Course Code : MAS 1203

Course Title : Basic Mathematics

Time : 2 Hrs

Max : 60 Marks

Answer Any FOUR questions : $4 \times 15 = 60$

1. (i). Add the following numbers : 7.001, 24.9, 96.93 and 0.682

    (ii). Subtract : 1.8264 from 23.3728

    (iii). Multiply : 1.28 × 0. 32

2. Find the perpendicular distance of the point P(1,1,1) from the line $\frac{x-2}{3} = \frac{y+3}{2} = \frac{z}{-1}$.
   Also find the foot of the perpendicular.

3. Let R be the relation from A ={1, 3, 5, 7, 9} to B = {2, 4, 6, 8} which is defined as
    a R b iff a > b
    (a) List all the elements of R
    (b) Find domain and Range of R.

4. If A ={a, b, c, d, e, f, g, h}, B={b, d, f, h} and C ={a, c, e}, then prove that
    (a) $A\Delta(B\Delta C) = (A\Delta B)\Delta C$ **(b)** $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$

5. Find the value of $A = \frac{36.72 \times \sqrt{(4.51)}}{(1.87)^3 \times (2.19)}$ by using logarithm.

6. (i) A bag contains 50 p, 25 p and 10 p coins in the ration 5 :9: 4, amounting to Rs. 206.
        Find the number of coins of each type.
    (ii) Evaluate : **(a)** $log_3 27$ **(b)** $log_{100} (0.01)$