International Islamic University Chittagong

[Answer any five of the following questions. Figures in the right margin indicate full marks.]

QN	Description of Questions	Marks	CLOs & PLOs	Cognitive learning
1(a).	Explain the Cardinal and Ordinal utility approaches.	2	CLO-4, PLO-5	Analyze
1(b).	"Demand curve is the portion of marginal utility curve which lies in the positive quadrant."-Justify the statement and derive the demand curve from the Law of Diminishing Marginal Utility theory.	8		Remember
	Or			
(a).	Assume the utility function $U=100_q - q^2$. Find marginal utility and draw the marginal utility function with an appropriate graph.	4		Remember
(b).	"Total utility curve is inverse "U"-shaped and marginal utility curve slopes downward". Justify the statement by the law of Diminishing Marginal Utility with graph.	6		Evaluate
2(a).	Prove that the slope of a budget line is the negative ratio of the prices of two goods.	3	CLO-4, PLO-5	Evaluate
2(b).	'Indifference curves don't intersect each other. Prove.	3		Create
2(c).	Draw the budget line assuming total income of 400, Price of X= 10 and Price of Y= 20. What change in the budget line will occur if the price of X falls from 10 to 5?	4		Analyze
3(a).	Using indifference curve analysis, prove that the price effect of a commodity is decomposed into income effect and substitution effect for an inferior good.	5		evaluate
3(b).	What is ICC? Draw indifference curve diagrams showing the ICC in the following cases; i) Good X is inferior and good Y is normal. ii) Good X is income neutral and good Y is normal.	5	CLO-4, PLO-5	Analyze
	Or			
3(a).	"All Giffen goods are inferior, but all inferior goods are not Giffen." Explain.	3	CLO-4, PLO-5	Evaluate
3(b).	Derive the Demand curve for a normal good and for an inferior good.	7		Analyze
4(a).	Define Production Function. Draw the APP_L and MPP_L from the	3	CLO-5,	Remember

TPP$_L$.

					PLO-5	

4(b). What is the law of variable proportion? What are the different stages of production under this law? Which stage is optimal for operation, why? Discuss with graphical presentation.

7   PLO-5   Create

5(a).

Combination	Labour	Capital	Output level
A	20	1	100 unit
B	18	2	100 unit
C	12	3	100 unit
D	9	4	100 unit
E	6	5	100 unit
F	4	6	100 unit

Draw an Iso-quant curve from the above table.

3   Apply

5(b) How is least-cost factor combination determined? Explain with the help of Iso-quant analysis.

7   CLO-5, PLO-5   Evaluate