Time: 1 Hour

Max. Marks: 30

I.   **Answer any FIVE of the following**   5x 3 = 15

1. State the law of diminishing marginal utility with an example.
2. Explainwhy indifference curves are convex to the origin.
3. State the axioms of preference under indifference curve approach.
4. Show a situation where the axiom of dominance gets violated. Draw the shape of indifference curve in that situation.
5. What is the difference between partial and general equilibrium? Explain with an example.
6. State the law of equi-marginal utility.
7. What can be the shape of price consumption curve and the underlying demand curve when two goods are perfect substitutes?

II.   **Answer any ONE of the following**   15X1 = 15

8. a. Find the optimum commodity purchased by a consumer (q_1 and q_2) whose utility function and budget constraint are the following:
   $U = q_1^2 q_2^2$ and $96 = 4q_1 + 8q_2$ respectively.   6
   b. Prove that price effect (P.E) is the summation of substitution effect (S.E) and income effect (I.E) using compensating variation of income. (Assume that consumer has two commodities, q_1 and q_2, where both the commodities are normal. Prove the above scenario if price of q_1 falls.).
          6
   c. What is the difference between positive and normative economics? Explain with examples.
          3

9. a. Draw Marshallian, Hicksian and Slutsky demand curves using price effect (P.E), substitution effect (S.E) and income effect (I.E).   8
   b. Prove that tangency between indifference curve and budget line is a necessary condition but not the sufficient one to obtain the equilibrium point of a consumer.   4
   c. What can be the shape of income consumption curve and Engel curve if two goods are perfect complements?   3