

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE – 1
SEMESTER EXAMINATIONS
NOVEMBER – 2016
FUNCTIONAL MATHEMATICS

15NMA3A

Time: 2 Hrs

Max. Marks: 50

SECTION – A (10 X 2 =20)

Answer ALL the questions.

1. If $0.75 : x :: 5 : 8$ then find x .
2. Divide Rs.72 in the ratio 4 : 5.
3. 9% of what number is 36?
4. Find 125% of 64.
5. If C.P = 125, S.P = 96, find the loss percent.
6. The C.P of 21 articles is equal to S.P of 18 articles. Find the gain loss percent.
7. At what rate of interest per annum will a sum double itself in 8 years?
8. Find the simple interest, if P = Rs.1000, R = 20% per annum, T = 4 years.
9. A number added to two - seventh of its value is equal to 72. Find the number.
10. The ages of two persons differ by 16 years, if 6 years ago, the elder one be 3 times as old as the younger one, find their present ages?

SECTION – B (3 X 10 =30)

Answer any THREE of the following questions.

11. i) Seats for mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40% , 50% , and 75% respectively. What will be the ratio of increased seats?
ii) A bag contains 50 P, 25 P and 10 P coins in the ratio 5 : 9 : 4, amounting to Rs.206. Find the number of coins of each type.
12. i) Difference of two numbers is 1660. If 7.5% of one number is 12.5% of the other number, find the two numbers.
ii) Evaluate $16\frac{2}{3}\%$ of 600 gm – $33\frac{1}{3}\%$ of 180 gm.
13. i) If the manufacturer gains 10%, the wholesale dealer 15% and the retailer 25%, then find the cost of production of a table, the retail price of which is Rs.1265?
ii) When a Commodity is sold for Rs.34.80, there is a loss of 25%, What is the cost price of the commodity?
14. Find the compound interest on Rs.2,400 at 20% per annum for $3\frac{3}{4}$ years.
15. i) The sum of four consecutive odd numbers is 80. Find the numbers.
ii) Rajeev's age after 15 years will be 5 times his age 5 years back. What is the present age of Rajeev?