



St. Xavier's Sr. Sec. School

Delhi-54

Section – C

(3 x 10 = 30 marks)

11. A road roller takes 700 complete revolutions to level a playground. If the diameter of the roller is 84cm and its length is 1m, find the area of the play ground.
12. A dice is thrown once. Find the probability to get
 - a) an odd number
 - b) a multiple of 2
 - c) a prime number
13. If 12 people can do a work in 12 hours, how long will it take for only 8 people to do the same?
14. A rectangular piece of paper 11cm × 4cm folded without overlapping to make a cylinder of height 4cm. Find the volume of the cylinder.
15. Simplify : $(x^2 + 9x + 20) \div (x + 5)$
16. Anu paid Rs. 55000 for a TV including sales tax of 10%. Find the list price of the TV.
17. Solve: $\frac{k-5}{4} - \frac{k-3}{2} = -3$
18. Name the graph that is used to
 - a) Compare parts of a whole
 - b) Show comparison of among categories
 - c) Represent data that changes continuously over a period of time
19. Find the compound interest on Rs. 12600 for 2 years at 10% per annum compounded annually.
20. Simplify:
 - a) $(2x + 5)^2 - (2x - 5)^2$
 - b) $(ab + bc)^2 - 2ab^2c$

Section – D

(4 x 11 = 44 marks)

21. Show that :
 - a) $(a+b)(a-b) + (b-c)(b+c) + (c-a)(c+a) = 0$
 - b) $(5a + 4b)^2 - 80ab = (5a - 4b)^2$
22. The cost of a scooter is Rs. 60000. Its price is depreciating at the rate of 10% per annum. What will be its price after two years?

