2020 Full Marks : 20 Time : As in the Programme The figures in the right hand margin indicate marks.

[10×2]

Answer any two.

- 1. What is function ? Discuss different properties of function.
- 2. Discuss different types of functions with appropriate graphs of functions.
- 3. Find $\frac{dy}{dx}$ for the following values of γ :

a)
$$\gamma = 3x^2 + 7x^2 - 9x + 20$$

b) $\gamma = (x+2)(3x+2)$

- 4. Prove rate of fall of MR curve is the twice the rate of fall of AR Curve.
- 5. Find the partial derivative of first & second order.

$$z = 2x^2 + 5x^2y + xy^2 + y^2$$

6. What is Matrix? Discuss the different features of Matrix.
