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   7+8
    are diminishing. Prove that Cobb-Douglas production function, elasticity of
    substitution is unity.

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

    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
A_1	2	4	3
A_2	4	5	2
A_3	7	6	8
A_4	3	1	7

Player-A

    (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?

(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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