1. Study the four different positions of a cube given below—

Which number occurs on the face opposite to 4 ?
(A) 1   (B) 3
(C) 5   (D) 6

2. Penicillin was discovered by—
(A) Michael Faraday
(B) Sir Alexander Fleming
(C) William Harvey
(D) Charles Goodyear

3. Which one of the following statements describe the research carried out by teacher in education ?
(A) Santosh devloped a CAI package
(B) Sonia compared the effectiveness of lecture method with CAI
(C) Suniti wrote an essay on teaching skills
(D) Tarun completed a document containing age, gender and qualifications of primary teachers in Ambala District

4. निम्नलिखित में से शब्दशक्ति नहीं है—
(A) अभिधा   (B) लक्षणा
(C) व्यंजना   (D) अंजना

5. Select the word which is nearly opposite in meaning to the **bold** word—

The atmosphere in that desolate place looked **ominous**.
(A) pleasant
(B) encouraging
(C) auspicious
(D) favourable

6. Where should an object be placed, so that a virtual and erect image of the enlarged size is obtained by a convex lens—
(A) At the focus of the lens
(B) At twice the focal length

(C) At infinity
(D) Between the optical centre of the lens and its focus

7. Which of the following is the correct sequence of activities for getting a book issued from the library ?
(a) noting call numbers from catalogue
(b) going to shelf
(c) going to librarian
(d) computing catalogue
(A) (a), (b), (c) (d)
(B) (d), (a), (c), (b)
(C) (d), (c), (b), (a)
(D) (d), (b), (a), (c)

8. Select from the four alternative figures the one with the same characteristics as in the given figure (*x*)—

Figure (*x*)

Alternative Figure

(A)   (B)   (C)   (D)

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

9. 'April 22nd' is celebrated as—
(A) Mother's Day
(B) Earth Day
(C) Teacher's Day
(D) Army Day

10. The length of the longest rod that can be placed in a room of dimensions 8 m × 8 m × 4 m is—
(A) 9 m   (B) 14 m
(C) 12 m   (D) 8 m

11. The Widow Remarriage Act was passed in the period of which Governor-General ?
(A) Lord Dalhousie
(B) Lord Curzon

(C) Lord Clive
(D) Lord Ripon

12. I like teaching profession because—
(A) there are lot of vacations
(B) I can earn through tuition
(C) I have interest in teaching
(D) my friends are teachers

13. रहिमन पानी राखिए, बिन पानी सब सून।
पानी गए न ऊबरै, मोती मानस चून ॥
इन पंक्तियों में अलंकार है—
(A) अनुप्रास   (B) उपमा
(C) रूपक   (D) श्लेष

14. Effective communication between teacher and students begins with—
(A) representing idea(s) in proper language
(B) reacting to idea(s)
(C) formulating an idea(s)
(D) choosing channel of transmission

15. वर्तनी की दृष्टि से शुद्ध है—
(A) श्रृंगार
(B) श्रंगार
(C) श्रृंगार
(D) इनमें से कोई नहीं

16. Select the correct number to replace the question mark (?) in the series—
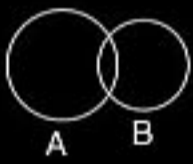4, 16, 36, 64, 100, ?
(A) 225   (B) 144
(C) 108   (D) 81

17. Which one of the following is not an example of a discrete variable ?
(A) place of residence
(B) martial status
(C) gender
(D) age

18. Choose the correct form of verbs to complete the given sentence—
He .... for five hours when they found him.
(A) is missing
(B) has missed
(C) was missed
(D) had been missing

19. The value of—
$$\frac{(6)^{0\cdot25} \times (216)^{0\cdot25}}{(625)^{0\cdot15} \times (625)^{0\cdot10}} \text{ is—}$$
(A) $\frac{\sqrt{6}}{5}$ (B) $\frac{36}{25}$

(C) $\frac{6}{5}$ (D) $\frac{36}{5}$

20. The energy released during fission of 1 kg of ^{235}U is equivalent to energy released by burning how much coal ?
(A) 25 tonne
(B) 250 tonne
(C) 3051 tonne
(D) 25000 tonne

21. Two buses start off at the same point on a straight highway facing opposite directions. Each bus drives for 6 km, takes a left turn and drives for 8 km. How far apart are the two buses ?
(A) 2 km   (B) 11 km
(C) 14 km   (D) 20 km

22. A teaching profession requires the teacher to—
(A) satisfy students and their parents
(B) please head by all means
(C) maintain discipline
(D) discharge his duty well

23. Choose noun form of the word 'Exaggerate'—
(A) Exaggerated
(B) Exaggerately
(C) Exaggeration
(D) Exaggerating

24. The Economy of India is—
(A) Capitalist
(B) Socialist
(C) A Mixed one
(D) None of these

25. Which of the following is the only country in the world with Hinduism as its State Religion ?
(A) Bhutan   (B) India
(C) Nepal   (D) Mauritius

26. Choose the noun from the given words—
(A) Sanitary   (B) Sanitise
(C) Sanitation   (D) Sanitising

27. Two taps can fill a tank in two hours and three hours respec-

tively. If both of them are opened at same time, in how much time the tank will be filled up—
(A) 1 hour 20 minute
(B) 1 hour 15 minute
(C) 1 hour 12 minute
(D) 1 hour 10 minute

28. A teacher can know students understanding of a concept by—
(A) hearing
(B) obtaining feedback
(C) one-way communication
(D) speaking/talking

29. As water freezes, its temperature—
(A) decreases
(B) does not change
(C) increases
(D) fluctuates

30. 'कमल' शब्द का उचित पर्यायवाची है—
(A) जलद   (B) नीरद
(C) सरोज   (D) अम्बु

31. Who wrote 'Indica' ?
(A) Megasthenese
(B) Kautilya
(C) Vishakhdutta
(D) Kalidasa

32. If three pieces of iron rods 33 m, 55 m and 77 m long are to be divided into pieces of same length. The greatest possible length of a piece will be—
(A) 3 m   (B) 5 m
(C) 1 m   (D) 11 m

33. Which of the following organelles carries out cellular respiration ?
(A) Chloroplast
(B) Mitochondrion
(C) Vacuole
(D) Lysosome

34. Which of the following is concerned with formative evaluation of students in the classroom ?
(A) monitoring learning progress
(B) knowing attainment of objectives
(C) diagnosing learning difficulties
(D) determining student's performance at the start of topic

35. Dr. A.P.J. Abdul Kalam is the author of—
(A) Wings of Fire
(B) Missiles of India
(C) Defence Development in India
(D) The Midnight Children

36. If first three letters of the word ELEPHANTA are written in the reverse order followed by the next three written in the reverse order and so on, which letter is the 8th in the written order—
(A) T   (B) P
(C) N   (D) H

37. In the given Venn diagram, if A and B are two sets such that A ∩ B has 10 elements, A has 16 elements and B has 20 elements. How many elements does A ∪ B have ?

(A) 16   (B) 26
(C) 36   (D) 30

38. The Industrial Revolution took place first of all in which country?
(A) England   (B) France
(C) Germany   (D) America

39. Find the missing number (?) in the following figure—

(A) 27   (B) 29
(C) 31   (D) 32

40. Which one of the following is not a Fundamental Right ?
(A) right to strike
(B) right against exploitation
(C) right to equality
(D) right to freedom of religion

41. Home work should be given to secondary school students for—
(A) keeping them busy at home
(B) reducing workload of teachers
(C) reinforcing their learning
(D) satisfaction of parents

42. Which of the following is the most important characteristic in the behaviour of a teacher ?
(A) sympathy   (B) patience
(C) dominance   (D) discipline

2

43. Choose the phrase that best completes the sentence—
She has been staying here ......
(A) from last month
(B) for last month
(C) by last month
(D) since last month

44. Which of the following shows strongest force of attraction between its particles ?
(A) Milk
(B) Nitrogen
(C) Sodium Chloride
(D) Sugar

45. Which is the smallest unit in the administration of India ?
(A) District   (B) State
(C) Mandal   (D) Village

46. The needs that the students would tend to fulfil first pertain to—
(A) self actualization
(B) social
(C) physiological
(D) esteem

47. प्रगतिवादी काव्य की प्रमुख विशेषता है—
(A) शोषकों के प्रति घृणा
(B) प्रेम और सौंदर्य
(C) ईश्वर के प्रति अटूट विश्वास
(D) उपर्युक्त सभी

48. A train 250 metre long crossed a railway platform 750 metre long in 1 minute 12 second. The speed of the train is—
(A) 60 km/hour (B) 54 km/hour
(C) 50 km/hour (D) 45 km/hour

49. Kanha National Park in Madhya Pradesh is famous for—
(A) Wild tigers
(B) One horned rhinoceros
(C) White tigers
(D) Chinkara

50. Select the word which is nearest in meaning to the **bold** word—
For some **inexplicable** reason he gave up a fantastic job.
(A) confusing
(B) incomprehensible
(C) chaotic
(D) unconnected

51. Self study habits in the students can be developed by—
(A) giving examples of others
(B) giving your own example
(C) lecturing
(D) sending them to library

52. The book 'Anandmath' was written by—
(A) Mulk Raj Anand
(B) Sharat Chandra Chatterjee
(C) Bankim Chandra Chatterjee
(D) Jawaharlal Nehru

53. If $z = \dfrac{x^3}{y}$ and x and y are both increased by 10% then the value of Z is increased by—
(A) 10%   (B) 11%
(C) 20%   (D) 21%

54. A good teacher always behaves with his students as—
(A) autocratic (B) democratic
(C) heuristic   (D) laissez faire

55. Choose one word which can be substituted for the following—
Habitually silent or talking little.
(A) Servile   (B) Unequivocal
(C) Taciturn   (D) Synoptic

56. 'नाकों चने चबाना' मुहावरे का उचित अर्थ है—
(A) बुरी तरह तंग करना
(B) भूखा रहना
(C) अभावग्रस्त होना
(D) डटकर टक्कर लेना

57. From a point 20 m away from the foot of a tower, the angle of elevation of the top of the tower is 30°. The height of the tower is—
(A) 12 m   (B) 10·5 m
(C) 10 m   (D) 11·53 m

58. Which of the following tissues transport water and minerals from the roots of other parts of the plant ?
(A) Phloem   (B) Parenchyma
(C) Xylem   (D) Cambium

59. Ozone layer is present in which part of atmosphere ?
(A) Thermosphere
(B) Troposphere
(C) Mesosphere
(D) Stratosphere

60. During teaching-learning, a teacher makes sure that his students—
(A) continue nothing down points
(B) interact with him
(C) listen to him
(D) sit quietly

61. In the following four figures three of them are similar in some respect. Select the ODD one out—

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

62. 'World Health Day' is celebrated on—
(A) 6th March (B) 7th April
(C) 5th May   (D) 9th April

63. Which one of the following is not an example of non-verbal communication ?
(A) talking
(B) body posture
(C) loudness
(D) eye contact

64. The phenomenon of electro-magnetic induction is the process of—
(A) Charging a body
(B) Generating magnetic field due to a current passing through a coil
(C) Producing induced current in a coil by relative motion between a magnet and the coil
(D) Rotating a coil of an electric motor

65. Ram and Mohan working separately can dig a well in 20 days and 30 days respectively. If they work together, in how many days, they complete the work ?
(A) 10   (B) 12
(C) 9   (D) 15

66. Choose the clause that correctly completes the given piece—
She has not been well ......
(A) as she is returning home
(B) when she left office
(C) since she returned from England
(D) while she worked here

3

67. The score above and below which exactly 50% case lie is called as—
    (A) standard deviation
    (B) mode
    (C) median
    (D) mean

68. The law of gravitation was propounded by—
    (A) Kepler
    (B) Galileo
    (C) Newton
    (D) Copernicus

69. Each of the term in question belongs to letter series. Find the missing term from amongst the four alternatives—
    B, E, J, Q, ?
    (A) Z
    (B) V
    (C) U
    (D) S

70. Students can pay attention in class only when teacher—
    (A) maintains discipline
    (B) develops curiosity
    (C) uses blackboard
    (D) asks questions

71. सूर्यकांत त्रिपाठी 'निराला' द्वारा रचित रचना कौनसी नहीं है ?
    (A) अनामिका
    (B) ग्रंथि
    (C) परिमल
    (D) नए पत्ते

72. Who was the founder of Indian National Congress ?
    (A) Womesh Chandra Banerjee
    (B) A. O. Hume
    (C) Surendra Nath Banerjee
    (D) Madan Mohan Malviya

73. The area of the sector-segment AOB of a circle whose radius is 6 cm and the angle at the centre is 35° is—

    (A) 12 cm²
    (B) 10 cm²
    (C) 12·5 cm²
    (D) 11 cm²

74. मलिक मोहम्मद जायसी का सम्बन्ध किस काव्यधारा से है ?
    (A) संत काव्यधारा
    (B) सूफी काव्यधारा
    (C) रामभक्ति काव्यधारा
    (D) कृष्णभक्ति काव्यधारा

75. What you will do if a student does not answer the question in a class ?
    (A) wait sometime for correct response
    (B) punish him for no response
    (C) inform his parents
    (D) prompt him for correct answer

76. Mohan has some stamps. If he pastes them in rows of 12, 15 or 18, no stamp remains. The least possible number of stamps Mohan has, is—
    (A) 360
    (B) 180
    (C) 90
    (D) 60

77. 'उज्ज्वल' शब्द का संधि-विच्छेद है—
    (A) उज + ज्वल
    (B) उत् + ज्वल
    (C) उज्ज + वल
    (D) उज्ज्व + ल

78. Name the Mughal Emperor who abolished 'Zaziya Tax' ?
    (A) Shahjahan
    (B) Babur
    (C) Akbar
    (D) Aurangzeb

79. A reduction of 20% in the price of bananas will enable you to buy 5 dozen more for ₹ 100. What is the price per dozen of bananas ?
    (A) ₹ 6
    (B) ₹ 5
    (C) ₹ 8
    (D) ₹ 4

80. Student's achievement can be increased when they learn by—
    (A) doing
    (B) imagining
    (C) listening
    (D) seeing

81. Dialysis is used for patients having the disease of—
    (A) kidney
    (B) liver
    (C) lung
    (D) heart

82. Which continent is known as the 'Dark Continent' ?
    (A) Asia
    (B) Africa
    (C) America
    (D) Australia

83. Four candidates are to present their reports in a meeting. In how many ways a candidate can sequence them ?
    (A) 24
    (B) 16
    (C) 12
    (D) 8

84. Choose the adjective from the given words—
    (A) Obscure
    (B) Obscurely
    (C) Obscured
    (D) Obscurity

85. An interactive process between a teacher and his colleagues involving exchange of message is called—
    (A) upward communication
    (B) downward communication
    (C) perception
    (D) interpersonal communication

86. R. K. Narayan is the author of—
    (A) The Untouchable
    (B) A Bend in the Ganges
    (C) The Guide
    (D) Music for Mohini

87. तत्सम शब्द छाँटिए—
    (A) मोर
    (B) दूध
    (C) गृह
    (D) अंधेरा

88. The following graph represents—

    (A) Uniform Acceleration
    (B) Uniform Speed
    (C) Variable Acceleration
    (D) Uniform Motion

89. An example of audio-visual media is—
    (A) Television
    (B) Radio
    (C) Models
    (D) Charts

90. Which is the highest Peak of Himalaya in India ?
    (A) Kanchanjunga
    (B) Mount Everest
    (C) Nanga Parvat
    (D) Dhaulagiri

91. The first step in preparing for a lecture is to decide about—
    (A) Content matter
    (B) Evaluation tool
    (C) Instructional media
    (D) Instructional objective

92. India's first satellite 'Aryabhatta' was launched in—
    (A) 1972
    (B) 1976
    (C) 1974
    (D) 1975

93. A student, who is weak in a particular subject, is helped by—
    (A) asking him to have coaching
    (B) giving him more homework in the subject
    (C) identifying causes of weakness and providing remedy
    (D) telling him to work hard

4

94. कवि बिहारी हिन्दी साहित्य के किस काल के अन्तर्गत आते हैं ?
    (A) आदिकाल   (B) भक्तिकाल
    (C) रीतिकाल   (D) आधुनिक काल

95. A student with more than 130 IQ possesses qualities of a—
    (A) backward child
    (B) delinquent child
    (C) gifted child
    (D) retarded child

96. Agriculture started in India in the age of—
    (A) Palaeolithic Age or Old Stone Age
    (B) Mesolithic Age or Middle Stone Age
    (C) Neolithic Age or New Stone Age
    (D) Chalcolithic Age or Copper Stone Age

97. The process of deduction in the classroom teaching is described by proceeding from—
    (A) a generalization to specific case
    (B) a specific case to generalization
    (C) one specific case to another
    (D) one theory to another

98. Chemical formula of washing soda is—
    (A) $NaCl$
    (B) $NaHCO_3$
    (C) $Na_2CO_3.10H_2O$
    (D) NH_4Cl

99. Which one of the following is not the component of behaviour modification ?
    (A) stimulus
    (B) response
    (C) knowledge
    (D) consequence

100. 'Hawa Mahal' is situated in—
    (A) Jaipur   (B) Udaipur
    (C) Jodhpur   (D) Jasalmer

101. If the mean of the terms 10, 8, 14, x, 9, 7, 23, 40 is 17, then the value of x is—
    (A) 20   (B) 25
    (C) 22   (D) 24

102. 'पृथ्वीराज रासो' के रचयिता हैं—
    (A) जगनिक   (B) हर्षवर्धन
    (C) बिहारी   (D) चन्दबरदाई

103. The criteria for the selection of a monitor in your class is based on—
    (A) democratic set up
    (B) personal preference
    (C) physical make up
    (D) intelligence

104. Find the missing number (?) in the following—
    $$\frac{?}{24} = \frac{72}{\sqrt{?}}$$
    (A) 48   (B) 96
    (C) 120   (D) 144

105. Which one of the following is regarded as the guardian of the Constitution of India ?
    (A) Parliament
    (B) President
    (C) Supreme Court
    (D) All of the above

106. A box contains coins of 50 paise, 25 paise and 10 paise, number of which are in the ratio 3 : 4 : 5. If the total amount in the box is ₹ 300, then the total number of 25 paise coins is—
    (A) 480   (B) 360
    (C) 280   (D) 400

107. The major nitrogenous product in human beings is—
    (A) Urea   (B) Uric Acid
    (C) Ammonia (D) Creatinine

108. A teacher performs the task to know student's understanding and learning—
    (A) involving students in learning
    (B) giving explanations
    (C) assigning tasks
    (D) asking questions

109. $5 + 7 - \left(3 \div 2 \times \frac{1}{4}\right)$ of $\frac{2}{7} + \frac{7}{2}$ $\times \frac{1}{16} = ?$
    (A) $12\frac{3}{88}$ (B) $12\frac{1}{224}$
    (C) $12\frac{25}{224}$ (D) $24\frac{11}{12}$

110. Simla Agreement was signed by India and Pakistan in—
    (A) 1972   (B) 1962
    (C) 1978   (D) 1964

111. Pronounciation in learning of languages can be corrected by the use of—
    (A) tape recorder
    (B) slide projector
    (C) radio
    (D) overhead projector

112. Which of the following choices correctly completes the given piece ?
    Their earnings are such that they find it difficult ....
    (A) to make both ends meet
    (B) to make both ends to meet
    (C) to make both ends for meeting
    (D) for making both ends to meet

113. Which was the immediate cause of the First World War ?
    (A) Bulkan Wars
    (B) Bosnian Crisis
    (C) Imperialistic Policy of Germany
    (D) Murder of Austrian Prince

114. Choose the correct meaning of the word 'Prowess'—
    (A) The pointed front part of a ship or boat
    (B) Great skill at doing something
    (C) To move quietly and carefully around an area
    (D) To cause a particular reaction or have a particular effect

115. Educational technology means applications of principles of—
    (A) psychology
    (B) physical sciences
    (C) both (A) and (B)
    (D) neither (A) nor (B)

116. Ramesh completes a work in 3 days and Sohan completes the same work in 6 days. If they work simultaneously, the work will get finished in—
    (A) 5 days   (B) 4 days
    (C) 3 days   (D) 2 days

117. Choose the word which best expresses the meaning of the word 'Capricious' ?
    (A) Erratic
    (B) Misleading
    (C) Whimsical
    (D) Unpredictable

5

118. The edge of a cube is 24 cm. The number of smaller cubes of edge 6 cm that can be formed from it, are—

    (A) 54   (B) 32

    (C) 64   (D) 16

119. Characteristics of a good test is—

    (A) Validity

    (B) Reliability

    (C) Objectivity

    (D) All of the above

120. In the following question, a square transparent sheet with a pattern is given. Figure out from the given four alternatives figures as to how the pattern would appear when transparent sheet is folded at the dotted line—

    Transparent
    Sheet

    Alternative Figure

    (A)   (B)   (C)   (D)

    (A) 1   (B) 2

    (C) 3   (D) 4