

Ex/UG/ECO/11/6/2017

BACHELOR OF ARTS EXAMINATION, 2017

(1st Year, 1st Semester)

ECONOMICS (HONOURS)

PRINCIPLES OF ECONOMICS – I

Time: Two hours

Full Marks: 30

Answer any 3 questions from Section A (each question carries 5 marks) and any 5 questions from Section B (each question carries 3 marks).

SECTION A

- 1) Distinguish between a shift in the demand curve and a movement along the demand curve. Do the same for the supply curve. Show that a shift in the supply curve leads to a movement along the demand curve in the transition from one market equilibrium to another. Show that a shift in the demand curve followed by a shift in the supply curve is associated with movements along the supply curve and demand curve respectively because of changes in market equilibrium. (1+1+1+ 2 = 5marks)
- 2) When will the long run average cost curve be a horizontal line (characterized by slope equal to zero)? Explain in terms of the properties of the production function. Explain the relationship between short run marginal cost and long run marginal cost in this case. (2 + 3 = 5 marks)
- 3) Consider the case of British trade with the United States in a two country world economy where Britain acts as a small open economy. Discuss the ramifications of an increase in supply of a major import substituting British industry on the dollar value of the British pound as well as Britain's various imports and exports. 5 marks

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- 4) Assume a downward sloping linear market demand curve and an upward sloping linear market supply curve where individual buyers and sellers are price takers. Show the position of market equilibrium in a diagram when initially there is no tax. Show diagrammatically and explain in words how the post-tax market supply curve is derived from the original market supply curve when a sales tax of Rs. T per unit is imposed. In the same diagram show the market equilibrium after the imposition of the tax. Derive the tax burdens imposed on the buyers and sellers due to taxation and show that the sum of the buyer's burden and the seller's burden equals unity. (1+1+1+ 2=5 marks)

SECTION B

- 5) John is fond of taking an afternoon nap on a holiday. At 2 p.m. on a Sunday winter afternoon he has the following options in regard to his activities for the next two and a half hours (since his friend is visiting him at home at 4:30 p.m., he has to be home to receive him):
- Take a two and half hour nap which he values at Rs. 40
 - Walk 15 minutes to a movie hall to catch a 2 hour movie at 2: 15 p.m. and then walk back home; the maximum price he would be willing to pay for the movie ticket is Rs. 160 but the ticket actually costs Rs. 130 (assume that the net benefit from walking for 30 minutes is valued at Rs. 7)
 - Take a 10 minute bus trip to his Professor's house, help him out as a research assistant for two hours and then take the bus back home (there is a bus at 2:05 p.m. which would pick him up in front of his house and take him to his Professor's house and similarly, there is a bus at 4:20 p.m. which would bring him home from his Professor's house; the total waiting time of 10 minutes at the two bus stops yields a net disbenefit of Rs.5 and the bus tickets cost him a total of Rs.10 while the bus journey is associated with a net benefit of Rs. 0). John likes the job of being a research assistant so much that, if he had nothing else to do, he would in fact be willing to pay Rs. 10 per hour to do that job for which his Professor actually pays him at the same rate.

Which one of the three activities listed above would John choose and why? 3 marks

- 6) Draw an indifference curve map between two economic “bads”: both goods exhibit negative and diminishing marginal utility. Use arrows on the diagram to show the direction in which utility increases. Where is utility maximized? (2+ 0.5 + 0.5 = 3 marks)
- 7) Show that price elasticity of demand is determined by the slope of the marginal utility curve. Use the concept of arc elasticity of demand.
- 8) Distinguish between ‘positive’ and ‘normative economics’. Explain briefly why both are important for research in economics and progress of the discipline. (1.5 +1.5 = 3 marks)
- 9) Consider the case where the Engel Curve is a straight line from the origin. Show that this is a case of income elasticity of demand equaling unity. 3 marks
- 10) Explain why pricing of water might augment social welfare in the case of a clean government but do exactly the opposite for a corrupt government. 3 marks