



**(Value based)**

11. Arushi sold 100 lottery tickets in which 5 tickets carry prizes. If Priya purchased a ticket, what is the probability of Priya winning a prize

- (A)  $\frac{19}{20}$       (B)  $\frac{1}{25}$       (C)  $\frac{1}{20}$       (D)  $\frac{17}{20}$

12. It is found that on walking, x meters towards a chimney in a horizontal line through its base, the elevation of its top changes from  $30^\circ$  to  $60^\circ$ . The height of the chimney is

- (A)  $3\sqrt{2}x$       (B)  $2\sqrt{3}x$       (C)  $\frac{\sqrt{3}}{2}x$       (D)  $\frac{2}{\sqrt{3}}x$

13. The probability of guessing the correct answer to a certain test question is  $x/12$ . If the probability of not guessing the correct answer to this question is  $2/3$ , then x =

- (A) 2      (B) 3      (C) 4      (D) 6

14. A bag contains 3 green marbles, 4 blue marbles and 2 orange marbles. If a marble is picked at random, then the probability that it is not an orange marble is

- (A)  $\frac{1}{4}$       (B)  $\frac{1}{3}$       (C)  $\frac{4}{9}$       (D)  $\frac{7}{9}$

15. The top of two poles of height 20m and 14m are connected by a wire. If the wire makes an angle of  $30^\circ$  with the horizontal, then the length of the wire is

- (A) 12m      (B) 10m      (C) 8m      (D) 6m

**(Logical Reasoning)**

16. Arrange the given word in the sequence in which they occur in the dictionary and then choose the correct sequence.

1. Page 2. Pagan 3. Palisade 4. Pageant 5. Palate

- (A) 1, 4, 2, 3, 5      (B) 2, 4, 1, 3, 5      (C) 2, 1, 4, 5, 3      (D) 1, 4, 2, 5, 3

17. Mohit was looking for his father. He went 90 metres in the East before turning to his right.

He went 20 metres before turning to his right again to look for his father at his uncle's place 30 metres from this point. His father was not there. From here he went 100 metres to the North before meeting his father in a street. How far did the son meet his father from the starting point?

- (A) 80 metres      (B) 100 metres      (C) 140 metres      (D) 260 metres

18. If + stands for 'division', × stands for 'addition', – stands for 'multiplication' and ÷ stands for 'subtraction', then which of the following equations is correct?

- (A)  $36 \times 6 + 7 \div 2 - 6 = 20$       (B)  $36 \div 6 + 3 \times 5 - 3 = 45$   
(C)  $36 + 6 - 3 \times 5 \div 3 = 24$       (D)  $36 - 6 + 3 \times 5 \div 3 = 74$

19. Shyama says that father of Rajiv's father is my father. How is Shyama related to Rajiv?

- (A) Aunt      (B) Sister      (C) Mother      (D) Bua (Father's Sister)

20. If the first half of the English alphabet series is written in reverse order, then which letter should be 8<sup>th</sup> letter to the left of 14<sup>th</sup> letter from the right end?

- (A) E      (B) G      (C) F      (D) I