

B. Sc. in Textile Engineering
Level-3 Term-II, Final Examination-2017

Subject: Economics (Code: HSS 301)

Time: 3.0 Hrs.

Full Marks: 105

(Use separate answer script for Part: A and Part: B)
(All parts of a question must be answered consecutively)

Part : A

(Answer any three questions)

1. (a) Define utility. What are the properties of utility function?
(b) What do you mean by indifference curve? What does the slope of indifference curve measure?
(c) What do you mean by marginal rate of substitution (MRS)?
(d) State the utility function and draw the diagram for the following cases i) goods are normal, ii) goods are perfect substitute, iii) goods are perfect complement.
[5+5+3+4.5=17.5]
2. (a) Define Indifference curve. Write down the properties of Indifference Curve.
(b) The given utility function is $U(x, y) = \sqrt{(x^2 - y^2)}$. Proof that $MRS_{x,y} = -x/y$
(c) Distinguish between "Quantity Tax" and "Value tax".
[6.5+7+4=17.5]
3. (a) Deduce the term "Pareto efficiency"? Through Edgeworth Box show how the economy finds its efficiency in Consumption?
(b) Explain the procedure of production efficiency in the economy.
(c) Using the answer of questions a) and b) show market efficiency allocation conditions.
[7+7+3.5=17.5]
4. (a) Briefly describe the "Four Market Model".
(b) Define the followings:
i) Average variable cost, ii) Total fixed cost, iii) Average total cost, iv) Total cost.
(c) Suppose a firm's average variable cost function is $(Q - 3)^2 + 3$. The firm has total fixed cost of \$50. What is this firm's "average total cost" and "total cost".
[8.5+4+5=17.5]

Part: B

(Answer any three questions)

5. (a) Define IS Curve. What are the elements of IS equation?
(b) What is LM curve? Discuss IS-LM equilibrium using a diagram.
(c) What do you mean by fiscal and monetary policies? Who are the authorities to take fiscal and monetary policies in Bangladesh?
(d) Discuss the effectiveness of expansionary fiscal policy in IS-LM model.
[2+7.5+2+6=17.5]
6. (a) Explain the Solow Growth Model. How steady state equilibrium occurs in the model. Define the golden rule in the Solow Model.
(b) What is Inflation? What are the cost of anticipated inflation?
[10.5+7=17.5]
7. (a) Briefly describe the "Theory of Liquidity Preference".
(b) Write short notes on the following.
i) Phillips Curve, ii) The Fisher Effect.
[8.5+(4.5+4.5)=17.5]
8. Write short notes on the following:
(a) Keynesian Cross Model
(b) Theory of Liquidity Preference
(c) Consumer Price Index (CPI) Vs GDP Deflator
(d) Phillips curve

(Use separate answer script for Part: A and Part: B)
(All parts of a question must be answered consecutively)

Part : A

(Answer any three questions)

1. (a) What is opportunity cost? Proof that the slope of the budget line measures the opportunity cost.
- (b) Graphically show the changes in budget line due to change in price of good 1 and income.
- (c) "Indifference curves cross each other"- True or False. Explain your answer.

[3.5+6+2.5=12]

2. (a) Define Marginal utility. Explain the "The law of diminishing marginal utility".
- (b) Explain the concept of "consumer surplus" in words and illustrate by a diagram.
- (c) Consider the linear demand curve $D(p) = 20 - 2p$. When the price changes from 2 to 3 what is the associated change in consumer's surplus?

[4+4+4=12]

3. (a) Define Iso-quant and Iso cost line. Through graph explain how the economy comes to the cost-minimization equilibrium.
- (b) Let the production function is $3L^{2/3} K^{1/3} = Y$ and iso-cost line is $2L + 3K$. Find out the optimal input combination where cost is minimized.

[5+7=12]

4. Write short notes:
 - (a) Perfectly competitive market
 - (b) Steady state level of capital
 - (c) Inferior good vs. giffen good

[3×4=12]

Part : B

(Answer any three questions)

5. (a) Differentiate between GDP and GNP.
- (b) Explain how economy finds its equilibrium income through Keynesian Cross model.
- (c) Show what happens to the equilibrium level of income when govt. purchase increases.

[2+6+4=12]

6. (a) What is money? Write down the functions of money.
- (b) Describe the tools of Central bank to control money supply.

[6+6=12]

7. (a) Define IS and LM curve. Discuss the equilibrium in IS-LM model.
- (b) Explain the effectiveness of monetary policy in IS-LM setting.

[6+6=12]

8. Write short notes:
 - (a) Tax multiplier
 - (b) Fiscal policy and monetary policy
 - (c) Solow growth model

[4×3=12]