B.Sc. (Hons.) / V Sem. / Computer Sc.   A
Paper – 505 : Economics
(Admissions of 2001 and onwards)

Time : 3 Hours   *Maximum Marks : 75*

(Write your Roll No. on the top immediately
on receipt of this question paper.)

All *questions are compulsory.*
Parts of the questions must be answered together.

1. (a) What is a production possibility frontier ? What is
         the interpretation of its slope ?

                                                        4

    (b) How can you use a production possibility frontier
         to solve the central problems of an economy ?

                                                        6

2. (a) Define the following measures of elasticity of
         demand :

         (i) Point Elasticity

         (ii) Arc Elasticity

         (iii) Total expenditure based measure   3

                                              [P.T.O.

(b) What do you understand by a demand curve with unitary elasticity ? Which measure of elasticity is the basis of the idea of unitary elastic demand curve ? Explain.

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3. (a) Market prices of two goods X & Y are Rs. 5/- and Rs. 6/- respectively. Our consumer Siddhanta buys 60 and 50 units of these two goods. He spends his entire income of Rs. 900/- on these two goods only. Assuming that he is in equilibrium, what should be his marginal rate of substitution between X and Y ? Explain with help of a diagram.

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(b) What is law of variable proportions ? Explain with help of a suitable numerical example.

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4. (a) What do you mean by returns to scale ?

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(b) Consider the following Cobb-Douglas production function :

$$Q = 100 \ L^{0.5} \ K^{0.5}$$

Where L = Labour and K = Capital

What can you say about returns to scale in this case ? Explain.

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5. Define the following concepts of costs :

(i) Direct costs

(ii) Opportunity costs

(iii) Variable costs

(iv) Fixed costs

(v) Marginal costs

(vi) Average costs

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6. (a) Explain the Monopolistic Competition Model of the market. Compare and contrast it with Monopoly.

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(b) What is product differentiation ? Is it different from price discrimination ?

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7. (a) What do you mean by duopoly ? 1½

(b) What is a business cycle ? 1½

(c) What is monetary policy ? 1½

(d) What is budgetary policy ? 1½

(e) Consider the following pay-off matrix

Accused X

	Confession	No confession
Confession	(A) 5 years 5 years	(B) 10 years 3 months
No confession	(C) 3 months 10 years	(D) 1 year 1 year

Analyse the above game. What is the optimum solution for each accused ? Will it be the optimum for two of them taken together ?

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8. (a) Calculate gross value added at market prices; and

3

(b) National Income from the following data : 3

Items Rs.

   (i) Value of output

     (a) Primary sector   800

     (b) Secondary sector   200

     (c) Tertiary sector   300

   (ii) Value of intermediate inputs purchased by :

     (a) Primary sector   400

     (b) Secondary sector   100

     (c) Tertiary sector   50

   (iii) Total indirect taxes paid
by the three sectors   50

   (iv) Consumption of fixed
capital (all sectors)   80

   (v) Factor income from
abroad   10

   (vi) Factor income paid
to rest of the world   20

   (vii) Subsidies received
by all the sectors   20

(c) What is balanced budget multiplier ? Why is it always equal to one ? Explain.

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