

**R. J. Tibrewal Commerce College, Vastrapur, Ahmedabad.**

**Department of Statistics**

**CE 202 B ADVANCED STATISTICS-IV (Principal)**

**Semester – 3**

**(Year – 2020-21)**

**Assignment 1:**

**Q.1** Consider the following technology matrix for two industries.

$$\begin{bmatrix} 0.2 & 0.5 \\ 0.8 & 0.5 \end{bmatrix}$$

If the respective final demand is 1000 units and 1200 units then estimate the total production of both the industries.

**Q.2** Consider the following input-output model.

Output	Input		Final Demand	Total output
	Industry A	Industry B		
Industry A	52	48	50	200
Industry B	25	26	28	100

If the final demand for the product of industries changes to 75 and 50 respectively, then find the total production.

**Assignment 2:**

**Q.3** The consumption expenditure function of a person is  $C = 180 + 0.7 Y$  and its investment function is  $I = 360 - 5R$ . If the rate of interest is 12% then construct the income determination model and find out the total income, the consumption expenditure and the investment expenditure of the person.

**Q.4**

What is economic model? Explain income determination model.