. Pavlov
   (3) B. F. Skinner
   (4) Albert Bandura

14. One of the following is not the purpose of a group project.
   (1) Cooperative learning
   (2) Speedy learning
   (3) Active learning
   (4) Learner-centered learning

15. A person is not satisfied with his job. He requires the following guidance.
   (1) Vocational
   (2) Family
   (3) Educational
   (4) Personnel

16. Leisure is the right ............... (A) of every child
   (2) when there are no exams
   (3) of bright children
   (4) of educationally backward children

17. As per the Right to Education Act–2009, the following statement is correct.
   (1) Admission can be rejected for want of T.C.
   (2) Admission cannot be given after the prescribed period
   (3) Admission cannot be given directly to age appropriate class
   (4) Admission cannot be rejected for want of T.C.
18. Mental health is defined as 'the adjustment of individuals to themselves and the world at large with a maximum of effectiveness, satisfaction, cheerfulness and socially considerate behavior and the ability of facing and accepting the realities of life'. This definition was given by .................
(1) Crow and Crow
(2) Sigmund Freud
(3) Bernard
(4) Raymond B. Cattle

20. One of the following is an effective motivation for learning.
(4) Learning for rewards
(2) Learning for avoiding punishment
(3) Learning for rank
(4) Learning for self satisfaction

21. 'Children learn to act in accordance with internal ideas rather than impulse' was stated by .................
(1) Vygotsky
(2) Chomsky
(3) Piaget
(4) Bruner

19. In the modern context, teaching is considered as .................
(1) a science
(2) an unplanned activity
(3) an art
(4) a spontaneous activity
22. For the development of language, the nativist perspective was proposed by
(1) Skinner
(2) Neom Chomsky
(3) Vygotsky
(4) Piaget

23. The school of Psychology to which Carl Rogers belongs to is
(1) behaviourist
(2) structural
(3) humanistic
(4) cognitive

24. Development follows the
(1) Cephalo-Caudal direction
(2) Cephalo-Proximal direction
(3) Proximo-Caudal direction
(4) Cephalo-Distal direction

25. Performing an activity for protecting oneself from emotional stress is known as
(1) emotional contagion
(2) emotional catharsis
(3) emotional display
(4) emotional masks

26. One of the following theories which says that the solution to a problem comes out suddenly is called
(1) insight
(2) operant conditioning
(3) classical conditioning
(4) trial and error
27. The suitable leadership style for a teacher for creation of a non-threatening learning environment in the classroom would be ............
(1) autocratic
(2) authoritative
(3) democratic
(4) laissez faire

28. One of the following is not a characteristic of programmed learning.
(1) Learner cannot learn according to his speed
(2) Presentation of content is in small steps
(3) Immediate feedback
(4) Active roles for learners in learning at every step

29. A student has the habit of writing with his right hand. Due to loss of his right hand in an accident, he used his left hand for writing. It is an example of ............... 
(1) positive transfer
(2) negative transfer
(3) zero transfer
(4) bilateral transfer

30. A strategy utilized to protect the ego from anxiety and frustration is called ..............
(1) adaptation
(2) defence mechanism
(3) mental health
(4) rationalization
PART-II
LANGUAGE I - TELUGU

31-36 యొక్క కార్యాలను ప్రమాణించండి. 31 రెండు తరువాత సమాధానాలను సంచాలించండి.

31. ‘విగానం’ - మనం ఎప్పుడు
   (1) అక్కడ
   (2) పంచాల జాఫీ
   (3) అవి
   (4) పంచాల జాఫీ

32. ‘ప్రమాణం’ మనం ప్రతి కార్యాలను ప్రమాణించండి
   (1) మనం
   (2) నిర్ణయం
   (3) అక్కడ
   (4) పంచాల జాఫీ

33. ‘ప్రమాణం’ - మనం ఎప్పుడు కార్యాలను ప్రమాణించండి
   (1) పంచాల జాఫీ
   (2) అక్కడ
   (3) అవి
   (4) పంచాల జాఫీ

34.  యొక్క కార్యాలను ప్రమాణించండి
   (1) మనం
   (2) నిర్ణయం
   (3) అక్కడ
   (4) పంచాల జాఫీ

35. యొక్క కార్యాలను ప్రమాణించండి
   (1) మనం
   (2) నిర్ణయం
   (3) అక్కడ
   (4) పంచాల జాఫీ

36.  ‘విగానం’ మనం ఎప్పుడు
   (1) అక్కడ
   (2) పంచాల జాఫీ
   (3) అవి
   (4) పంచాల జాఫీ

37. లొకేసిన కాలానికట్టు - ఇంటి ప్రయోగాలు.
   (1) మధ్యఘటన
   (2) అదిసంపూర్ణ
   (3) రకము నమూన పంచాయతీ
   (4) లోకానికట్టు

38. సంస్థ సంస్థలు - ఉదాహరణలు.
   (1) కుటుంబ సంస్థ
   (2) మొబడి సంస్థ
   (3) వారింటర్ సంస్థ
   (4) వారింటర్ సంస్థ

39. ముగ్గురు చరిత్ర ప్రాంతంలో అనేక ప్రాంతాలు ఉన్నాయి. అనేక ప్రాంతాలు ఉన్నాయి.
   (1) యాన్ను
   (2) నాను
   (3) నాయక
   (4) సంవత్సరం

40. దృశ్యాలు సంస్థలు - ప్రాంతాలు ప్రాంతాలు.
   (1) దృశ్యాలు ప్రాంతాలు
   (2) ప్రాంతాలు ప్రాంతాలు
   (3) ప్రాంతాలు ప్రాంతాలు
   (4) ప్రాంతాలు ప్రాంతాలు

41. సాధారణ సమాధానానికి సరిపట్టిన సమాధానానికి సరిపట్టిన 
   (1) సరిపట్టిన 
   (2) సరిపట్టిన 
   (3) సరిపట్టిన 
   (4) సరిపట్టిన 

42. సారాంశాలు - ఇంటి ప్రయోగాలు 
   (1) ఇంటి 
   (2) ఇంటి 
   (3) ఇంటి 
   (4) ఇంటి 

43. సాధారణ సమాధానానికి సరిపట్టిన 
   (1) సరిపట్టిన 
   (2) సరిపట్టిన 
   (3) సరిపట్టిన 
   (4) సరిపట్టిన 

44. సాధారణ సమాధానానికి సరిపట్టిన 
   (1) సరిపట్టిన 
   (2) సరిపట్టిన 
   (3) సరిపట్టిన 
   (4) సరిపట్టిన 

45. సాధారణ సమాధానానికి సరిపట్టిన 
   (1) సరిపట్టిన 
   (2) సరిపట్టిన 
   (3) సరిపట్టిన 
   (4) సరిపట్టిన 

46. సాధారణ సమాధానానికి 

47. సాధారణ సమాధానానికి 

48. సాధారణ సమాధానానికి 

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49. అంతర్మానం వంటి సమయంలో చేసుకోవాలి సమయం

(1) జీత విధానం
(2) బుద్ధును దాధికారం
(3) సుద్దించడం
(4) ప్రియమ్మ ఉపయోగం

50. ‘అంతర్మానం వంటి సమయం’ లో ప్రతి సమయం

(1) జీత విధానం
(2) బుద్ధును దాధికారం
(3) సుద్దించడం
(4) ప్రియమ్మ ఉపయోగం

51. సమయంలో తినాంటికి జరిగిన జాతీయ సమాంతం

(1) జీత విధానం
(2) బుద్ధును దాధికారం
(3) సుద్దించడం
(4) ప్రియమ్మ ఉపయోగం

52. కార్యాలయంలో వంటి సమయంలో జరిగిన జాతీయ సమాంతం

(1) జీత విధానం
(2) బుద్ధును దాధికారం
(3) సుద్దించడం
(4) ప్రియమ్మ ఉపయోగం

53. సమయంలో లేదా సమయానవతైన జాతీయ సమాంతం

(1) జీత విధానం
(2) బుద్ధును దాధికారం
(3) సుద్దించడం
(4) ప్రియమ్మ ఉపయోగం

54. మేన్ని ప్రతిష్ఠా

(1) జీత విధానం
(2) బుద్ధును దాధికారం
(3) సుద్దించడం
(4) ప్రియమ్మ ఉపయోగం
55. 'SIET' నుండి
(1) కొబ్బరి మాసంలో నాటకం
(2) తూర్పు ప్రాంతంలో నాటకం
(3) నాటక నామాంకనం
(4) మామిడి నాటకం

56. మామిడి నాటకం పట్టికలో మామిడి నాటకం
(1) మామిడి పట్టిక
(2) పట్టిక
(3) నాటక సంవత్సరం
(4) మామిడి నాటకం

57. నాటకం పట్టికలో నాటకం
- మామిడి నాటకం పట్టికలో
(1) నాటక నామాంకనం
(2) నాటక పట్టిక
(3) నాటక సంవత్సరం
(4) మామిడి నాటకం

58. స్వాగతం గానాయి నాటకం
(1) చోల
(2) కార్యక్రమం
(3) మామిడి
(4) విభాగం

59. మామిడి నాటకం పట్టికలో
(1) చోల
(2) కార్యక్రమం
(3) మామిడి
(4) విభాగం

60. స్వాగతం గానాయి నాటకం
- మామిడి నాటకం పట్టికలో
(1) చోల
(2) కార్యక్రమం
(3) మామిడి
(4) విభాగం
61. Identify the part of speech of the word underlined in the following sentence.

He bought a **gold** ring for his wife.

(1) Noun
(2) Adjective
(3) Pronoun
(4) Conjunction

62. Identify the sentence that shows the speaker's past habit.

(1) I went to the cinema every day.
(2) I had to go to the cinema every day.
(3) I used to go to the cinema every Sunday.
(4) I go to the cinema every Sunday.

63. Identify the active form of the sentence.

'**She** likes being admired.'

(1) She likes admiring others.
(2) She likes to admiring others.
(3) She would like if she admired others.
(4) She likes people admiring her.

64. 'Anil is not taller than Ravi.'

If you change the above sentence, into the positive degree correctly, you will get ............

(1) Ravi is at least as tall as Anil.
(2) Ravi is as taller as Anil.
(3) Ravi is taller than Anil.
(4) Ravi is so tall as Anil.

65. Match the words and their categories.

<table>
<thead>
<tr>
<th>Words</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>used</td>
<td>modal auxiliaries</td>
</tr>
<tr>
<td>to be</td>
<td>full verb</td>
</tr>
<tr>
<td>can</td>
<td>principle auxiliaries</td>
</tr>
</tbody>
</table>

(1) (a) – (d), (b) – (e), (c) – (f)
(2) (b) – (f), (a) – (d), (c) – (e)
(3) (a) – (e), (b) – (f), (c) – (d)
(4) (c) – (e), (a) – (d), (b) – (f)

66. Identify the correct question tag for the statement.

Ram and his wife put a lot of money in the donation box last year.

(1) Don't they?
(2) Do they?
(3) Didn't he?
(4) Didn't they?

67. 'She is too weak to walk.'

If you change the above sentence, into a complex sentence correctly, you will get ............

(1) She is so weak that she cannot walk.
(2) She is so weak and so she cannot walk.
(3) She is very weak and she cannot walk.
(4) She is weak but she cannot walk.

68. Identify the sentence that contains an adverb clause of concession.

(1) Note down the date, lest you will forget.
(2) Although he noted down the date, he forgot to attend the meeting.
(3) Although he noted down the date, but he forgot to attend the meeting.
(4) Note down the date, or else you may forget.
69. Identify the correct words in the following blanks.
Co-curricular activities must be related (a) (b) academic work and supplement (c) ____________.

   (i) (a) about, (b) an, (c) them
   (ii) (a) to, (b) a, (c) those
   (iii) (a) about, (b) the, (c) these
   (iv) (a) to, (b) the, (c) it

70. (a) He went to the post office.
(b) He bought some postal stationery.

If you combine the above sentences correctly, you will get:
(1) He went to the post office to buy some postal stationery.
(2) He went to the post office to buy some postal stationery.
(3) He went to the post office in order to buy some postal stationery.
(4) He bought some postal stationery, so he went to the post office.

71. Read the following four parts of a sentence.
(a) For when verse is read aloud
(b) It is the ear
(c) Which is the true test of verse
(d) Not the eye
(e) It sounds different from prose

Now place them in the correct order to make a grammatically correct sentence.
(1) (b) (c) (d) (a) (e)
(2) (b) (d) (c) (a) (e)
(3) (b) (a) (c) (e) (d)
(4) (b) (c) (c) (a) (d)

72. While writing a precis of a passage, you must reduce the passage to ____________.
   (1) half its length
   (2) one-third its length
   (3) one-fourth its length
   (4) one-fifth its length

73. She said to him, "Are you coming with me or not?"
If you report the above sentence correctly, you will get ____________.
(1) She asked him whether he was coming with her or not.
(2) She told him whether he was coming with him or not.
(3) She said to him if he was coming with her.
(4) She asked to him whether she was coming with him or not.

74. Identify the meaning of the phrase underlined in the following sentence.
The bus broke down on the ghat road.
(1) stops
(2) stopped due to mechanical failure
(3) was damaged
(4) met with an accident
75. Identify the synonym of the word underlined in the following sentence.

The patient's deteriorating health condition became **enigmatic** to the doctors as days passed.

1. anxious
2. chronic
3. puzzling
4. wobbling

76. Identify the antonym of the word underlined in the following sentence.

At school, the boy had an **erratic** behavior.

1. incredible
2. ecstatic
3. fantastic
4. right

77. Identify the sentence that contains a noun clause.

1. Tell me why did you go there?
2. How he earns money is a mystery.
3. Although he earns money, no one knows how.
4. Inspite of his earning money, no one knows how.

78. Identify the adjective clause that can replace the underlined part of the following sentence.

They visited a village without any inhabitants.

1. They visited village with no one living there.
2. They, who visited a village, without any inhabitants.
3. They visited a village where there were no inhabitants.
4. They visited village with no inhabitants.

79. Check the correctness of the two sentences given below.

(a) That company provides equal opportunities to women.

(b) Great is the struggle, and great is also the prize.

1. Both the sentences are wrong.
2. Both the sentences are correct.
3. Sentence (a) is correct and sentence (b) is wrong.
4. Sentence (a) is wrong and sentence (b) is correct.

80. How do you disagree with the negative statement given below?

Didn't you receive my e-mail yesterday?

1. No, I didn't.
2. Yes, I didn't.
3. No, I did.
4. Yes, I haven't.
81 to 84: Read the following passage carefully and answer the questions given below it.

The first thing the children wanted to do at the zoo was to ride an elephant. They were frightened as they climbed the ladder to take their seats on the swaying back of the huge beast. Elephants look like awkward creatures as they move along heavily, their legs covered with loose folds of tough skin and their trunk swinging from side to side in search of food or drink. An elephant has great strength due to which it can drag heavy loads with ropes, but it can also use its trunk to pick up small articles such as coins or nuts from the ground.

81. Where is the elephant?
   (1) At the school
   (2) At a circus
   (3) At the zoo
   (4) At the forest

82. Which word in the passage describes the elephant?
   (1) swaying
   (2) tough
   (3) loose
   (4) awkward

83. What does the elephant use to search for food or drink?
   (1) Its trunk
   (2) Its legs
   (3) Its body
   (4) Its skin

84. Identify the correct statement about an elephant’s skill.
   (1) It cannot move heavy things
   (2) It can pick very small things from the ground
   (3) It can see things at a great distance
   (4) It is a huge beast
85. How many syllables are there in the word, matches?
   (1) one  
   (2) three  
   (3) four  
   (4) two  

86. How many language skills does an educated person learn?
   (1) four  
   (2) three  
   (3) only one  
   (4) two  

87. How many sounds are there in the English language?
   (1) forty  
   (2) forty-four  
   (3) forty-five  
   (4) twenty-four  

88. Why are some poems included in English Readers?
   (1) To teach poetic words  
   (2) To let pupils learn meter and prosody  
   (3) To help pupils to read them and enjoy  
   (4) To help pupils to identify figures of speech  

89. In a language question paper, how much weightage may be given for KNOWLEDGE?  
   (1) about 80%  
   (2) about 5%  
   (3) about 60%  
   (4) about 20%  

90. To which category does a TV belong as a teaching aid?
   (1) Audio-visual aid  
   (2) Audio aid  
   (3) Visual aid  
   (4) Authentic aid
91. If \( \sqrt{2} = 1.4142 \), then the value of \( \frac{\sqrt{2}}{2 + \sqrt{2}} \) is .......... 

\[ \frac{\sqrt{2}}{2 + \sqrt{2}} = 0.4142 \]

(1) 0.4124  
(2) 0.4142  
(3) 0.6162  
(4) 0.6126

92. The value of 0.57 is .......... 

0.57  

(1) 57  
(2) 99  
(3) 52  
(4) 26  
(5) 45

93. The LCM of two numbers is 48. If the numbers are in the ratio 2 : 3, then the sum of the numbers is ......... 

The LCM of two numbers is 48. If the ratio is 2 : 3, the numbers are 

(1) 28  
(2) 32  
(3) 40  
(4) 64

94. If a sum of Rs. 450 amounts to Rs. 495 in 2 years, then the time taken to Rs. 820 to become Rs. 943 at the same rate is .......... 

Rs. 450 becomes Rs. 495 in 2 years, then the time taken for Rs. 820 to become Rs. 943 is .......... 

(1) 2 years  
(2) 2\frac{1}{2} years  
(3) 3 years  
(4) 3\frac{1}{2} years

95. If \( \sqrt{1 + \frac{x}{144}} = \frac{13}{12} \) then the value of \( x \) is .......... 

\[ \sqrt{1 + \frac{x}{144}} = \frac{13}{12} \]

(1) 25  
(2) 20  
(3) 15  
(4) 10

96. If \( A = \{1, 2\} \) and \( B = \{a, b, c\} \) are two sets, then the number of relations from \( A \) to \( B \) are .......... 

\( A = \{1, 2\} \) and \( B = \{a, b, c\} \) are two sets, then the number of relations from \( A \) to \( B \) are .......... 

(1) 6  
(2) 32  
(3) 48  
(4) 64
97. If \( x : y = 8 : 9 \) and \( x : z = 6 : 5 \), then
the ratio of \( y \) and \( z \) is ..............
\( x : y = 8 : 9 \) নিয়ে \( x : z = 6 : 5 \) থেকে
\( y \) ও \( z \) এর হার হলো ..............
(1) 9 : 5
(2) 5 : 9
(3) 27 : 20
(4) 20 : 27

98. In a parallelogram \( ABCD \), if the
angular bisectors of angle \( A \) and
angle \( B \) intersect at 'P', then the
angle \( APB \) is ..............
\( ABCD \) এর \( A \) ও \( B \) এর পূর্বের লাইনের মাঝে \( P \) এবং \( APB \)
সমান হলে, \( APB \) ..............
(1) 90°
(2) 60°
(3) 45°
(4) 30°

99. The values of \( x \) in the equation
\( 4^{1+x} + 4^{1-x} = 10 \) are ..............
\( 4^{1+x} + 4^{1-x} = 10 \) এর \( x \) এর সমাধান
হলো ..............
(1) 0, 1
(2) 1, -1
(3) \(-\frac{1}{2}, \frac{1}{2}\)
(4) 2, -2

100. If each edge of a cube is increased
by 50%, then the percentage
increase in the total surface area
is ..............
কাবার বাবদের প্রত্যেকের অর্ধের পরিবর্তন
তাদের সারির মোট চারণেরর বৃদ্ধির
প্রতি শতাংশ হলো ..............
(1) 50%
(2) 75%
(3) 100%
(4) 125%

101. The domain of relation
\( R = \{ (x, y) | x, y \in N, x + 2y = 5 \} \) is ...
\( R = \{ (x, y) | x, y \in N, x + 2y = 5 \} \) এর
সূত্র হলো ..............
(1) \{1, 3\}
(2) \{2, 1\}
(3) \{1, 2, 3\}
(4) \{2, 3\}

102. A and B together can complete a
piece of work in 4 days. If A alone
can complete the same work in
12 days, then the days required by
B only to complete the same work
are ..............
A এবং B একেয়েকে আকারের কৃতির
কাজ করতে 4 দিনের
কাজ করতে, যেখানে A একেয়েকে
কাজ 12 দিনের
ইন খালে কঠোর কা করতে
কৃতির দিন হলো ..............
(1) 12
(2) 10
(3) 8
(4) 6
103. The solution of inequation
\[ 2(2x + 3) - 10 < 6(x - 2) \] for real number \( x \) is .................

\( x \) is in the interval ...............

(1) \([4, \infty)\)
(2) \((4, \infty)\)
(3) \((-\infty, 4)\)
(4) \((-\infty, 4]\)

104. The time required (in years) for Rs. 1,000 to become Rs. 1,331 at 10% per annum compounded annually is .................

\[ \frac{10\% \text{ interest}}{100} \times \frac{1,000}{1,331} \text{ years} = \frac{100}{1331} \text{ years} \]

(1) 2
(2) 4
(3) 5
(4) 3

105. The intersection point of all the altitudes of a triangle is called .............

(1) centroid
(2) circumcenter
(3) orthocenter
(4) incentre

106. In a class of 26 students, 8 take tea but not coffee. If 16 students take tea, then the number of students taking coffee are .................

26 students \( - \) 8 students \((\text{take tea but not coffee})\) = 18 students take tea

26 students \( - \) 16 students \((\text{take coffee})\) = 10 students take coffee

(1) 8
(2) 18
(3) 16
(4) 6

107. \( AB \) is a chord of a circle of radius 14 cm. If the chord \( AB \) subtends a right angle at the center \( O \), then area of triangle \( AOB \) (in sq. cm) is .......

\[ \text{Area of triangle} = \frac{1}{2} \times \text{base} \times \text{height} \]

\[ \text{Area of triangle} = \frac{1}{2} \times 14 \times 14 = 98 \text{ sq. cm} \]

(1) 112
(2) 98
(3) 198
(4) 56

108. The area of a triangle is 30 cm\(^2\). If the altitude exceeds the base by 7 cm, then its base (in cms) is .............

\[ \text{Area of triangle} = \frac{1}{2} \times \text{base} \times \text{height} \]

\[ 30 = \frac{1}{2} \times b \times (b + 7) \]

Solving, we get \( b = 6 \) cm

(1) 4
(2) 6
(3) 5
(4) 7

[Answer: (4)]
109. If the diagonals of a rhombus are 6 cm and 8 cm, then its side (in cms) is ............

(1) 2
(2) 5
(3) 7
(4) 7.5

110. An angle whose measure is greater than 180° and less than 360° is called a/an ..............
(1) acute angle
(2) obtuse angle
(3) reflex angle
(4) straight angle

111. A field is rectangular in shape and its length is 1½ times its breadth. If its area is 2.4576 hectares, then its perimeter (in meters) is ............

(1) 600
(2) 620
(3) 630
(4) 640

112. In a bar diagram, the value represented by a rectangle is proportional to its ............
(1) length
(2) width
(3) area
(4) perimeter

113. The ratio between the speeds of two trains is 7 : 8. If the second train runs 400 kms in 4 hours, then the speed of the first train (in km/hr) is ............

(1) 70
(2) 75
(3) 84
(4) 87.5

114. A student spent his time during a day as shown below:

<table>
<thead>
<tr>
<th>Time spent for</th>
<th>sleep</th>
<th>school</th>
<th>play</th>
<th>others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time spent</td>
<td>8hrs</td>
<td>6hrs</td>
<td>2hrs</td>
<td>8hrs</td>
</tr>
</tbody>
</table>

If the student stays in school for 6 hours, then the angle represented in the pie diagram is .............
115. The Goldbach's conjecture, 'Every even number greater than two is the sum of two primes' was explained by
(1) Bhaskaracharya
(2) Srinivasa Ramanujan
(3) Aryabhata
(4) Shakunthala Devi

116. The specification related to the objective, 'understanding is ..........'
(1) verifying the results
(2) selecting the appropriate method
(3) recalling the definitions
(4) establishing relationships

117. "Curriculum is the sum total of student activities which the school sponsors for the purpose of achieving its objectives," was stated by ..........
(1) Cunningham
(2) Albert A. and Albert E.
(3) H. Robert Beck and W. Walter Cook
(4) P. Samuel

118. The evaluation conducted during the Teaching-Learning process is called ............
(1) summative
(2) diagnostic
(3) formative
(4) prognostic
119. If a student derived the formula \[ R = \frac{100 \times I}{PT} \] using the Simple Interest formula \[ I = \frac{PTR}{100} \], then the method followed by the student is ....

(1) inductive method
(2) analytical method
(3) deductive method
(4) synthetic method

120. The fifth step in 'Herbartian steps in preparing a Lesson Plan' is ........

(1) presentation
(2) generalization
(3) association
(4) application
121. A pair of physical quantities having same units are ...............  
(1) work and energy  
(2) force and work  
(3) force and torque  
(4) work and power  

122. The mass of 500 cm$^3$ of iron of density 7.6 g cm$^3$ in kilograms will be ...........  
500 cm$^3$ నియంత్రితుడు నియంత్రితుడు  
7.6 g cm$^3$ లేదా 500 cm$^3$ యొక్క భాగం నుండి కిలోగ్రమ్ వంటి ఎంతుండంటే  
(1) 3.7  
(2) 3.9  
(3) 3.8  
(4) 3.6  

123. Identify the wrong statement about comets from the following.  
(1) Comets are objects coming from outer space  
(2) Comets revolve round the earth in an elliptical orbit.  
(3) The comet, 'Halley' appears periodically every 76 years.  
(4) In July 1994, a comet 'Shoemaker–Levy 9' collided with the biggest planet Jupiter of our solar system.  

124. An example for viscous fluid is ...........
(1) water  
(2) alcohol  
(3) honey  
(4) air
125. If an air bubble rises from the bottom of the lake to the surface of water at a constant temperature, then its volume ..........
(1) increases
(2) decreases
(3) remains the same
(4) disappears in between

126. If the temperature of a body is 86°F, then its equivalent temperature in the Celsius scale is ..........
(1) 34°C
(2) 30°C
(3) 40°C
(4) 44°C

127. \( \frac{\sin i}{\sin r} = \text{constant} \). The value of the constant depends upon the .......... 
   a) pair of media  
   b) wavelength  
   c) colour of incident light  
   d) refracting nature of the material
   (1) Only on a)  
   (2) Only on b)  
   (3) Only on a) and d)  
   (4) a), b), c) and d)

128. Two metal spheres of 10 kg and 20 kg masses are allowed to fall freely from a height of 30 m. When they are at a height of 10 m from ground, the ratio of their potential energy is ......

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129. When three cells of voltages 3V, 2V and 2.5V are connected in series and parallel, then their respective effective emfs are ..............

3V, 2V, 2.5V and emf of 3V, 2V and 2.5V are connected in series and parallel, then their respective effective emfs are ..............

(1) 3V, 7.5V
(2) 7.5V, 2V
(3) 7.5V, 3V
(4) 5.5V, 2V

130. An example for divalent radical from the following is ..............

(1) chlorate
(2) bicarbonate
(3) phosphate
(4) dichromate

131. A gas that can be prepared by decomposing hydrogen peroxide is

(1) carbon dioxide
(2) nitrogen
(3) oxygen
(4) hydrogen

132. Find the values of 'X' and 'Y' in the given balanced chemical equation.

\[ \text{Na}_2\text{CO}_3 + X \text{HCl} \rightarrow \frac{X}{2} \text{NaCl} + \text{H}_2\text{O} + \text{CO}_2 \]

(1) 3, 3
(2) 2, 2
(3) 2, 3
(4) 3, 2
133. Which one of the following is a correct pair?

(1) Panchanan Maheshwari–Paleobotany
(2) Sir T. S. Venkataraman–Continental Drift theory
(3) Birbal Sahani–Fossil plants gymnosperms
(4) Hargobind Khorana–In vitro fertilization in plants

134. Which one of the following is not a filamentous organism though it belongs to the kingdom 'Fungi'?

(1) Yeast
(2) Slime mould
(3) Mould
(4) Mushroom

135. Cartilage is a type of

(1) epithelial tissue
(2) connective tissue
(3) muscle tissue
(4) nerve tissue

136. Which one of the following is not a correct pair?

(1) Rhodes Island–mule
(2) Berkshire–pig
(3) Przewalski–horse
(4) Karakul–sheep
137. The method to be used to preserve a special variety of mango, available in your village, for future generations is .............
(1) hybridization
(2) pedigree method
(3) germplasm collection
(4) genetic engineering

138. Nucleus is not found in .............
(1) RBC of camel
(2) immature RBC
(3) mature RBC of lower chordates.
(4) mature RBC of higher chordates

139. When plants are grown in shade, they tend to bend towards light and grow. This is due to .............
(1) gibberellins
(2) auxins
(3) cytokinins
(4) abscisic acid

140. HIV is spread through .............
a) blood  b) toilets
c) mosquitoes  d) semen
(1) a) and b)
(2) b) and c)
(3) a) and d)
(4) c) and d)
141. Which one of the following is not a fungal disease?

(1) Red rot in sugarcane
(2) Leaf blight in rice
(3) Blast of rice
(4) Tikka in groundnut

142. Pacinian corpuscles are ............

(1) receptors for temperature
(2) receptors for taste
(3) receptors for light
(4) receptors for pressure

143. An adaptation found in deep sea animals is ............

(1) weak skeleton
(2) round body
(3) water in cytoplasm
(4) air and gases in the body

144. Pernicious anemia is caused due to the deficiency of ............ vitamin.

(1) Thiamin
(2) Riboflavin
(3) Cyanocobalamin
(4) Ascorbic acid
145. The question, "Translate $F = ma$ into verbal statement" intends to test the following objective.

1. Knowledge
2. Understanding
3. Application
4. Skill

$F = ma$ అనే విషయాన్ని వాచన రంగంలో అభివృద్ధి చేయడానికి

146. "Learning by doing and learning by living in real life situation" are characteristic principles of

1. lecture method
2. lecture cum demonstrations
3. heuristic method
4. project method

147. One of the following characteristics does not belong to a scientist.

1. Does not accept any statement for granted
2. Believes in cause and effect relationship
3. Desire for experimental verification
4. Trusts all existing principles, laws and theories of Science

148. Testing previous knowledge of students at the beginning of the teaching-learning process is a

1. summative evaluation
2. formative evaluation
3. diagnostic evaluation
4. continuous comprehensive evaluation
149. The component of curriculum which emphasizes on "why do we teach" is
(1) objectives
(2) learning experiences
(3) T.L.M.
(4) teaching approaches

150. The first aid for "acid in eyes" is:
(1) wash the eyes with plenty of water and soapwater
(2) close the eyes for few seconds
(3) stay in open air for five minutes
(4) clean the eyes with soft cotton cloth

(1) అలచా దాని రెండు రెండు సారి వేషం
(2) దాని రెండు సారి వేషం మరియు
(3) సారి వేషం సారి వేషం సారి
(4) సారి వేషం సారి వేషం సారి సారి