



'समानो मन्त्रः समितिः समानी'

UNIVERSITY OF NORTH BENGAL
B.Com. Honours Part-III Examination, 2022

B.COM.

PAPER-3H1

BUSINESS ECONOMICS AND QUANTITATIVE TECHNIQUES

REVISED NEW SYLLABUS

(For Honours in Accounting, Management and Finance)

Time Allotted: 4 Hours

Full Marks: 100

*The figures in the margin indicate full marks.
All symbols are of usual significance.*

GROUP-A

Answer any four questions

15×4 = 60

1. Define price elasticity, income elasticity and cross elasticity of demand. Discuss the factors determining the price elasticity of demand. Show that on a straight line demand curve, the elasticity of demand varies between zero to infinity. 3+6+6
2. What do you mean by iso-cost and iso-quant line? What do they represent? How can we determine the profit maximizing input combination of a firm with the help of iso-cost and iso-quant lines? 5+10
3. Narrate the conditions necessary for price discrimination. What are the different forms of price discrimination—narrate briefly? Given price elasticity in two markets e_1 and e_2 , if $e_1 > e_2$, show that $p_1 < p_2$. 5+5+5
4. Discuss the arguments in support of Baumol's sales maximization model. Show that as per Baumol's hypothesis, sales maximization output is more than profit maximization output. 7+8
5. Discuss monetary theory of business cycle. What measures do you recommends to tackle a downturn in the economy of country? Discuss quantity theory of money in the context of inflation. 5+5+5
6. Discuss any one statistical method of demand forecasting. Time series in respect of yearly production of a firm have been given below: 5+10

YEAR:	2013	2014	2015	2016	2017	2018	2019	2020	2021
PRODUCTION (in tonnes):	40	46	56	77	46	51	65	59	78

Make a production forecast of the firm for the year 2023.

7. If the production function is $Q = 5.L^{0.25}K^{0.75}$, then show that AP_L and MP_L both are diminishing. Prove that Cobb-Douglas production function, elasticity of substitution is unity. 7+8

8. Discuss the basic assumptions of Linear Programming Model. Solve the following linear programming problem by simplex method: 15

Maximize, $Z = 5X_1 + 4X_2$

Subject to, $6X_1 + 4X_2 \leq 24$

$X_1 + 2X_2 \leq 6$

$X_1 + X_2 \leq 1$

$X_2 \leq 2$

Where, $X_1 \geq 0, X_2 \geq 0$

GROUP-B

9. Answer any **four** questions: 5×4 = 20

- (a) Discuss the profit maximizing conditions of a price discriminating monopoly.
- (b) What is called Expansion Path? How is it determined? 2+3
- (c) Show that the sum of the price elasticity, income elasticity and cross elasticity is equal to zero.
- (d) What are the differences between monopoly and monopolistic competition? Give example of a market of monopolistic type.
- (e) Briefly discuss the major factors of economic development.
- (f) Solve the game from the given pay-off matrix:

		Player-B		
		B_1	B_2	B_3
Player-A	A_1	2	4	3
	A_2	4	5	2
	A_3	7	6	8
	A_4	3	1	7

- (g) Prove that dual of a dual is the primal in the linear programming.
- (h) Write a note on “Kinked Demand Curve”.

GROUP-C

10. Answer any **ten** questions: 2×10 = 20

- (a) Define saddle point.
- (b) What is Giffen goods?
- (c) What is elasticity of substitution?
- (d) What is mixed strategy?
- (e) What are the phases of business cycle?

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- (f) What do you mean by oligopoly?
- (g) What is cost-push inflation?
- (h) What do you mean by homogenous production function?
- (i) How can you measure economic development?
- (j) In which market firm faces a horizontal demand curve?
- (k) What is called a fair game?
- (l) What is derived demand?
- (m) What is cartel?
- (n) What is recession?
- (o) Mention the impediments of economic development.

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