

VISA

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6 Year

Paper Code :

VI-STP-2009-6Y-A

Six Year

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AIR 4 -10	Rs. 5,000/month	Rs. 2,40,000/-
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AIR 21-30	Rs. 1,500/month	Rs. 72,000/-
AIR 31-50	Rs. 1,000/month	Rs. 48,000/-
AIR 51-100	Rs. 500/month	Rs. 24,000/-

* Terms & Conditions apply

Screening Test Paper-I

Name of the Student :

Reg. No. :

Duration : 1.30 hour

Max. Marks : 150

Please read the instructions carefully. You are allotted 3 minutes specifically for this purpose.

INSTRUCTIONS :

1. This Question Paper contains 75 Questions.
2. Each question has 4 choices for its answer (A), (B), (C) and (D).
3. Only ONE of them is the right answer.
4. There is **no negative marking**.
5. For each question you will be awarded +3 marks.
6. In all other cases you will be awarded 0 marks.
7. Use HB pencil to fill the bubble corresponding to correct answer.
8. *You should submit the question paper & answer sheet after the completion of the test to the invigilator.*
9. *You should keep the question paper & answer sheet clean. Rough work must be done in the space provided.*

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The hi-Tech Institute

VISION
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MATHEMATICS

1. Choose the correct answer :

(A) $\frac{8}{5} < \frac{11}{12}$

(B) $\frac{5}{8} < \frac{11}{12}$

(C) $\frac{1}{2} < \frac{1}{3}$

(D) $\frac{15}{12} < \frac{1}{4}$

2. $(12)^5 \times (12)^4$ is equal to :

(A) $(12)^1$

(B) $(12)^9$

(C) $(12)^{20}$

(D) None of these

3. $\left(\frac{15}{12}\right)^5 \times \left(\frac{12}{15}\right)^4$ is equal to :

(A) $\frac{5}{4}$

(B) $\frac{3}{4}$

(C) $\frac{15}{13}$

(D) $\frac{1}{4}$

4. Choose the improper fraction :

(A) $\frac{18}{27}$

(B) $\frac{1}{2}$

(C) $\frac{3}{2}$

(D) $\frac{1}{3}$

5. Which of the following is true :

(A) $\frac{1}{4} < \frac{1}{3} < \frac{1}{2} < 1$

(B) $\frac{4}{3} > \frac{4}{5} > \frac{5}{6} > \frac{3}{2}$

(C) $\frac{8}{9} > \frac{5}{6} > \frac{1}{3} > \frac{1}{2}$

(D) $\frac{4}{3} < \frac{4}{9} < \frac{5}{6} < \frac{3}{2}$

6. 2, 1, 0, 1, 2, 3, are :

(A) Integers

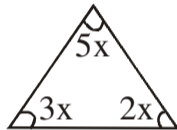
(B) Whole numbers

(C) Natural numbers

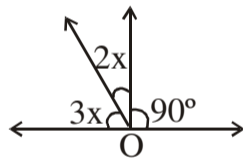
(D) None of these

7. 2.5 is:
 (A) Integer (B) Rational number
 (C) Irrational (D) Whole number
8. $\frac{4}{0}$ is:
 (A) undefined (B) 1
 (C) 4 (D) 0
9. $(4)^0 \times (5)^2$ is equal to:
 (A) 25 (B) 0 (C) 100 (D) 40

10. In the given figure, x is equal to :



- (A) 10° (B) 18°
 (C) 9° (D) 20°
11. In the given figure x is equal to :



- (A) 10° (B) 18°
 (C) 9° (D) 20°
12. 4 men can do a piece of work in 18 days then 2 men can do the same work in :
 (A) 72 days (B) 9 days
 (C) 36 days (D) $\frac{4}{9}$ days
13. $(4)^{-5} \times \left(\frac{1}{4}\right)^{-3}$ is equal to :

- (A) $(4)^{-8}$ (B) $\left(\frac{1}{4}\right)^{-3}$
 (C) $\frac{1}{16}$ (D) $\frac{1}{64}$

14. 40% of a number is 140. Then the number is :
- (A) 300 (B) 350
(C) 400 (D) 450
15. For the supplementary angles sum of two angles is:
- (A) 90° (B) 120°
(C) 180° (D) 360°
16. If $x\%$ of 540 = 108, then x is equal to:
- (A) 10 (B) 20
(C) 30 (D) 15
17. 998×1002 is equal to:
- (A) 99996 (B) 999996
(C) 99884 (D) 999884
18. A triangle having no sides are equal is called:
- (A) Isosceles (B) Scalene
(C) Equilateral (D) None of these
19. If the area a rectangular field is 220 m^2 . If length is 22 m then its perimeter is equal to:
- (A) 60 m (B) 64 m
(C) 32 m (D) 10 m
20. $(a - 1)(a^2 + a + 1)$ is equal to:
- (A) $a^3 + 1$ (B) $a^3 - 1$
(C) $a^2 + 1$ (D) $a^2 - 1$
21. $(a + b)^2 =$
- (A) $a^2 + 2ab + b^2$ (B) $a^2 - 2ab + b^2$
(C) $a^2 + 2ab - b^2$ (D) $-a^2 + 2ab - b^2$

22. Four right angle =
(A) 90° (B) 180°
(C) 270° (D) 360° .
23. Sum of all the interior angles of a quadrilateral is :
(A) 180° (B) 270°
(C) 360° (D) 540° .
24. A rectangle has
(A) opposite sides are equal
(B) Each angle is right angle
(C) Both diagonals are equal
(D) All of these.
25. Sum of all the exterior angles of a regular hexagon is :
(A) 180° (B) 360°
(C) 270° (D) 540° .
26. $(a + b)^2 - (a - b)^2 =$
(A) $2(a^2 + b^2)$ (B) $2(a^2 - b^2)$
(C) $4ab$ (D) $4ab$.
27. The sum of two consecutive natural number is 31, then the smaller number is :
(A) 15 (B) 16
(C) 17 (D) 13.
28. The sum of two odd number is :
(A) an odd number (B) an even number
(C) always a prime number (D) always a multiple of 3.
29. The sum of the smallest prime number and smallest composite number is :
(A) 6 (B) 3
(C) 4 (D) 8.

30. The square of smallest odd composite number is :
(A) 9 (B) 81
(C) 25 (D) 121.

SCIENCE

31. Which of the following is not a planet ?
(A) Mercury (B) Saturn
(C) Mars (D) Moon.
32. Which of the following is a good conductor of electricity ?
(A) Paper (B) Drycloth
(C) Rubber (D) Copper.
33. The S.I. unit of length is :
(A) Centimetre (B) Metre
(C) Decimetre (D) Kilometre.
34. The normal temperature of human body is :
(A) 98.4 °C (B) 37 K
(C) 98.4 K (D) 37 °C.
35. Which of the following is the correct relation for pressure ?
(A) Pressure = Force × Area (B) Pressure = $\frac{\text{Force}}{\text{Area}}$
(C) Pressure = $\frac{\text{Area}}{\text{Force}}$ (D) Pressure = Force × (Area)².
36. Vehicles plying on road come to a stop if their engines are switched off. This is due to
(A) Electric force (B) Magnetic force
(C) Force of friction (D) Gravitational force.
37. Pressure of fluids can be measured with
(A) Manometer (B) Barometer
(C) Thermometer (D) Odometer.

38. A moving car on a road possess :
- (A) Light energy (B) Electrical energy
(C) Kinetic energy (D) Chemical energy
39. Which of the following is not a simple machine ?
- (A) Sickle (B) Screw
(C) Knife (D) Bicycle.
40. In celsius scale, the upper fixed point is :
- (A) 50°C (B) 100°C
(C) 150°C (D) 200°C
41. In Kelvin scale, the lower fixed point is :
- (A) 173 K (B) 273 K
(C) 373 K (D) 473 K
42. The unit of temperature is :
- (A) Kelvin (B) Meter
(C) Pounds (D) Newton.
43. A man running on a road has
- (A) Light energy (B) Electrical energy
(C) Kinetic energy (D) Chemical energy
44. Moon is the natural satellite of
- (A) Earth (B) Venus
(C) Mars (D) Jupiter
45. Celsius scale has
- (A) 100 Division (B) 200 Division
(C) 300 Division (D) 400 Division
46. Man made materials are :
- (A) Glass (B) Steel
(C) Plastic (D) All of these.

47. Gases occupy :
(A) No space (B) Small space
(C) Space (D) None of these.
48. Changes in which no new substances are formed :
(A) Chemical changes (B) Physical changes
(C) No changes (D) All of these.
49. When in washing soda lemon juice is added, the gas evolve is :
(A) HCl (B) CO₂
(C) O₂ (D) H₂O
50. Iron sheet is coated with..... before making a can :
(A) Copper (B) Gold
(C) Tin (D) Zinc.
51. An example of liquid is
(A) Mercury (B) Sponge
(C) Gold (D) Silver
52. The matter that occupies a definite shape is called a
(A) Solid (B) Liquid
(C) Gas (D) Both(A) and (C)
53. The matter that neither occupies a definite space nor has a definite shape is called a
(A) Gas (B) Liquid
(C) Solid (D) Both (A) and (B)
54. Materials like paper, rubber are bad conductors of electricity. They are also called
(A) Conductor (B) Insulator
(C) Convection (D) Conjunction.
55. Air is :
(A) Transparent material (B) Translucent material
(C) Opaque material (D) mixture of several gases.

56. The process of separating any salt from its solution by removing water is called
- (A) Sublimation (B) Crystallisation
(C) Evaporation (D) Distillation.
57. The process in which a solid gets converted directly into its gaseous state without changing into its liquid state is called
- (A) Sublimation (B) Evaporation
(C) Crystallisation (D) Distillation.
58. The process of setting down of solid particles in a liquid is known as
- (A) Sedimentation (B) Crystallisation
(C) Distillation (D) Evaporation.
59. The process by which a pure solid substance is obtained from its solution is called
- (A) Crystallisation (B) Sedimentation
(C) Distillation (D) Evaporation.
60. Neela thotha is also called :
- (A) White vitriol (B) Blue vitriol
(C) Green vitriol (D) Brown vitriol.
61. What is X in the following food chain ?
- Plants $\xrightarrow{\text{eaten by}}$ X
- (A) Plants (B) Animals
(C) Rose (D) Tiger
62. Plants and animals are:
- (A) Inter-dependent (B) Independent
(C) Harmful to each other (D) None of these
63. Cell wall of plant cell is made up of :
- (A) Protein (B) Fat
(C) Mineral (D) Cellulose
64. Mushrooms are:
- (A) Flowering plant (B) Non-flowering plant
(C) Animals (D) Small animal

65. Fibrous root system are present in:
 (A) Pea (B) Marigold
 (C) Tulsi (D) Grasses
66. Carrot is an example of modified :
 (A) Fruit (B) Stem
 (C) Root (D) Leave
67. Teeth help in biting the food is :
 (A) Incisors (B) Canines
 (C) Premolar (D) Molars
68. A stethoscope amplifies the sound of a :
 (A) Heart beat (B) Lungs
 (C) Stomach (D) Liver.
69. Energy giving food are :
 (A) Carbohydrate (B) Fats
 (C) Carbohydrate and fat (D) Protein
70. Night blindness is due to the deficiency of:
 (A) Vitamin A (B) Vitamin B
 (C) Vitamin C (D) Vitamin D.
71. The green colour of plants is due to :
 (A) Chlorophyll (B) Leaves
 (C) Branches (D) All of these.
72. Example of single-celled organism is :
 (A) Bacteria (B) Human
 (C) Pig (D) Birds.
73. The movement of tip of a plant towards the light is :
 (A) Chemotropic (B) Phototropic
 (C) Thigmotropic (D) None.
74. Homo sapiens is the name of
 (A) Dog (B) Cat
 (C) Rat (D) Man.
75. The ovary contains egg like structure known as
 (A) Fruits (B) Seeds
 (C) Ovules (D) Pollen.

ANSWER

- | | | | | |
|-------|-------|-------|-------|-------|
| 1. B | 2. B | 3. A | 4. C | 5. A |
| 6. A | 7. B | 8. A | 9. A | 10. B |
| 11. B | 12. C | 13. C | 14. B | 15. C |
| 16. B | 17. B | 18. B | 19. B | 20. B |
| 21. A | 22. D | 23. C | 24. D | 25. B |
| 26. C | 27. A | 28. B | 29. A | 30. B |
| 31. D | 32. D | 33. B | 34. D | 35. B |
| 36. C | 37. A | 38. C | 39. D | 40. B |
| 41. B | 42. A | 43. C | 44. A | 45. A |
| 46. D | 47. C | 48. B | 49. B | 50. C |
| 51. A | 52. B | 53. A | 54. B | 55. A |
| 56. C | 57. A | 58. A | 59. A | 60. B |
| 61. B | 62. A | 63. D | 64. B | 65. D |
| 66. C | 67. A | 68. A | 69. C | 70. A |
| 71. A | 72. A | 73. B | 74. D | 75. C |