B.Sc. (Hons.) / V Sem.

COMPUTER SCIENCE

Paper- 505 --- Economics

Time: 3.00 hours

Maximum Marks: 75

.Attempt any five questions. All questions carry equal marks.

- (a) What do you understand by production possibility curve? Explain the problems of scarcity of resources, choice and opportunity cost using production possibility curve.
 - (b) What is price mechanism? Describe the role of price mechanism in a market economy. (5)
- (a) Distinguish between price elasticity of demand, income elasticity of demand and cross elasticity of demand.

A consumer purchases 20 liters of milk at the income of Rs.3000. When his income increases to Rs. 4000, how much milk will the consumer purchase given the income elasticity of demand equal to +1.5?

(b) Two straight line downward sloping demand curves intersect each other.

Which one of them will have higher elasticity of demand at

- 3. (a) What is meant by an indifference curve? Explain why is it generally convex to the origin.(5)
 - (b) Explain the equilibrium of a consumer with the help of indifference curve technique. Derive demand curve using indifference curve technique.
- 4. Answer any two:
 - (a) Describe the optimum combination of factors of production.
 - (b) Why are the short run cost curves U-shaped? How do you derive long run average cost curve(LAC) from short run average cost curves(SAC)?
 - (c) Describe economies of scale. (7.5, 7.5)
- 5. (a) Describe the equilibrium conditions of a firm under perfect competition in the short run. How does competition ensure zero supernormal profit in the long run? Draw suitable diagrams. (10)
 - (b) Find the equilibrium price and quantity of a monopolist firm when the market demand and total cost functions are given as follows:

Demand function:
$$Q = 120 - 0.5 P$$

Cost function :
$$C = 30 + 60 Q$$

$$Q = Quantity, P = Price, C = Total cost$$
 (5)

- 6. (a) What are the various methods of measuring national income of an economy? Explain any one in detail. (9)
- (b) Consumption function of an economy is given as C = 100 + 0.75 Y.
 Find the marginal propensity to consume, marginal propensity to save and the value of multiplier.
- 7. Write notes on any two of the following:
- (a) Cost-push and demand-pull inflation
 - (b) Gross domestic product (GDP) and its related aggregates
 - (c) Determination of national income in an economy using the Keynesian approach (7.5, 7.5)