

Dept. of CSE, Sec-A, CT-1, Code-HUM 1213, Marks-20, Time-40 minutes

- 1) What is economics? What are the three basic economic problems? [2+3] [5×1=5]
- 2) Using demand-supply framework, state and explain whether the following statements are true or false.
 - a) A good harvest will generally lower the income of farmers.
 - b) When the weather turns into warm in Bangladesh, the price of hotel rooms in Cox's bazar plummets.
 - c) As Rohingya Muslims are coming temporarily into Bangladesh, demand for good will be lower. As a result the demand curve will shift to rightward.
 - d) Due to the recent occurrence of flood in Bangladesh, people expect that price of rice will be higher in near future. As a result demand for rice is lower in current time.
 - e) As more people buy computers, the demand for internet service increases and the price of internet service decreases. The fall in the price of internet service decreases the supply of internet service.
- 3) What is Price elasticity of demand? Suppose the price of a pen increases from Tk. 8 to Tk. 10 and the quantity demanded of pen decreases from 24 to 20. What is the price elasticity of demand for pen? What does the value of elasticity mean? [2+2+1]
- 4) What is utility, marginal utility and total utility? [1+2+2]

Set-01

[3+4+3]

- a) Define total cost (TC), marginal cost (MC) and average cost (AC).
- b) Calculate total cost (TC), marginal cost (MC) and average cost (AC) from the following table. Also draw the TC, MC and AC curves.

Combinations	Labor	Output	TFC	TVC	TC	MC	AC
A	0	0	25	0			
B	1	4	25	25			
C	2	10	25	50			
D	3	13	25	75			
E	4	15	25	100			
F	5	16	25	125			

- c) Why the average cost curve is U-shaped?

Set-02

[3+3+2+2]

Suppose a monopolist faces the following demand curve $P=100-Q$ and average cost is given by $AC=4+Q$.

- a) Calculate equilibrium output, equilibrium price and profit of the monopolist.
Again suppose that the industry above were perfectly competitive.
- b) Calculate equilibrium quantity, equilibrium price and profit of the firm.
- c) Also calculate the size of the welfare loss of the society resulting from the presence of the monopolist.
- d) Show the whole scenario graphically.

RAJSHAHI UNIVERSITY OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

1st Year Even Semester Examination 2017

COURSE NO: Hum 1213 COURSE TITLE: Economics, Government & Sociology

FULL MARKS: 72

TIME: 3 HRS

- N.B. (i) Answer any SIX questions taking any THREE from each section.
 (ii) Figures in the right margin indicate full marks.
 (iii) Use separate answer script for each section.

40

SECTION : A 26

- Q.1 (a) Distinguish between quantity demanded and demand. 3 3
 (b) State law of demand. What are the exceptions to the law of demand? 5 2
 (c) Why the demand curve slopes downward? 4 4
- Q.2 (a) Define total cost (TC), marginal cost (MC) and average cost (AC). 3 3
 (b) Given that the cost function is $C=100+20q-4q^2+3q^3$. Calculate TFC, TVC, AFC, AVC, AC and MC. 6 1
 (c) Why the average cost curve is U-shaped? 3 3
- Q.3 (a) What is indifference curve? 2 2
 (b) Explain the properties of indifference curve. 4 4
 (c) Define MRS. How do we calculate MRS? 3 1
 (d) What is budget-line? 3 3
- Q.4. (a) Define GDP and GNP. 4
 (b) Calculate nominal GDP, real GDP, GDP, deflator and inflation rate taking 2015 as the base year from the following table. 4

Year	Prices and Quantities			
	Prices of apple	Quantity of apple	Prices of orange	Quantity of orange
2015	\$1	100	\$2	50
2016	\$2	150	\$3	100
2017	\$3	200	\$4	150

- (c) Is GDP a well measure of economic well being in an economy? Explain. 4

SECTION : B 14

- Q.5 (a) What is sociology? 3 3
 (b) Why should we study sociology? 3 3
 (c) Why do you need to study sociology being a student of CSE? 6 6
- Q.6 (a) What is civilization? 3
 (b) Define culture? 2
 (c) Define city? 2
 (d) Suggest remedial measures to solve ecological problem. 5
- Q.7. (a) Define democracy. 3
 (b) Explain the merits of democracy. 3
 (c) What are the functions of legislature? 6
- Q.8. (a) Distinguish between local and central Government. 4 1
 (b) Write short notes about: (i) Karl Marx, (ii) Auguste Comte and (iii) Saint Simon 4
 (c) Explain the various forms of government. 4 1

...