

fall out when the bank is turned. upside down, what is the probability that win :

- (i) will be a 50 p Coin?
- (ii) will not be a ₹5 coin?
- (iii) will be ₹10 Coin?

## PAPER-3

### SECTION - A

► Do as directed. (Q. 1 to 24) [1 Marks Each] (24)

• Choose the correct option. (Q. 1 to 6)

(1) Kinjal is asking to Dipti that before 3 years the sum of their ages were 36, then tell me that after 4 years what will be the sum of their ages?

- (A) 53 years
- (B) 43 years
- (C) 39 years
- (D) 50 years

(2) which of the following is a root of the quadratic equation  $\sqrt{3}x^2 + 10x + 7\sqrt{3} = 0$ ?

- (A)  $-\sqrt{3}$
- (B)  $\sqrt{3}$
- (C)  $7\sqrt{3}$
- (D)  $-7\sqrt{3}$

(3) If  $n^{\text{th}}$  term of an AP is  $2n + 1$  then its sum of  $n$  terms is \_\_\_\_\_

- (A)  $n(n-1)$
- (B)  $n(n+2)$
- (C)  $n(n+1)$
- (D)  $n(n-1)$

(4) A(1, 2), B(2, 3), C(3, 4) are given points out of the following which is true?

- (A)  $AC + BC = AB$
- (B)  $AB + BC = AC$
- (C) C is the midpoint of AB
- (D) A, B, C are not collinear.

(5)  $\frac{1 + \tan^2 A}{1 + \cot^2 A} =$  \_\_\_\_\_

- (a)  $\sec^2 A$
- (b) -1
- (c)  $\cot^2 A$
- (d)  $\tan^2 A$

(6) Equation of mean  $\bar{x} = a + \frac{\sum f_i u_i}{\sum f_i}$  where  $u_i =$  \_\_\_\_\_

- (A)  $\frac{x_i - a}{h}$
- (B)  $x_i - a$
- (C)  $x_i - h$
- (D)  $\frac{x_i - h}{a}$

• Fill in the blanks. (Q. 7 to 12)

(7) L.C.M(12,15) = \_\_\_\_\_ (15,1,60)

(8) one zero -5 is of quadratic equation.

$P(x) = x^2 + 7x + 10$  then second zero is \_\_\_\_\_. (-2, 7, 5)

(9) If the value of  $\theta$  is increased Then value of  $\sin \theta$  is \_\_\_\_\_. (increased, decreased, minus)

(10) The Common point of a tangent to a circle and the circle is Called the \_\_\_\_\_ (point of contact, origin, mid point)

(11) Median class is \_\_\_\_\_ of the following distribution table.

Class	0-15	15-30	30-45	45-60	60-75
Frequency	8	7	12	10	2

(60-75, 30-45, 15-30)

(12) The probability is \_\_\_\_\_ to get 5 Mondays come in june month of a non leap year. ( $\frac{1}{7}, \frac{2}{7}, \frac{3}{7}$ )

• Write the statements true or false. (Q. 13 to 16)

(13)  $2 + \sqrt{2}$  is an irrational number.

(14) If 3 is one zero of  $P(x) = x^2 - 11x + K$  then  $k = 24$ .

(15) For pair of linear equations in two variables.

$\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$  then pair of equations is Consistant

(16) The sum of the probabilities of all the elementary events of an experiment is 1

• Match the following. (Q. 17 to 20)

	A		B
(17)	The region enclosed by the chord and its corresponding arc are called _____	(a)	sector
(18)	The circular region enclosed by two radii and the corresponding arc is called _____	(b)	Segment
		(c)	Diameter

	A		B
(19)	Total surface area of a cylinder	(a)	$\frac{2}{3} \pi r^3$
(20)	volume of a sphere	(b)	$\frac{1}{3} \pi r^2 h$
		(c)	$2\pi r(h+r)$

• Solve the following. (Q. 21 to 24)

(21) Find the sum of an AP given as: 2, 7, 12, ... upto 10 terms.

(22) From a point Q, the length of tangent to a Circle is 24 cm. and the distance of Q from the Centre is

25 cm. The radius of the circle find.

(23) write the lower limit of class 25 - 45

(24) what is the probability to get 6 on balanced die thrown?