## **ASSIGNMENT QUESTIONS**

## **OPEN COURSE : BUSSINESS MATHEMATICS (MM 1551.2)**

1. If y = f(x) be the equation of a curve. What is the slpoe of the tangent to the curve at a point p ?

2. A pressure cooker is available for Rs.250 each or rs.100 cash down payment followed by Rs. 165 after 6 months. Find the rate of interest charged under the installed plan.

3. If the demand function is  $= 16 - x^2$ , find consumers surplus at x = 3.

4. A person deposited Rs. 4,000 in a bank at 6% compounded continuously. After 3 years, the rate of interest was increased to 7% and after 5 more years, the rate was further increased to 8%. The money was withdrawn at the end of 10 years. Find the amount.

5. If the marginal revenue of a firm is given by  $MR = 9 - 4x^2$ , find the total revenue R in terms of X. What can be maximum revenue possible?

6. Fit a straight line trend to the following data by least squares method. Estimate the sales for 2003.

Year	:	1996	1997	1998	1999	2000
Sales (Rs. Lakh	s) :	70	74	80	86	90

7. Briefly explain advantages or uses of Index Numbers.

8. Differentiate  $x^3$  from first principle.