

Time : 3 Hrs]

STD. 10 Maths (Basic)

[Total Marks : 80

PAPER-1

SECTION - A

▶ Do as Directed (Q. 1 to 24) [1 Marks Each] [24]

• Choose the correct option: (Q-1 to 6)

(1) The ones of two digit is x and tens is y , then the double of that digit is

- (A) $10x + 2y$ (B) $2y + 20x$
(C) $20y + 2x$ (D) $2x + 10y$

(2) which of the following method is used for the Solution of pair of linear equations in two variables?

- (A) Graphic Method (B) Substitution Method
(C) Elimination (D) All of them

(3) If $S_1 = 2 + 4 + \dots + 2n$ and $S_2 = 1 + 3 + 5 + \dots + (2n-1)$ then $S_1 : S_2 = \dots$

- (A) $\frac{n+1}{n}$ (B) $\frac{n}{n+1}$
(C) n^2 (D) $n+1$

(4) Distance between point (3,4) and origin is

- (A) 25 (B) 5
(C) 16 (D) 9

(5) $(\sec A + \tan A)(1 - \sin A) = \dots$

- (A) $\sec A$ (B) $\sin A$
(C) $\operatorname{cosec} A$ (D) $\cos A$

(6) For any data $z + \bar{x} = 71$ and $z - \bar{x} = 3$ then Using inter-relation between mean, mode and median Value of $M = \dots$

- (A) 31 (B) 38
(C) 35 (D) 34

• Fill in the blanks (Q-7 to 12) [05]

(7) The difference of HCF and LCM of prime numbers 5 and 7 is (35,34,36)

(8) The graph of $P(x) = x^2 + 4x + 3$ is
(line, open upwards parabolas, open downwards

parabolas)

(9) is the short form of secant A.
($\cos A$, $\operatorname{cosec} A$, $\sec A$)

(10) The tangent of circle intersects a circle in points
(2,0,1)

(11) Modal class is of the following frequency distribution table.

Class	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25
Frequency	3	5	8	7	6

(15 - 20, 10 - 15, 20 - 25)

(12) If $P(A) = 0.62$ then $P(\bar{A}) = \dots$ (0.62, 1, 0.38)

• State the following statements are true or false (Q. 13 to 16)

(13) $4 + \sqrt{2}$ is an irrational number.

(14) Number of zeroes of polynomial $P(x) = x^2 - 10x + 6$ are three zeroes.

(15) If $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ then in Pair of linear equations in two variables have infinite many solutions.

(16) The probability is $\frac{1}{81}$ to get 81 marks in 80 marks question paper.

• Match the following (Q: 17 to 20) [05]

A	B
(17) Area of minor sector	(a) $2\pi r$
(18) Area of sector	(b) $\frac{\pi r^2 \theta}{360^\circ}$
	(c) πr^2

A	B
(19) volume of sphere	(a) $2\pi r(h+r)$
(20) Total surface area of 5 rupees Coin	(b) $2\pi rh$
	(c) $\frac{4}{3}\pi r^3$

● **Solve the following. (Q. 21 to 24)**

(21) In the AP 2, ?, 26 find the missing terms?

(22) How many tangents are got on a one point of circle?

(23) write class length of class 17.5 - 27.5

(24) Two coins are tossed at a time then what is the probability of getting two heads?