B.A. (Honours) Examination, 2016
Semester – I
Economics
Course: H-1 (Core)
(Microeconomics-I)

Time: Three Hours **Full Marks: 40**

Questions are of value as indicated in the margin

Answer questions no. **1** and ***any three*** from the following questions

1. Prove or disprove ***any two*** of the following:
   a) If demand is inelastic then rise in price lowers the revenue.
   b) If a consumer's preferences satisfy "more is better" assumption, then a straight line through the origin will intersect each indifference curve only once.
   c) If consumers do not buy less of a commodity when their income rises, they will surely buy less when the price of the commodity rises. 5+5=10
2. a) Consider the events: Scientists reveal that consumption of oranges decrease the risk of diabetes, and at the same time, farmers use new fertilizer that makes orange trees more productive. Illustrate and explain what effect these changes have on the equilibrium price and quantity of oranges.
   b) The equation of the demand function for potatoes is $Q^d = 28 – 0.04P$ and the equation of the supply curve for the potatoes is $Q^S = – 2+0.16P$.
      i) What will be the equilibrium price and quantity?
      ii) Next, the Potato Growers Association begins a nationwide advertising campaign to promote potatoes. As a result, the demand for potatoes now becomes $Q^d = 40 – 0.05P$. Supply is unaffected by the advertising campaign. What will be the new equilibrium price and quantity of potatoes? Represent the original and new equilibrium in a diagram. 3+(2+3+2)=10
3. a) What is meant by the law of Diminishing Marginal Rate of Substitution? What will be the shape of indifference curve if the marginal rate of substitution is constant?
   b) Explain why strictly concave preference means that the extremes are strictly preferred to averages. (2+3)+5=10
4. a) Explain Weak Axiom of Revealed Preference. What is its difference with Strong Axiom of Revealed Preference?
   b) When prices are $(P_1,P_2) = (1,2)$ a consumer demand $(X_1,X_2) = (1,2)$, and when prices are $(q_1,q_2) = (2,1)$ the consumer demands $(y_1,y_2) = (2,1)$. Is the behavior consistent with Weak Axiom of Revealed Preference? (2+2)+6=10
5. With one variable factor of production identify the three stages of production according to the returns to the factor and hence explain why efficient production takes place in the second stage. 10
6. Show that supply curve of a perfectly competitive firm in the short run is the short-run marginal cost curve above the point of minimum average variable cost. 10
7. a) Why are the iso-cost lines straight lines?
   b) Using iso-cost lines show how a producer optimally allocates factors of production to produce a certain level of output. 4+6=10
