



**Mathematics I for Humanities (Math-011)**

Section \_\_\_\_\_

Name of Student: \_\_\_\_\_

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**ASSIGNMENT 2**

**Q.1** Perform the operations given that **[3 Marks ]**

$A = \{ 3, 6, 9, 10 \}, \quad B = \{ 3, 4, 5, 6, 7 \}$

$C = \{ 4, 5, 7, 11 \}, \quad \text{and} \quad D = \{ 1, 2, 3, 4, 5, 6, 7 \}.$

1.  $A \cup B =$

2.  $C \cap (A \cup D) =$

3.  $C \cap D =$

**Q.2** Complete the following table **[4 Marks]**

S.No	Interval Notation	Set builder Notation	Graph
1		$\{x x > 3\}$	
2	$(-5, 5)$		
3		$\{x -4 < x \leq 3\}$	
4	$[0, 6)$		

**Q.3** Evaluate the expression

**[6 Marks]**

1.  $\left(\frac{2 a b^2 c^3}{5 a b^2}\right)^3 =$

2.  $\left(\frac{8}{27}\right)^{-2/3} =$

3.  $125^{4/3} =$

4.  $\left(\frac{a^2 b}{a^3 b^{-3}}\right)^0 =$

$$5. \sqrt[3]{216 m^3 n^9} =$$

**Q.4** Perform the operations

**[2 Marks]**

1.  $(17 - 16) \times 13 + 4 =$

2.  $(11 + 29 - 4) \div 12 =$

3.  $(12 + 48 - 6^2) + (5^3 - 3) =$