

(vii) If the line $7y = ax + 4$ and $2y = 3 - x$ are perpendicular to each other, then the value of 'a' is

- (a) -1
- (b) $\frac{-7}{2}$
- (c) -14
- (d) 14

(viii) The radius and slant height of a cone are in the ratio $4 : 7$. If its curved surface area is $252 \pi \text{ cm}^2$, its radius is

- (a) 12 cm
- (b) 21 cm
- (c) 36 cm
- (d) 63 cm

(ix) A bag contains 5 red balls and 4 white balls. One ball is drawn at random from the bag. The probability of getting either a red ball or a white ball is

- (a) 0
- (b) $\frac{5}{9}$
- (c) $\frac{4}{9}$
- (d) 1

(x) If the two cylinders of same lateral surface have their radii in the ratio $9 : 4$, then the ratio of their heights is

- (a) $9 : 4$
- (b) $4 : 9$
- (c) $3 : 2$
- (d) $2 : 3$

SECTION B

(Attempt any three questions from this section.)

Question 2

(i) If A $(-5, 3)$, B $(-2, 6)$ and C $(1, 3)$ are the vertices of a square ABCD. Find the coordinates of D. [2]

(ii) A pair of dice is rolled. Find the probability of getting [2]
(a) doublets
(b) sum is at least 10.