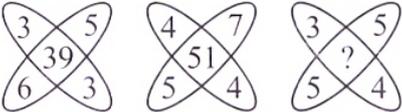


IQ:

- Q.1 Poles: Magnet :: ? : Battery
 (a) Energy (b) Power
 (c) Terminals (d) Cells
- Q.2 A and B are young ones of C. If C is the father of A but B is not the son of C. How are B and C are related.
 (a) Niece and Uncle (b) Daughter and Father
 (c) Brother and sister (d) Daughter and Mother
- Q.3 There are five books A,B,C,D and E placed on a table. If A is placed below E, C is placed below D , B is placed below A and D is placed above E, then which of the following books touches the surface of the table?
 (a) C (b) B
 (c) A (d) E
- Q.4 If PALE is coded as 2134, EARTH is coded as 41590, how can is PEARL be coded in that language?
 (a) 25430 (b) 29530
 (c) 25413 (d) 24153
- Q.5 Find the missing number, is same rule is followed in all the three figures.

 (a) 47 (b) 45
 (c) 37 (d) 35
- Q.6 If a, b are coprime, then a^2, b^2 are:
 (a) Coprime (b) Not coprime
 (c) Odd numbers (d) Even numbers
- Q.7 The quadratic polynomial $p(x)$ with -81 and 3 as product and one of the zeros respectively is:
 (a) $x^2 + 24x - 81$
 (b) $x^2 - 24x - 81$
 (c) $x^2 - 24x + 81$
 (d) $x^2 + 24x + 81$
- Q.8 The value of k for which the pair of linear equation $4x + 6y - 1 = 0$ and $2x + ky - 7 = 0$ represents parallel lines is

- (a) $k = 3$ (b) $k = 2$
 (c) $k = 4$ (d) $k = -2$

Q.9 $(\sec A + \tan A)(1 - \sin A)$ is equal to
 (a) $\sec A$ (b) $\sin A$
 (c) $\operatorname{cosec} A$ (d) $\cos A$

Q.10 For a symmetrical distribution, which is correct
 (a) Mean > Mode > Median
 (b) Mean < Mode < Median
 (c) $Mode = \frac{Mean + Median}{2}$
 (d) Mean = Median = Mode

Q.11 The next term of the A.P. $\sqrt{27}, \sqrt{48}, \sqrt{75}, \dots$ is :
 (a) $\sqrt{105}$
 (b) $\sqrt{107}$
 (c) $\sqrt{108}$
 (d) $\sqrt{147}$

Q.12 IF two tangents inclined at an angle of 60° are drawn to circle of radius 3 cm, the length of each tangent is equal to
 (a) $\frac{3\sqrt{3}}{2}$ cm
 (b) 6 cm
 (c) 3 cm
 (d) $3\sqrt{3}$ cm

Q.13 The minute hand of a clock is 21 cm long. The distance moved by the tip of the minute hand in 1 hour is
 (a) 21π cm
 (b) 42π cm
 (c) 10.5π cm
 (d) 7π cm

Q.14 The outer and inner diameters of circular ring are 34 cm and 32 cm respectively. The area of the ring is:
 (a) 66π (b) 60π
 (c) 33π (d) 29π

Q.15 A man bought 5 shirts at Rs.450 each, 4 trousers at Rs.750 each and 12 pairs of shoes at Rs. 750 each. What is the average expenditure per article ?
 (a) 678.57 (b) 800
 (c) 900 (d) 1000

- Q.16 Haemoglobin is having maximum affinity with :-
(A) NH_3 (B) O_2
(C) CO (D) CO_2
- Q.17 Urea, a nitrogenous waste, requires a large amount of water. Therefore it is the main excretory product in :-
(A) protozoans, amphibians and reptiles (B) elasmobranchii, adult amphibians
(C) reptiles, birds and mammals (D) insects, birds and fishes
- Q.18 Which of the following is not naturally occurring plant hormone :-
(1) 2, 4-D (2) Cytokinin
(3) Gibberellin (4) I.A.A
- Q.19 Which of the following tests is for determining the sex of the foetus ?
(A) Blood group test (B) Amniocentesis
(C) Blood sugar test (D) pH value test
- Q.20 An acid used in lead storage batteries is
(a) H_2SO_4 (b) HNO_3
(c) HCl (d) CH_3COOH
- Q.21 Which one of the following oxides is neutral-
(a) CO (b) SnO_2
(c) ZnO (d) SiO_2
- Q.22 Which is the lightest gas
(a) Nitrogen (b) Helium
(c) Oxygen (d) Hydrogen
- Q.23 The length of a wire is doubled and the radius is doubled. By what factor does the resistance change
(a) 4 times as large (b) twice
(c) unchanged (d) half as large
- Q.24 ASSERTION(A): Coal based thermal power stations contribute to acid rain.
REASON (R) : Oxides of carbon are emitted when coal burns.
(a) Both A and R are individually true and R is the correct explanation of A.
(b) Both A and R are individually true and R is not the correct explanation of A
(c) A is true but R is false.

(d) A is false but R is true.

Q.25 The known forces of the nature can be divided into four classes i.e. gravity, electromagnetism, weak nuclear forces and strong nuclear forces. With reference to them, which one of the following statements is not correct?

- (a) Gravity is the strongest of the four.
- (b) Electromagnetism act only on particles with an electric charge.
- (c) Weak nuclear forces causes radioactivity.
- (d) Strong nuclear force holds protons and neutrons inside the nucleus of an atom.

ANSWER KEY

1.c 2.b 3.b 4.d 5.c
6.a 7.a 8.a 9.d 10.d
11.c 12.d 13.b 14.c 15.a
16.c 17.c 18.a 19.b 20.a
21.a 22.d 23.d 24.b 25.a