

ALL INDIA SAINIK SCHOOL ENTRANCE EXAM (AISSEE)

SOLVED PAPER-2023

Note :-

- This Question Paper Booklet contains five Sections. Section "A" Mathematics contains 50 questions of 4 marks each. Section "B" English, Section "C" General Science, Section "D" Social Studies and Section "E" Intelligence contain 25 questions each of 2 mark per question. In all, the paper consists of 150 questions for a total of 400 marks. Answer all questions.
- The test is of 3 hours (180 minutes) duration.

SECTION-A: MATHEMATICS

- Arun bought binder clips at the rate of 5 for a rupee. He had to sell them at the rate of 6 for a rupee. Find his loss percent in the transaction.

(a) $\frac{40}{3}\%$	(b) $\frac{50}{3}\%$
(c) $\frac{10}{3}\%$	(d) $\frac{20}{3}\%$
- For what value of m

$$xy^2m = (2xy + 5y)^2 - (2xy - 5y)^2$$

(a) -100	(b) 100
(c) 40	(d) -4
- Which is the like term as $84xy^2z^2$?

(a) $-3 \times 8 \times x \times y \times z \times z$	(b) $12 \times 7 \times x \times y \times y \times z \times z$
(c) $-5 \times 6 \times x \times x \times y \times y \times z$	(d) $6 \times 4 \times x \times z \times y \times z \times y$
- ABC is a right-angled triangle, which is right angled at B. If $AB = \sqrt{12^2 + 4^2}$ cm, $BC = 3$ cm, then find out the perimeter of the given figure:

(a) $(4\sqrt{10} + 16)$ cm	(b) $(16\sqrt{10} + 4)$ cm
(c) $(8\sqrt{10} + 2)$ cm	(d) $(2\sqrt{10} + 8)$ cm
- A bicycle wheel makes 1000 revolutions in moving 2km. Find the diameter of the wheel.

(a) 1.57 m	(b) 1.27 m
(c) 6.036 m	(d) 0.636 m
- If $a = 5 + 2\sqrt{6}$ and $b = \frac{1}{a}$, then what will be the value of $a^2 + b^2$?

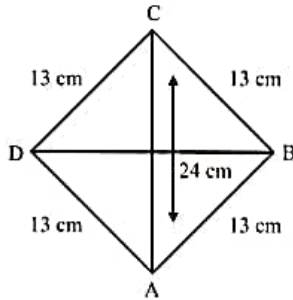
(a) 100	(b) 96
(c) 102	(d) 98
- Gauransh has 290 cards. Tanya has 150 cards. How many cards must Gauransh give to Tanya so that Tanya may have 3 times as many cards as Gauransh?

(a) 180	(b) 40
(c) 140	(d) 80
- A's present age is twice that of B. If B's age 5 years ago was b , then what is A's present age?

(a) $2b + 5$	(b) $2b - 5$
(c) $2b - 10$	(d) $2b + 10$
- If ABCD is a parallelogram, then find the value of x and y , Where $OC = x + y$, $OD = 18$, $OB = y - 5$ and $OA = 25$.

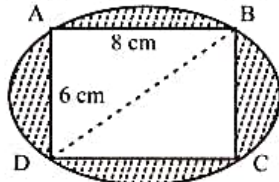
(a) $x = 13, y = 12$	(b) $x = 2, y = 23$
(c) $x = 23, y = 2$	(d) $x = 12, y = 13$
- Statement A : Every parallelogram is a trapezium and every rhombus is a kite.
Statement B: Every rectangle is a square but every square is not a rectangle.

(a) Both A and B are true	(b) A is true and B is false
(c) A is false and B is true	(d) Both A and B are false
- Find the area of Rhombus ABCD having each side equal to 13cm and one of its diagonal is 24 cm



- (a) 80 cm^2 (b) 140 cm^2
 (c) 100 cm^2 (d) 120 cm^2

12. A rectangle ABCD is inscribed in a circle having sides 8 cm and 6 cm. Find the area of the shaded region.



- (a) 32 cm^2 (b) 30.5 cm^2
 (c) 40.5 cm^2 (d) 36 cm^2

13. Find m so that $(-5)^{m+1} (-5)^{m-1} = (-5)^3$

- (a) 1 (b) 3 (c) 5 (d) $\frac{3}{2}$

14. The denominator of a rational number is greater than its numerator by 2. If the denominator is increased by 5 and the numerator is decreased by 2, the number obtained is $\frac{1}{10}$. The rational number is:

- (a) $\frac{25}{8}$ (b) 3 (c) 1 (d) $\frac{3}{5}$

15. Which one of the following is a Pythagorean triplet in which one side differs from the hypotenuse by two units?

- (a) $(2n + 1, 4n, 2n^2 + 2n)$ (b) $(2n, 4n, n^2 + 1)$
 (c) $(2n^2, 2n, 2n + 1)$ (d) $(2n, n^2 - 1, n^2 + 1)$

16. The ratio of the circumference of 2 wheels is 5:3. Find the ratio of the radii of the 2 wheels.

- (a) 5 : 3 (b) 3 : 5 (c) 9 : 10 (d) 10 : 9

17. The following marks are obtained by a student in different subjects during formative assessment in 8 subjects. Find median.

- (a) 7.5 (b) 9 (c) 6.5 (d) 8.7

18. Factorize $4a^2 - 9b^2 - 2a - 3b$. Identify the correct factorize answer.

- (a) $(2a - 3b)(2a - 3b - 1)$ (b) $(2a - 3b)(2a + 3b + 1)$
 (c) $(2a + 3b)(2a + 3b + 1)$ (d) $(2a + 3b)(2a - 3b - 1)$

19. $\sqrt[4]{3\sqrt{2^2}}$ is equal to :

- (a) $2\frac{1}{6}$ (b) $\frac{1}{2^6}$ (c) 2-6 (d) 26

20. There are 200 employees in an office. Food provision for them is for 20 days. How long will this provision last if 90 of them leave the group?

- (a) 16 days (b) 25 days
 (c) 17 days (d) 36 days

21. 5 pipes are required to fill a tank in 1 hour 36 minutes. How long will it take if e pipes stopped working?

- (a) 57.40 minutes (b) 2 hours
 (c) 48 minutes (d) 2 hours 40 minutes

22. The curved surface area of a cylindrical pipe is $2\pi(x^2 + x - 132)$ metres and its radius is $(x + 12)$ metres. What will be the height of the pipe?

- (a) $(x + 12)$ sq. m (b) $(x - 11)$ sq. m
 (c) $(x - 11)$ m (d) $(x + 12)$ m

23. Match List - I with List - II:

- | | |
|-------------------------|----------------------------|
| List - I | List - II |
| A. $(7a + 6b)(7a - 6b)$ | I. $49a^2 + 84ab + 36b^2$ |
| B. $(7a + 6b)^2$ | II. $49a^2 + 21ab - 18b^2$ |
| C. $(7a - 6b)^2$ | III. $49a^2 - 36b^2$ |
| D. $(7a + 6b)(7a - 3b)$ | IV. $49a^2 - 84ab + 36b^2$ |

Choose the correct answer from the options given below:

- (a) (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
 (b) (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
 (c) (A) - (III), (B) - (I), (C) - (IV), (D) - (II)
 (d) (A) - (IV), (B) - (III), (C) - (II), (D) - (I)

24. Match List - I with List - II:

- | | |
|-----------------------|----------------|
| List-I | List-II |
| A. $3m \times 2m$ | I. $16a^2$ |
| B. $-9m \times -3n$ | II. $6m^2$ |
| C. $4a^2 \times 4a^2$ | III. $27mn$ |
| D. $2a \times 8a$ | IV. $16a^4$ |

Choose the correct answer from the options given below:

- (a) (A) - (IV), (B) - (I), (C) - (II), (D) - (III)
 (b) (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
 (c) (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
 (d) (A) - (II), (B) - (III), (C) - (I), (D) - (IV)

25. If a 4-digit number $2x y8$ is exactly divisible by 3, then which of the following is the least value of $(x + y)$?

- (a) 2 (b) 4 (c) 6 (d) 5

26. Find the digits A and B if

$$\begin{array}{r} BA \\ \times AA \\ \hline 13A0 \end{array}$$

- (a) 5.4 (b) 5.2 (c) 4.5 (d) 2.5

27. One of the factors of $6x^2 + 5x - 6$ is:

- (a) $2x - 3$ (b) $3x + 2$
 (c) $2x + 3$ (d) $2x - 2$

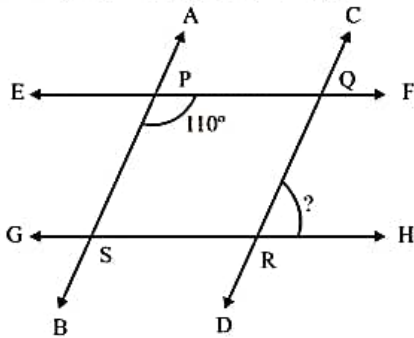
28. A tree broke at a height of 6m from the ground and its top touched the ground at the distance of 8m from the foot of the tree. Find the height of the tree.

- (a) 10 m (b) 14 m (c) 16 m (d) 2 m

29. 15 boys earn ₹ 900 in 5 days. How much will 20 boys earn in 7 days?

- (a) ₹ 1680 (b) ₹ 1720 (c) ₹ 1420 (d) ₹ 2008

30. If $AB \parallel CD$ and $EF \parallel GH$ then find $\angle QRH$:



- (a) 105°
- (b) 50°
- (c) 110°
- (d) 70°

31. In what time will ₹ 16,0000 amount to ₹ 176400 at 5% per annum compounded annually?

- (a) 4 years
- (b) 3 years
- (c) 2 years
- (d) 1 years

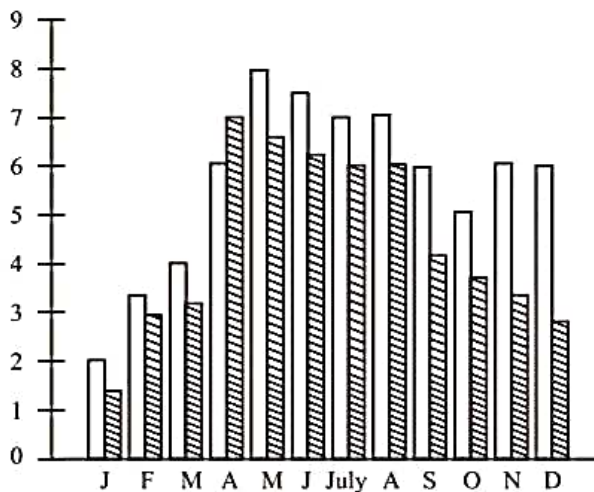
32. Anita borrows ₹ 1000 at 10% p.a. Simple interest for 3 years. She immediately lends this money at compound interest at the same rate and for the same time. What is her gain at the end of 3 years?

- (a) ₹ 40
- (b) ₹ 41
- (c) ₹ 30
- (d) ₹ 31

33. Mohan can do a piece of work in 25 days alone and Rohan can finish it in 20 days. They work together for 5 days & then Mohan left the work. In How many days will Rohan finish the remaining work?

- (a) 20 days
- (b) 9 days
- (c) 14 days
- (d) 11 days

34. The following bar graph shows the average daily hours of sunshine in two cities during the year. Observe the double bar graph and answer the following question. In which month is the difference between average hours of sunshine of two cities least?



- (a) December
- (b) May
- (c) January
- (d) February

35. If one of the number of a Pythagorean triplet is 10, the triplet is:

- (a) (23, 25, 10)
- (b) (10, 24, 26)
- (c) (5, 8, 10)
- (d) (3, 4, 10)

36. If one number is twice the other number and the sum of the squares of two numbers is 50,000, then find the difference of numbers.

- (a) 10000
- (b) 50
- (c) 100
- (d) 10

37. Evaluate : $\sqrt[3]{1372} \times \sqrt[3]{1458}$

- (a) 126
- (b) 136
- (c) 116
- (d) 106

38. If $a = 12, b = -5$ and $c = -7$, then the value of $a^3 + b^3 + c^3$ is :

- (a) 1360
- (b) 420
- (c) 1260
- (d) -1260

39. The value of a smart phone depreciates every year by 40%. Find out its value after 2 years if its present value is ₹ 70000.

- (a) ₹ 28000
- (b) ₹ 16800
- (c) ₹ 25200
- (d) ₹ 35000

40. Which of the following cannot be true for a polyhedron?

- (a) $V = 4, F = 4, E = 6$
- (b) $V = 6, F = 8, E = 12$
- (c) $V = 20, F = 12, E = 30$
- (d) $V = 4, F = 6, E = 6$

41. Consider the following distribution:

Class	0-20	20-40	40-60	60-80	80-100
Frequency	17	28	32	f	19

If the mean of the above distribution is 50, what is the value of f ?

- (a) 24
- (b) 34
- (c) 56
- (d) 96

42. The mean of 20 observations is 19. On checking it was found that the two observations were wrongly copied as 3 & 6. If wrong observations are replaced by correct values 8 and 9. Then what is the correct mean ?

- (a) 19.4
- (b) 16.6
- (c) 15.8
- (d) 14.2

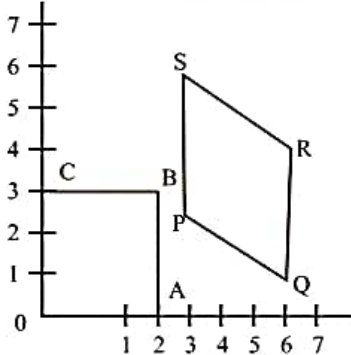
43. A person has 2 bags. First has 3 black and 4 white balls. Second bag has 4 black and 3 white balls. A bag is selected at random and then a ball is selected from it. Find the probability of the ball to be black.

- (a) $\frac{1}{3}$
- (b) $\frac{1}{4}$
- (c) $\frac{1}{7}$
- (d) $\frac{1}{2}$

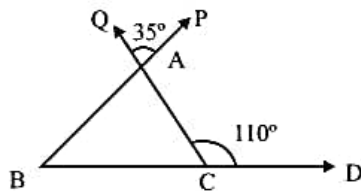
44. What is the probability that the number selected from the numbers 1, 2, 3,30 is a prime number.

- (a) $\frac{1}{29}$
- (b) $\frac{5}{6}$
- (c) $\frac{1}{3}$
- (d) $\frac{2}{3}$

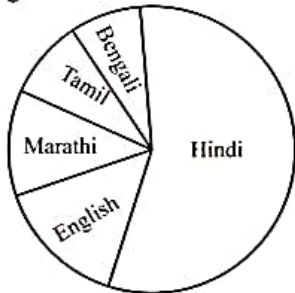
45. Identify the correct coordinates of the vertices of rectangle $OABC$ from the adjoining figure.



- (a) $O(0, 0), A(2, 0), B(2, 3), C(0, 3)$
 (b) $P(4.3), Q(6.1), R(6,5), S(4,7)$
 (c) $O(0,0), A(0,2), B(3,2), C(3,0)$
 (d) $O(1,1), A(0,2), B(2,3), C(3,3)$
46. A cistern can be filled by one tap in 4 hours and by another tap in 3 hours. How long will it take to fill it, if both taps are opened together?
- (a) $\frac{11}{7}$ hours (b) $\frac{12}{7}$ hours
 (c) $\frac{7}{12}$ hours (d) $\frac{7}{11}$ hours
47. Choose the correct remainder when $p(x):3x^2 + 4x + 5$ is divided by $g(x): x - 2$:
- (a) 20 (b) 25
 (c) 30 (d) 35
48. In the Fig, $\angle QAP = 35^\circ$ and $\angle ACD = 100^\circ$, Find $\angle ABC$:



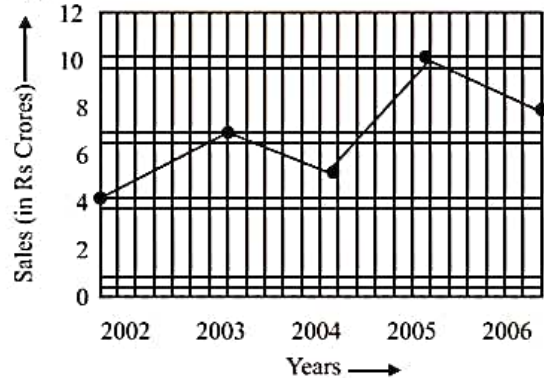
- (a) 55° (b) 65°
 (c) 75° (d) 50°
49. In India people speak different languages. Choose the correct option in degrees which represent the number of people speaking Tamil using the Information given in the chart:



Language	Number of people
I. Hindi	40
II. English	12
III. Marathi	9
IV. Tamil	7
V. Bengali	4
Total	72

- (a) 45° (b) 35°
 (c) 20° (d) 60°
50. The following line graph shows the yearly sales figures for a manufacturing company. Study the line graph and answer the following question.

The average sales of the company of the even years will be,



- (a) 7 (b) 8.5
 (c) 6 (d) 18

SECTION-B : ENGLISH

51. Choose the correct option that has the right rearrangement of words to make a meaningful sentence.
 (A) butter (B) is a
 (C) Bread and (D) Combination
 (E) Tempting
 Choose the correct answer from the options given below:
 (a) (D), (A), (E), (C), (B)
 (b) (A), (B), (D), (C), (E)
 (c) (C), (A), (B), (E), (D)
 (d) (A), (B), (E), (C), (D)
52. Choose the correct option that has the right rearrangement of words to make a meaningful sentence.
 (A) is important (B) rules
 (C) it (D) to observe
 (E) traffic
 Choose the correct answer from the options given below:
 (a) (C), (A), (D), (E), (B)
 (b) (D), (A), (B), (C), (E)
 (c) (E), (B), (A), (C), (D)
 (d) (A), (B), (C), (E), (D)
53. Choose the correct option to fill in the blanks
 The patient was _____ weak to walk without help.
 (a) Too (b) Little
 (c) Much (d) Few

54. Choose the correct preposition:
Are you looking for anything _____ particular?
(a) Over (b) Among
(c) Above (d) In
55. Match the following books/poems with their authors/poets
Books /Poems Authors/Poets
A. Treasure Island I. Major H.P.S. Ahluwalia
B. Swami and Friends II. Robert Louis Stevenson
C. Harry Potter III. R.K. Narayan
D. The summit within IV. J.K. Rowling
Choose the correct answer from the options given below:
(a) (A) – (III), (B) – (IV), (C) – (I), (D) – (II)
(b) (A) – (II), (B) – (III), (C) – (IV), (D) – (I)
(c) (A) – (I), (B) – (II), (C) – (IV), (D) – (III)
(d) (A) – (III), (B) – (I), (C) – (IV), (D) – (II)
56. Choose the correct option.
The mason is building the wall.
The above sentence would be written in passive form as:
(a) The wall are being built by the mason.
(b) The wall is being built by the mason.
(c) The mason is being built by the wall.
(d) The wall was being built by the mason.
57. Choose the correct option.
His _____ is in the ascendant.
(a) Galaxy (b) Universe
(c) Star (d) Luckily
58. Identify the error and choose the correct option.
Energy is very essential in succeed in life.
(a) In-to (b) Is-was
(c) In-for (d) Is-were
59. Choose the correct option:
Ramesh and his brother _____ dancing.
(a) Was (b) Were
(c) Will (d) Would
60. Choose the correct option and fill in the blanks:
My sister said, "you lied to me yesterday,"
My sister said that _____ to her _____.
(a) You has lied, yesterday
(b) I had lied, yesterday
(c) I had lied, the previous day
(d) You had lied, the previous day
61. Identify the subject in the following sentence:
The Board of Directors has arrived.
(a) The Board (b) The Board of Directors
(c) Directors (d) The Board of
62. Choose the correct option:
Sam is a _____ man.
(a) First (b) Handsome
(c) Half (d) Delicious
63. Choose the correct option to fill in the blank:
The _____ man died in the hospital.
(a) Injury (b) Injure
(c) To injure (d) Injured
64. Identify the positive degree from the following options:
(a) Hottest (b) Hot
(c) Hotter (d) Hotters
65. Choose the correct option to complete the following sentence:
Did _____ see her paintings?
(a) Her (b) Them
(c) You (d) Him

DIRECTIONS (Qs. 66-70): Read the passage given below

Valentin Haüy developed a system of reading for the blind. He printed normal letters in relief that could be felt by a touch of finger. He also started a school for the blind children. Haüy's system of reading for the blind was very useful. But it was quite difficult to learn. Moreover, it was only a reading system. There was no way for the blind to write in this system. In 1819, a ten-year-old blind boy named Louis Braille entered Haüy's school. He was an intelligent student and quickly learnt to read with the help of embossed letters. But he soon realised the disadvantages in Haüy's system. He made up his mind to develop an easier method of reading and writing for the blind. And in 1824, when he was only 15, Braille invented a system of writing which has been accepted all over the world. He was yet a student in Haüy's school. This school is now known as the National Institute for Blind Children. It is supported by the French Government.

On the basis of your understanding of the passage, answer the following questions:

66. What according to the passage was the major disadvantage in Haüy's system?
(a) It was difficult to comprehend.
(b) Haüy's system was difficult for the blind to use for writing.
(c) It was easy to learn.
(d) It was a regular reading and writing system.
67. What according to you is Louis Braille Known for?
(a) A blind boy
(b) A general student in Haüy's school
(c) The inventor of a system of reading and writing for the blind
(d) A ten year old boy
68. He printed letters I relief.
Here the word – 'relief' means _____.
(a) Engraved
(b) In a depressed form
(c) Normal form
(d) In a raised form
69. Give the synonym of the word – 'invent'
(a) Create (b) Realize
(c) Discover (d) Unearth
70. Give the antonym of the word – 'develop'
(a) Grow (b) Decline
(c) Overweight (d) Ripe
71. Choose the correct option:
The synonym of 'take' is _____.
(a) Except (b) Accept
(c) Ignore (d) Refuse
72. Choose the correct option:
The antonym of 'Stiff' is _____.
(a) Bland (b) Dark
(c) Limp (d) Bright

73. Choose the correct option to fill in the blank:
They aren't good scuba divers, _____?
(a) Could they? (b) Are they?
(c) Can they? (d) Will they?
74. Which of the following is an assertive sentence?
(a) Do you enjoy Idli Sambhar?
(b) You are requested to stand in line.
(c) The Taj is a beautiful monument.
(d) Hurrah! The school team has won the match.
75. Match the poems/books with poets/authors:
- | Poems/Books | Poets/Authors |
|-----------------------|------------------------|
| A. Vocation | I. Rabindranath Tagore |
| B. Christmas Carol | II. Jawaharlal Nehru |
| C. Geography Lesson | III. Charles Dickens |
| D. Discovery of India | IV. Zulfikar Ghose |
- Choose the correct answer from the options given below:
(a) (A) – (III), (B) – (IV), (C) – (I), (D) – (II)
(b) (A) – (IV), (B) – (I), (C) – (II), (D) – (III)
(c) (A) – (II), (B) – (IV), (C) – (III), (D) – (I)
(d) (A) – (I), (B) – (III), (C) – (IV), (D) – (II)

SECTION-C: GENERAL SCIENCE

76. Identify the correct sequence of process that results in lightning-
(A) Magnitude of accumulated charge becomes large.
(B) Accumulation of negative charge near the lower edges of cloud.
(C) Air becomes conductor of charges.
(D) Accumulation of positive charge near the upper edges of cloud.
(E) Negative and positive charge meet producing streaks of bright light and sound called as lighting
Choose the correct answer from the options given below:
(a) (A), (C), (B), (D), (E)
(b) (D), (B), (C), (A), (E),
(c) (D), (B), (A), (C), (E)
(d) (A), (C), (B), (D), (E)
77. The calorific value of a fuel is expressed in the unit-
(a) g/J (b) kg/J
(c) kJ/kg (d) J/g
78. To electroplate silver (AG) on a metal object, what will you choose as cathode, anode and electrolyte?
(a) Cathode – metal object, Anode – silver bar, Electrolyte – copper salt
(b) Cathode – silver bar, Anode – metal object, Electrolyte – silver salt
(c) Cathode – metal object, Anode – silver bar, Electrolyte – silver salt
(d) Cathode – copper rod, Anode – silver bar, Electrolyte – copper salt
79. Rashi was unable to hold the greasy tumbler of milk in her hand. It would be because-
(a) Greasing has made the surface smooth, increasing the friction
(b) Greasing has made the surface rough, decreasing the friction
(c) Greasing has made the surface smooth, reducing the friction
(d) Greasing has made the surface rough, increasing the friction
80. 'Combine' is a machine. Identify from the following for which it is used?
(a) For harvesting and threshing
(b) For sowing and harvesting
(c) For threshing and sowing
(d) For irrigation and sowing
81. Tadpole develops into an adult frog by the process of-
(a) Fertilisation (b) Metamorphosis
(c) Budding (d) Adaptation
82. Force acting opposite to the direction of motion of a body is-
(a) Gravitational Force (b) Electrical Force
(c) Friction Force (d) Atmospheric Pressure
83. Human ears are sensory organs that help to hear sound. Its outer portion can be seen. The rest of the delicate ear is buried deep inside the skull. Identify the correct sequence from outer ear to Inner ear –
(A) Auditory Nerve (B) Ear drum
(C) Pinna (D) Ear tube
(E) INNER EAR
Choose the correct answer from the options given below:
(a) (C), (D), (B), (E), (A) (b) (B), (C), (D), (E), (A)
(c) (A), (B), (C), (D), (E) (d) (D), (E), (A), (B), (C)
84. Match List-I with List-II:
- | List-I | List-II |
|----------------------|--|
| A. Braille | I. Splitting of white light into seven colours |
| B. Kaleidoscope | II. left of the object appears right and right appears left |
| C. Dispersion | III. Resource for visually (Blind) challenged person |
| D. Lateral inversion | IV. Beautiful patterns are formed because of multiple reflection |
- Choose the correct answer from the options given below:
(a) (A) – (I), (B) – (IV), (C) – (III), (D) – (II)
(b) (A) – (I), (B) – (II), (C) – (III), (D) – (IV)
(c) (A) – (III), (B) – (IV), (C) – (I), (D) – (II)
(d) (A) – (IV), (B) – (II), (C) – (III), (D) – (I)
85. Which of the following statements is incorrect for CNG?
(a) It can be easily transported through pipes.
(b) It is more polluting.
(c) It is stored under high pressure.
(d) It is used as fuel for transport vehicles.
86. Amish has to demonstrate a science Activity on Ignition temperature from the objects given to him like paper sheets, candle, matchbox and water. The correct sequence for the activity to work will be-
(A) Light the candle.
(B) Pour the water in one of the cups.
(C) Continue heating both the cups.
(D) Make two paper cups by folding a sheet of paper.
(E) Heat both the cups separately with a candle.

Choose the correct answer from the options given below:

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

87. Match List - I with List - II

List-I	List-II
Cell organelles	Function
A. Nucleus	I. Contains cell organelles
B. Cell membrane	II. control center of all activities of cell
C. Chromosomes	III. Transfer of characters
D. Cytoplasm	IV. Provide shape and protection

Choose the correct answer from the options given below:

- (a) (A) - (II), (B) - (IV), (C) - (III), (D) - (I)
- (b) (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
- (c) (A) - (III), (B) - (IV), (C) - (II), (D) - (I)
- (d) (A) - (IV), (B) - (III), (C) - (II), (D) - (I)

88. Identify the name of a book carrying information about endangered species from the following:

- (a) Red Data Book
- (b) Record Data Book
- (c) Record Book
- (d) Observation Book

89. Identify the traditional methods of Irrigation-

- (A) Chain Pump
- (B) Lever System
- (C) Sprinkler System
- (D) Drip System
- (a) Both (A) and (C)
- (b) Both (A) and (B)
- (c) Both (C) and (D)
- (d) Both (D) and (A)

90. Name a National Park situated in Pachmarhi Biosphere Reserve from the following -

- (a) Satpura National Park
- (b) Bori National Park
- (c) Jim Corbett National Park
- (d) Tawa National Park

91. Ankush has just entered his adolescence years, He wishes to know what should be eaten to remain healthy. Which of the following set of food should he consume to remain fit and healthy?

- (a) Milk, rice, dal, leafy vegetables
- (b) Chips, leafy vegetables, milk, burger
- (c) Milk, dal leafy vegetables, fried snacks
- (d) Dal, rice, burger, chips

92. At puberty which hormone is secreted by ovaries?

- (a) Estrogen
- (b) Growth hormone
- (c) Testosterone
- (d) Insulin

93. Metamorphosis in frog is controlled by this hormone -

- (a) Insulin
- (b) Thyroxine
- (c) Estrogen
- (d) Adrenaline

94. Choose the feasible displacement reaction from the options given below:

- (a) Copper sulphate + Zine granules
- (b) Iron sulphate + Copper turnings
- (c) Zine sulphate + Iron nails
- (d) Zine sulphate + Copper turnings

95. Plastic containers or boxes are mostly preferred to store food items because these are -

- (a) Non biodegradable
- (b) Non reactive

- (c) Poor conductor of heat and electricity
- (d) More expensive

96. If current is passed through copper sulphate solution copper gets deposited on the plate connected to -

- (a) Positive terminal of battery
- (b) Negative terminal of battery
- (c) When battery is not connected
- (d) Copper deposited on both plates

97. ISRO stands for -

- (a) Indian Science Research Organisation
- (b) International Science Research Organisation
- (c) Indian Space Research Organisation
- (d) Interstate Research Organisation

98. Identify which is not a water pollutant from the following:

- (a) Sewage
- (b) Algae
- (c) Fertilisers
- (d) Weedicides

99. Which of these gases are responsible for global warming?

- (a) CO₂, methane and water vapour
- (b) CO₂, Sulphur dioxide, water vapour
- (c) CO, CO₂, and water vapour
- (d) CO₂, ozone and methane

100. The bread or idly dough becomes fluffy because of -

- (a) Heat
- (b) Grinding
- (c) Growth of yeast cells
- (d) Kneading

SECTION-D: SOCIAL STUDIES

101. The neighbourhood markets are the ones which _____.

- (a) Are far from our house
- (b) Are very expensive
- (c) Provide all necessary items
- (d) Provide less items

102. The source of fresh water available for human use is -

- (a) Rivers
- (b) Rain
- (c) Drains
- (d) Water vapour

103. The Khilafat Movement was led by whom, from the following?

- (a) Mahatma Gandhi
- (b) Mohammad Ali and Shaukat Ali
- (c) C.R.Das
- (d) Mahamud Ali

104. The Veda Samaj established in Madras in 1864 worked for which of the following causes?

- (a) Promotion of man
- (b) To abolish caste distinctions and for improving the conditions of women
- (c) Poor people
- (d) Against Child Marriage

105. The Ladakh desert is mainly inhabited by -

- (a) Christians and Muslims
- (b) Buddhists and Muslims
- (c) Christians and Buddhists
- (d) Only Buddhists

106. From the following options, choose which is not true about the Internet?
 (a) Provides worldwide information
 (b) Provides interaction
 (c) Allows moving physically from one place to another
 (d) Enhances E-Commerce
107. From the following, choose the region that is known as 'Orchards of the World'.
 (a) Coniferous region (b) Tropical region
 (c) Mediterranean region (d) Temperate region
108. Sandstone is an example of _____ rock.
 (a) Igneous (b) Metamorphic
 (c) Sedimentary (d) Extrusive Igneous rock
109. Match List – I with List - II
- | | |
|---------------------------------|--|
| List – I | List – II |
| A. Right to Equality | I. Prohibits human trafficking |
| B. Right to Freedom | II. Equal before law |
| C. Right to freedom of Religion | III. The right to form associations |
| D. Right against Exploitation | IV. The right to practise any religion of their choice |
- Choose the correct answer from the options given below:
 (a) (A) – (III), (B) – (I), (C) – (IV), (D) – (II)
 (b) (A) – (II), (B) – (III), (C) – (IV), (D) – (I)
 (c) (A) – (I), (B) – (II), (C) – (III), (D) – (IV)
 (d) (A) – (IV), (B) – (III), (C) – (II), (D) – (I)
110. Identify the crop which is not classified as a plantation crop?
 (a) Rice (b) Tea
 (c) Sugarcane (d) Cashew
111. Who founded the "Brahmo Samaj"?
 (a) Dayanand Saraswati
 (b) Raja Rammohan Roy
 (c) Ishwar Chandra Vidyasagar
 (d) Pandita Ramabai
112. Choose the correct meaning of 'Patent'.
 (a) It means adding the value of any commodity.
 (b) It means enhancing the usability of any thing.
 (c) It means reducing cost of production.
 (d) It means the exclusive right over any idea or invention.
113. Who am I?
 I am founder of sur dynasty.
 (a) Humayun (b) Sher Shah
 (c) Alauddin (d) Genghis Khan
114. Identify the source of funds for the Gram Panchayats.
 (a) Income tax
 (b) Government School's fee
 (c) Taxes on national highways
 (d) Taxes on houses, market places etc,
115. Choose the landform, which is not formed by the river?
 (a) Ox-bow (b) Levees
 (c) Meanders (d) Loess
116. Iron made from iron ore is the product of _____.
 (a) Marine industry (b) Mineral based industry
 (c) Agro based industry (d) Forest based industry
117. When and to whom the British Parliament transferred their powers in order to ensure a more responsible management of Indian affairs?
 (a) 1857, East India Company
 (b) 1859, Lawrence – The viceroy
 (c) 1858, Governor general with the title of Viceroy
 (d) 1887, Dinshaw Wacha
118. Which Article of the Constitution of India provides every citizen the Fundamental Right to life including the Right to health?
 (a) Article 15 (b) Article 360
 (c) Article 12 (d) Article 21
119. Choose the meaning of the word Metamorphic from the following:-
 (a) Fire (b) Settle down
 (c) Change of form (d) Air
120. Match List – I with List - II.
- | | |
|---------------------------|------------------------|
| List – I | List – II |
| A. The Brahma Samaj | I. Jyotirao Phule |
| B. The Ramkrishna Mission | II. Swami Dayanand |
| C. Gulamgiri | III. Raja Rammohan Roy |
| D. Arya Samaj | IV. Swami Vivekananda |
- Choose the correct answer from the options given below:
 (a) (B) – (IV), (C) – (I), (D) – (II), (A) – (III)
 (b) (A) – (IV), (B) – (III), (C) – (II), (D) – (I)
 (c) (C) – (II), (D) – (III), (A) – (IV), (B) – (I)
 (d) (D) – (II), (C) – (III), (B) – (I), (A) – (IV)
121. Choose the correct definition of 'Birth rate' from the following options:
 (a) The number of births per year
 (b) The change in total population during a specific time
 (c) The number of live births per 1,000 people
 (d) The number of live births per year, per 10,000 people
122. Match List – I with List - II
- | | |
|--------------------------|---|
| List – I | List – II |
| A. Intensive subsistence | I. Slash and burn |
| B. Shifting cultivation | II. Amount of capital use is large |
| C. Nomadic herding | III. Prevalent in the thickly populated areas |
| D. Commercial farming | IV. Move from place to place with their animals |
- Choose the correct answer from the options given below:
 (a) (A) – (I), (B) – (II), (C) – (IV), (D) – (III)
 (b) (A) – (III), (B) – (I), (C) – (IV), (D) – (II)
 (c) (A) – (II), (B) – (III), (C) – (I), (D) – (IV)
 (d) (A) – (IV), (B) – (I), (C) – (II), (D) – (III)
123. Which of the following is a public sector company?
 (a) Maruti Suzuki India Limited
 (b) Anand Milk Union Limited
 (c) Steel Authority of India Limited
 (d) Pesticide Factory of Union Carbide

124. Arrange in chronological order:
 (A) Tughlaq Dynasty (B) Early Turkish
 (C) Khalji Dynasty (D) Rajput Dynasty
 (E) Lodi Dynasty
 Choose the correct answer from the options given below:
 (a) (D), (C), (A), (E), (B)
 (b) (D), (B), (C), (A), (E)
 (c) (C), (A), (B), (E), (D)
 (d) (B), (D), (C), (E), (A)
125. Match List - I with List - II.

List - I	List - II
A. Khilafat Agitation	I. Mohammad Ali Jinnah
B. Rowlatt Act	II. Viceroy Curzon
C. Salt March	III. Shaukat Ali
D. Partition of Bengal	IV. Mahatma Gandhi

- Choose the correct answer from the options given below:
 (a) (B) - (I), (C) - (II), (D) - (III), (A) - (IV)
 (b) (A) - (III), (B) - (I), (C) - (IV), (D) - (II)
 (c) (D) - (IV), (B) - (III), (C) - (I), (A) - (II)
 (d) (A) - (III), (C) - (II), (D) - (I), (B) - (IV)

SECTION-E: INTELLIGENCE TEST

126. $\frac{2}{5} : \frac{8}{25} :: \frac{11}{15} : \underline{\hspace{2cm}}$
 (a) $\frac{1331}{225}$ (b) $\frac{121}{3375}$
 (c) $\frac{111}{155}$ (d) $\frac{128}{55}$
127. If word MATH is coded as 26, 2, 40, 16, then code for the word BOOK is -
 (a) 2, 15, 15, 11 (b) 10, 20, 20, 44
 (c) 4, 30, 30, 22 (d) 1, 12, 12, 14
128. A, B, C, D are four friends. A is shorter than B but taller than C who is shorter than D.
 Who is shortest among all-
 (a) A (b) B
 (c) C (d) D
129. Choose the correct alternative from the given options:
 If 8th of April falls on Monday, what Day would be the 30th May of that year?
 (a) Sunday (b) Monday
 (c) Thursday (d) Wednesday
130. If the English alphabets are divided into two equal halves from A to M and N to Z such as A corresponds to N, then which letter in the later half would be corresponding to letter K.
 (a) X (b) Y
 (c) Z (d) W
131. Arrange the given responses in a meaningful sequence-
 (A) Leaf (B) Fruit
 (C) Stem (D) Root
 (E) Flower
- Choose the correct answer from the options given below:
 (a) (C), (D), (A), (E), (B)
 (b) (D), (C), (E), (A), (B)
 (c) (C), (D), (E), (A), (B)
 (d) (D), (C), (A), (E), (B)
132. Choose the option that will replace question mark (?) in the following-
-
- (a) 28 (b) 42
 (c) 74 (d) 72
133. Find the odd one out.
 (a) Alphonso (b) Kesar
 (c) Malgova (d) Sherbati
134. Find the odd one out
 (a) Rhombus (b) Square
 (c) Rectangle (d) Kite
135. Choose the odd one out.
 (a) Scissors (b) Knife
 (c) Axe (d) Hammer
136. Complete the analogy
 36: 225:: 1225: _____
 (a) 7929 (b) 6926
 (c) 5929 (d) 4929
137. Find the missing number, which has the same relationship with the other number on the basis of the relation between the numbers in the given pair.
 16: 41:: 20: _____
 (a) 71 (b) 53
 (c) 44 (d) 67
138. Complete the analogy.
 Thermometer: Temperature:: _____ : Current.
 (a) Ammeter (b) Voltmeter
 (c) Anemometer (d) Berometer
139. Arrange the given words in the sequence in which they occur in the dictionary.
 (A) Aaerstd (B) Aaersted
 (C) Amquarine (D) Acgledhi
 (E) Acgledih
 Choose the correct answer from the options given below:
 (a) (A), (B), (C), (D), (E)
 (b) (A), (B), (D), (C), (E)
 (c) (A), (B), (D), (E), (C)
 (d) (A), (B), (C), (E), (D)
140. Find the missing word, which has the same relationship with the other word as that between words of different pair.
 Pie : Cake:: π : _____
 (a) Pasta (b) Pastry
 (c) Mathematics (d) Noodles

141. Complete the analogy.

Work : Joule:: _____ : Watt.

- (a) Volume (b) Area
(c) Time (d) Power

142. Complete the analogy.

Chennai: Tamil Nadu:: Kohima: _____.

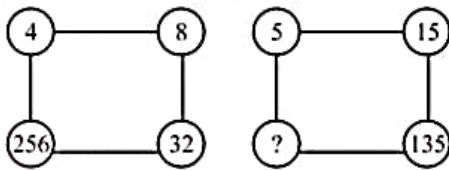
- (a) Nagaland (b) Gujarat
(c) Orissa (d) Meghalaya

143. Choose the odd one out.

ZXV, LJH, IGE, UTR, PNL

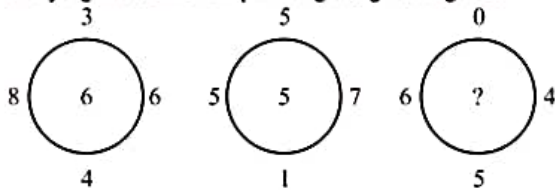
- (a) PNL (b) IGE
(c) UTR (d) ZXV

144. Find the missing number



- (a) 3800 (b) 3645
(c) 3435 (d) 3400

145. Find the missing term out of the options given below after studying the relationship among the given figures.



- (a) 7 (b) 6
(c) 4 (d) 5

146. Decipher the pattern (study the pattern and fill in the blank)

5	40	7
11	77	6
3	?	6

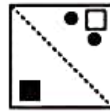
- (a) 29 (b) 43
(c) 52 (d) 30

147. Which letter will come in the place of "?"

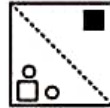


- (a) M (b) N
(c) O (d) P

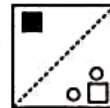
148. Which of the following is the water image of the given figure?



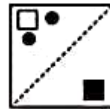
(a)



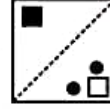
(b)



(c)



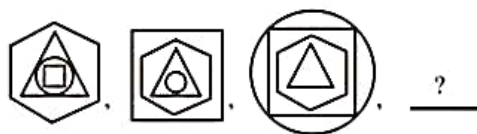
(d)



149. Identify the correct mirror image of word BLINK along the line XY.

- (a) KИLVB (b) BИLK
(c) BИLK (d) KИLVB

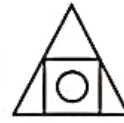
150. Find the next pattern in the sequence



(a)



(b)



(c)



(d)

