01. The [HCF LCM] for the numbers 75 and 25 is
a. 1875 b. 175 c. 1275 d. 875

02. $(4 + 13 + 22 + ... + 157) = ?$
a. 1465 b. 1452 c. 1449 d. 1467

03. Find the value of y, if the series (2y-1), (3y+2) and (6y-1) are in AP.
a. 2 b. 3 c. 4 d. 5

04. Find a cubic polynomial when the zeros are 3, -1, - 1/3
a. $3x^3 - 5x^2 - 11x - 3$ b. $3x^3 + 5x^2 + 11x - 3$
c. $3x^3 - 5x^2 + 11^x + 3$ d. None of these

05. The product of two consecutive integers is 240. The quadratic representation of the above situation is
a. $5x^2 + 8x + 4 = 2x^2 + 4x + 6$ b. $x^2 + (x + 1) = 240$
c. $x(x + 1) = 240$ d. $x(x + 1)2 = 240$

06. The ratio of the sum and product of the roots of the equation 7x2 - 14x + 6 = 0 is
a. 5 : 3 b. 3 : 4 c. 2 : 1 d. 7 : 3

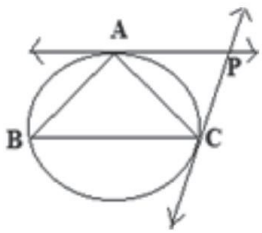
07. The sum of two natural numbers is 12 and sum of their reciprocals is 3/8. Find the numbers.
a. x = 5 and x = 7 b. x = 4 and x = 8 c. x = 3 and x =9 d. x = 2 and x = 10

08. Five male and three female candidates are available for selection as manager in a company. Find the probability that a male candidate is selected.
a. 0.833 b. 0.625 c. 0.5 d. 0.75

09. The distance of the point (4, – 5) from y axis is
a. 4 units b. units c. 5 units d. 5 units

10. Choose the incorrect statement
a. If the bisector of an angle of a triangle bisects the opposite side, then that triangle is isosceles.
b. The line segments joining the midpoints of the adjacent sides of a quadrilateral form a parallelogram.
c. The line segment joining the midpoints of any two sides of a triangle is parallel to the third side.
d. If the corresponding angles of two similar triangles are equal, then their corresponding sides are also equal.

11. As shown in figure, tangent drawn at point A and C of a circle intersect each other at point P. If ∠APC = 50° then find ∠ABC.



a. 60°
b. 75°
c. 80°
d. 65°

12. A quadrilateral PQRS is formed by joining the midpoints of the sides of a square ABCD. If the area of square ABCD is 38 sq.cm., find the area of □PQRS.
a. 14 sq.cm. b. 16 sq.cm. c. 17.5 sq.cm. d. 19 sq.cm.

13. The perpendicular distance between the two parallel circular bases, is called the _____ of the frustum of the cone.
a. volume b. height c. slant height d. radius

14. Evaluate: cosec36° – sec54°
a. 2 b. 1 c. -1 d. 0

15. The mean of the first 100 natural numbers is
a. 50.5 b. 49.5 c. 50 d. 55.5

16. The total surface area of a hemisphere of diameter 49 cm is
a. 7543 cm^2 b. 22628 cm^2 c. 462 cm^2 d. 5657 cm^2

ANSWER KEY

1	a	2	c	3	b	4	a	5	c	6	d	7	b	8	b
9	a	10	d	11	d	12	d	13	b	14	d	15	a	16	d