

University of Rajshahi  
Department of Computer Science and Engineering  
B. Sc. Engg. Part1 Even Semester, Examination-2016  
Course: ECON-1211 (Economics)  
Full Marks: 35 Time: 2 Hours  
Answer two questions from each part

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Dept. of Computer Science &  
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University of Rajshahi.

Part A

- |    |   |      |
|----|---|------|
| 1. | (a) Define economics. What are the fundamental problems of any economy?   | 4    |
|    | (b) Discuss the subject matters of microeconomics and macroeconomics.   | 2    |
|    | (c) Explain the relation between economics and engineering  | 2.75 |
| 2. | a) State the law of demand. Draw a demand curve using the demand equation $Q_d = 50 - 5p$   | 3    |
|    | b) What is supply? What are the causes of change in supply? Explain.  | 3.75 |
|    | c) Using the following demand and supply equations, find the equilibrium quantity and market price: $Q_d = 20 - 2p$ , $Q_s = 10 + 3p$ | 2    |
| 3. | a) What is production? Discuss the four factors of production.  | 3    |
|    | b) Define cost. Distinguish between fixed cost and variable cost.   | 3    |
|    | c) What is a market? Discuss the main differences between perfect competition and monopoly.   | 2.75 |

Part B

- |    |  |      |
|----|--|------|
| 4. | (a) Define inflation and unemployment.   | 2    |
|    | (b) How are inflation and unemployment related in the short-run? Explain this relationship with the help of Philips curve.                         | 3    |
|    | (c) What is business cycle? Discuss the phases of business cycle.  | 3.75 |
| 5. | (a) What is national income? Distinguish between Gross Domestic Product (GDP) and Gross National Product (GNP).                                    | 3    |
|    | (b) What do you mean by multiplier? Prove that the investment multiplier is $\frac{\Delta Y}{\Delta I} = \frac{1}{1-MPC}$                          | 3.75 |
|    | (c) Suppose, the level of autonomous investment (I) in any economy is Tk. 200 crores and consumption function of the economy is $C = 80 + 0.75Y$ . | 2    |
|    | (i) What will be the equilibrium level of income?  |      |
|    | (j) What will be the increase in national income if the investment increases by Tk. 25 crores?   |      |
| 6. | (a) What do you mean by budget? Distinguish between revenue budget and capital budget.   | 3    |
|    | (b) What are the major sources of revenue of the government of Bangladesh? Discuss.  | 3    |
|    | (c) Explain the major objectives of the first five years plan of Bangladesh.   | 2.75 |

**University of Rajshahi**  
**Department Of Computer Science and Engineering**

B.Sc.(Engg.) Part-I, Even Semester Examination-2014

Course: ECON 1211 (Economics)

Full Mark: 35    Duration: 2 hours

**[N.B. Answer any four questions taking two from each group. Figures in the right margin indicate full marks]**

**Part-A**

1. a) What do you mean by economics? Explain the concepts of total product, average product and marginal product in economics. 3  
b) Mention the three stages of production. Explain why a rational producer concentrates producing on the second stage of the total product curve. 5.75
2. a) Discuss what are meant by price elasticity, cross price elasticity and income elasticity of demand. 3  
b) If the demand for the commodity y increases from 5 units to 8 units as a result of increase in income of a consumer from Tk. 50,000.00 to Tk. 65,000.00, find the income elasticity of demand and comment on the nature of the commodity. 2  
c) Show that the price elasticity of demand ranges from zero to infinity. 3.75
3. a) What is meant by a perfectly competitive market? State its assumptions. 3  
b) Explain the conditions for obtaining equilibrium of a firm under a perfect competition. 5.75

**Part-B**

4. a) Distinguish between GDP and GNP. 3  
b) Graphically explain the circular flow of national income in a simple two sector economy. 3.75  
c) Discuss various steps of business cycle. 2
5. a) What is inflation? 2  
b) What are the features and causes of inflation? 3.75  
c) Compare among the methods of measuring national income. 3
6. a) What is meant by multiplier? 2  
b) Describe the simple Keynesian model for the determination of national income with the help of expenditure method. 4  
c) What are the differences between revenue budget and capital budget? 2.75

**University of Rajshahi**  
**Department of Computer Science and Engineering**  
 B.Sc. (Engg.) Part-I (Even Semester) Exam - 2013  
 Course: ECON 1211 (Economics)

Full Marks: 35

Time: 2 Hours

(Answer 4 questions taking any 2 from each group. Figures in the margin indicate full marks)

**Group A**

- 1.(a) Why is "what to produce" a problem in every economy? 2
- (b) How does the price mechanism solve this problem in a free-enterprise economy? 3
- (c) Define economic resources. What are the factors of production? Are they economic resources? 3.75
- 2.(a) State the law of demand and the law of supply. 3
- (b) The following table refers the change in an individual's consumption of lemons and tea at home when the price of lemons rises (*ceteris paribus*) 2.75

	Before		After	
	Price (cents/unit)	Quantity (units/month)	Price (cents/unit)	Quantity (units/month)
Lemons	10	20	20	15
Tea	20	40	20	35

- i) Draw a figure showing these changes
- ii) Explain the figure drawn.
- (c) Define ATC, AVC and MC. Draw them in a single diagram. 3
- 3.(a) What is meant by market equilibrium? What will happen in a market if the current price is above the equilibrium price? 3
- (b) What happens to the equilibrium price in a market if the supply curve shifts to the left? 2.75
- (c) Given the market demand function  $QD_x = 120,000 - 20,000P_x$  and market supply function  $QS_x = 20,000P_x$  3
  - i) Find the equilibrium price and equilibrium quantity.
  - ii) Is the equilibrium condition stable? Why?
  - iii) Define unstable equilibrium and metastable equilibrium.

**Group B**

- 4.(a) Mention some macroeconomic variables. Is Rajshahi City Corporation's annual expenditure a macroeconomic variable? 3.75
- (b) What does the CPI measure? How is the CPI different from the GDP deflator? 5
- 5.(a) Describe the major problems of GDP measurement. 4
- (b) What problems does the underground economy pose for GDP measurement? 4.75
- 6.(a) Define aggregate output. 3
- (b) Show the circular flow of national income for the three-sector model and derive the equation of national income from there. 5.75



**Department of Computer Science and Engineering**  
**University of Rajshahi**  
**B.Sc. (Engg) Part-1 Examination 2012 Semester: Even**  
**Course Title: Economics** **Course Code: ECON 1211**  
**Full Marks: 35** **Time 3 Hours**  
**(Answer any Four question taking two from each group)**

**Part A**

- |      |   |      |
|------|---|------|
| 1(a) | Critically explain the definition of Economics given by L. Robbins.   | 3    |
| (b)  | Discuss the central economic problems of a society.   | 2.75 |
| (c)  | What do you mean by economic law? What are the limitations of economic laws?  | 3    |
| 2(a) | State the law of demand. Distinguish between demand schedule and demand curve.  | 2.75 |
| (b)  | Distinguish between change in demand and change in quantity demand.   | 3    |
| (c)  | What is 'cross elasticity' of demand? How do you identify the relationship between two commodities with the help of 'cross elasticity' of demand? | 3    |
| 3(a) | Distinguish between total fixed cost and total variable cost and present both in a single diagram   | 2.75 |
| (b)  | What is meant by equilibrium of a firm? State the conditions of the equilibrium of firm.  | 3    |
| (c)  | Discuss short run equilibrium of a firm under perfect competition.  | 3    |

**Part B**

- |      |   |      |
|------|---|------|
| 4(a) | What is input-output analysis? State the assumptions of input-output analysis.  | 3    |
| (b)  | Define co-efficient matrix and technology matrix.   | 2    |
| (c)  | Suppose, there are n number of different industries in the economy. If the co-efficient matrix and final demand vector are given, then how can you obtain correct level of output for the industries? | 3.75 |
| 5(a) | Define macroeconomics. State the main macroeconomic variables.  | 2.75 |
| (b)  | Discuss the circular flow of economic activities in a three sector economy.   | 3    |
| (c)  | Define unemployment and discuss different types of unemployment.  | 3    |
| 6(a) | Discuss how equilibrium national income is determined in a simple Keynesian two sector economy.   | 3.75 |
| (b)  | Define budge. Distinguish between revenue and development budget.   | 2.5  |
| (c)  | State the objectives and core targets of the Sixth Five-Year plan of Bangladesh.  | 2.5  |

University of Rajshahi  
Department of Computer Science and Engineering  
B.Sc. Engg.(CSE) 1<sup>st</sup> Year 2<sup>nd</sup> Semester 2011  
Course: ECON 1211 (Economics)  
Time: 3 Hrs. Full Marks: 35  
[N.B. Answer FOUR questions taking at least TWO from each part.]

PART-A

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|--|------|
| 1. (a) Define Economics.   | 2.75 |
| (b) Distinguish between Micro and Macro economics.   | 3    |
| (c) Discuss the central economic problems of every society.  | 3    |
| 2. (a) What is demand? Explain the law of demand.  | 3    |
| (b) Why does a demand curve slope downward to the right?   | 2.75 |
| (c) What is elasticity of demand? From the demand function, $Q=50-2P$ , find price elasticity of demand when $P=8$ . | 3    |
| 3. (a) What is monopoly? What are the characteristics of a monopoly market?  | 2    |
| (b) What is meant by equilibrium of a firm? Derive the conditions of equilibrium of a firm.                          | 3.75 |
| (c) Explain the short run equilibrium of a firm under perfect competition.   | 3    |

PART-B

- |   |      |
|---|------|
| 4. (a) What do you mean by input-output analysis? Mention the assumptions of input-output analysis.       | 3    |
| (b) Distinguish between open and closed input-output model.   | 2    |
| (c) Explain how the correct level of output is obtained in an input-output model?                         | 3.75 |
| 5. (a) Graphically present the circular flow of macroeconomic activity.                                   | 3    |
| (b) Distinguish between Gross Domestic Product and Gross National Product.                                | 2.75 |
| (c) What are the problems of measuring national income?   | 3    |
| 6. (a) What is budget? Distinguish between revenue budget and capital budget.                             | 3    |
| (b) Distinguish between direct tax and indirect tax.  | 2.75 |
| (c) What are the major sources of revenue and major heads of expenditure of the government of Bangladesh? | 3    |