

Full Marks: 60 (60 × 1 = 60)

Time : 1 hrs., 30 minutes.

ENGLISH

1. **I have lived in this crowded city a decade.**
 (a) since (b) until (c) for (d) from
2. **No one gave me the message,?**
 (a) didn't they (b) did they (c) did he (d) didn't he
3. **..... Unicom is believed to look like a horse.**
 (a) The (b) A (c) An (d) no article
4. **Please your shoes before entering this room.**
 (a) take off (b) take down (c) put down (d) take out
5. **we had to cancel our hike the bad weather.**
 (a) because of (b) although (c) despite (d) even though
6. **..... the poor visibility, the pilot decided to take off.**
 (a) even though (b) so that (c) in spite of (d) because of
7. **I am late for class today,?**
 (a) aren't I (b) don't I (c) am I (d) do I
8. **The house is beautiful that I have fallen in love with it.**
 (a) such (b) such a (c) so (d) such an
9. **No sooner had he come out of the office it started raining hard.**
 (a) after (b) then (c) than (d) when
10. **The nature of these people really good.**
 (a) been (b) is (c) are (d) were
11. **Which of the sentences is correct?**
 (a) it feel like rough (b) it feels as though rough
 (c) it feels rough (d) it feels like a rough
12. **The teacher got the students the word correctly.**
 (a) to pronounce (b) pronounce
 (c) pronouncing (d) pronounced
13. **I watched the game midnight yesterday.**
 (a) for (b) in (c) until (d) by
14. **The passive voice of 'I hate people who laugh at me' is**
 (a) I hate laughing people (b) I hate people laughing at me
 (c) I hate people who laugh (d) I hate being laughed at,
15. **The word ' mountain' is a syllabic word .**
 (a) mono (b) two (c) three (d) four
16. **Which of the sentences is correct?**
 (a) I don't know where does he live? (b) I don't know where he live (c) I don't know where he live.
 (d) I don't know where did he live?
17. **Cattle us milk.**

- (a) is giving (b) gives (c) are giving (d) give
18. The Saint says he has never talked toEuropean national.
(a) an (b) the (c) a (d) no article
19. The pencil rolledthe table before he could hold it.
(a) to (b) off (c) of (d) by
20. There arestudents in this class that one .
(a) less (b) fewer (c) lesser (d) few

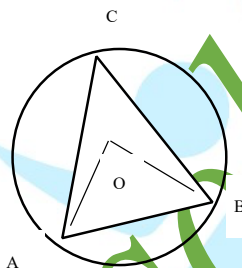
SCIENCE

21. In which stage of Silkworm produce silk?
(a) Egg (b) Larva (c) Coccon (d) Adult
22. How many constellations are there in Universe?
(a) 66 (b) 77 (c) 88 (d) 99
23. Which gas is used in soft Drink?
(a) H₂ (b) CO₂ (c) O₂ (d) NH₃
24. Which Blood cells do not have Nucleus?
(a) RBC (b) Plasma (c) platelets (d) WBC
25. Which is the molecular formula of Sulphuric Acid?
(a) HNO₃ (b) H₂SO₄ (c) NaCl (d) SO₄
26. What is the main cause of Global warming?
(a) Hydrogen gas (b) Greenhouse effect
(c) Acid Rain (d) None of them
27. Which of the following is Thermosetting plastic?
(a) Polyethene (b) PVC (c) Nylon (d) Bakelite
28. Which is the molecular formula of ethyl alcohol?
(a) CH₃OH (b) C₂H₅OH (c) C₃H₇OH (d) C₂H₄
29. How Diploid chromosomes are represented?
(a) n (b) 2n (c) 3n (d) 4n
30. Which is the unit of specific heat capacity?
(a) Joule (b) Watt (c) Joule/kg (d) Joule/kg°C
31. Which gas is responsible for Acid Rain?
(a) H₂ (b) O₂ (c) CO₂ (d) Cl₂
32. What is the value of 1 atmospheric pressure?
(a) 10⁵ N/m² (b) 750 mm Hg (c) 700 mm Hg (d) 10⁶ N/m²
33. Which instrument is used to measure electric power?
(a) Ammeter (b) voltmeter (c) Galvanometer (d) Wattmeter
34. Which of the followings expression represents ohm's law?
(a) $1 \propto 1/v$ (b) $1 \propto R$ (c) $V \propto 1$ (d) $1 \propto 1/R$
35. How many kg can a man lift on the moon if he can lift 10kg on the earth?
(a) 50kg (b) 60kg (c) 1 kg (d) 6kg
36. What types of reaction occurs in the sun?
(a) Nuclear Fusion (b) Nuclear Fission

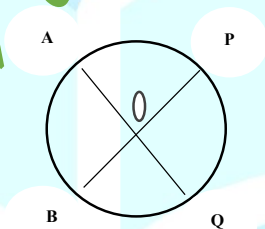
- (c) Acid-Base reaction (d) Thermal Reaction
37. How many periods are there in modern periodic Table?
 (a) 4 (b) 5 (c) 6 (d) 7
38. Which lens is used to correct the defect of short sightedness?
 (a) Concave (b) Convex (c) Plano Concave (d) Double Concave
39. Which acid remain in Honey Bee?
 (a) Acetic Acid (b) Citric Acid (c) Sulphuric Acid (d) Formic Acid
40. Which of the followings is Vector Quantity?
 (a) mass (b) volume (c) time (d) velocity

MATHEMATICS

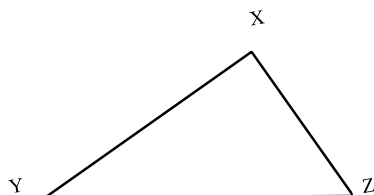
41. What is the total surface area of a cone when the base radius of the cone is 7cm and the sum of the radius and slant heights is 28 cm?
 (a) 231cm^2 (b) 400cm^2 (c) 462cm^2 (d) 616cm^2
42. In the given figure, O is the centre of a circle. If $\angle OAB = 20^\circ$, what is the value of $\angle ACB$?



- (a) 40° (b) 60° (c) 70° (d) 80°
43. In the given figure, O is centre of a circle. If $AB = PQ$, $\angle AOB$ equal to.....



- (a) $\angle AOP$ (b) $\angle AOQ$ (c) $\angle POB$ (d) $\angle BOQ$
44. In the given figure, the area of the triangle xyz is 45cm^2 . If $xy = 12\text{cm}$ and $yz = 15\text{cm}$, what will be the value of ?



- (a) 30° (b) 45° (c) 60° (d) 90°
45. If $x = 10^a$, $y = 10^b$ and $x^b y^a = 100$, that is the value of ab ?
 (a) 1 (b) $\sqrt{2}$ (c) 2 (d) 10
46. If $\sqrt{3m+1} - 2 = 0$, what is the value of m ?
 (a) 0 (b) -1 (c) 1 (d) 4
47. If $m + n = 7$ and $2m - 3n = 4$, what will be the value of $m-n$?
 (a) 2.5 (b) 5 (c) 3 (d) 5.2
48. 6 black and 7 red marbles of the same size and shape are kept in a bag. Two marbles are drawn one at a time without replacement, what is the probability of getting the red marble at first and after the black marble?
 (a) $\frac{7}{26}$ (b) $\frac{27}{26}$ (c) $\frac{78}{84}$ (d) $\frac{9}{26}$
49. If 10 is added to the number that is seven times of the square of a natural number, the result is 353. What will be the number?
 (a) ± 7 (b) -7 (c) 7 (d) 9
50. The area of an equilateral triangle is $9\sqrt{3}\text{cm}^2$, what is the perimeter of the triangle?
 (a) 6cm (b) 9cm (c) 18cm (d) $27\sqrt{3}\text{cm}$
51. What is the result when $\frac{x^2-xy+y^2}{x-y} - \frac{x^2+xy+y^2}{x+y}$ is simplified?
 (a) $2(x^3+x^3)$ (b) $\frac{2x^3}{x^2-y^2}$ (c) $\frac{2y^3}{x^2-y^2}$ (d) $\frac{(2y)^3}{x^2-y^2}$
52. What is the highest common factor (H. C. F.) of two algebraic expressions $(x+2)$ and $(x-2)$?
 (a) $x+2$ (b) $x-2$ (c) x^2-4 (d) 1
53. What is the order of the surd $3\sqrt[4]{7}$?
 (a) 1 (b) 2 (c) 3 (d) 4
54. What is the H.C.F of x^2-1 and x^2-3x+2 ?
 (a) $x-1$ (b) $x+1$ (c) $(x-1)(x-2)$ (d) $(x+1)(x-1)$
55. if $A = \{2,3,5\}$ and $B = \{1,4\}$, what is the value of $n(A \cap B)$?
 (a) θ (b) $\{ \}$ (c) 0 (d) 5
56. How many different values of the variable of unit place digit in a two digit number?
 (a) 1 (b) 9 (c) 10 (d) y
57. if $2^{x+1} - 4 = 0$, What is the value of x ?
 (a) 0 (b) -1 (c) 1 (d) 2
58. Which one is the formula to calculate the curved surface area of a cylinder?
 (a) πrh (b) $2\pi rh$ (c) $2\pi r^2 h$ (d) $2\pi(r+h)$
59. What is the relation between the area of a square and a triangle standing on the same base and between the same parallel lines?
 (a) Area of square = Area of triangle (b) Area of square = $\frac{1}{2}$ area of triangle
 (c) Area of square = 2 area of triangle (d) Area of triangle = 2 area of square

60. The marked price of an article is Rs. x. if the price of the article after discount is Rs. y, what percent discount is provides?

(a) $\frac{y}{x} \times 100\%$

(c) $\frac{x-y}{x} \%$

(b) $\frac{x}{y} \times 100\%$

(d) $\frac{x-y}{x} \times 100\%$

ANSWERS

1. C	2.B	3.B	4.A	5.D	6.D	7.B	8.B	9.D	10.A
11.A	12.C	13.C	14.A	15.B	16.C	17.A	18.C	19.D	20.B
21.A	22.C	23.C	24.A	25.A	26.D	27.D	28.B	29.B	30.C
31.D	32.C	33.C	34.B	35.A	36.D	37.A	38.C	39.A	40.C
41.D	42.C	43.B	44.C	45.D	46.D	47.B	48.D	49.B	50.A
51.C	52.B	53.C	54.B	55.C	56.C	57.A	58.C	59.A	60.C