

**2007****COMMERCE****(Managerial Economics and  
International Business Finance)****PAPER—V***Full Marks : 100**Time : 4 hours**The figures in the right-hand margin indicate full marks.**Candidates are required to give their answers in their  
own words as far as practicable.**Illustrate the answers wherever necessary.***First Half***(Managerial Economics)***[Marks : 50]**

Answer Q. No. 1 and two from the rest  
taking one from each Group.

1. Answer any four of the following : 5×4

- (a) Suppose a demand function is  $q = A p^{\alpha} y^{\beta}$  where  $q$  is quantity demanded,  $p$  is price and  $y$  is income,  $A$ ,  $\alpha$ ,  $\beta$  are constants. Determine the price elasticity of demand and income elasticity of demand for this demand function.
- (b) Distinguish between average cost and marginal cost and show the relation between them.

*(Turn Over)*

- (c) What is demand forecasting ? State the importance of demand forecasting.
- (d) Prove that for the Cobb-Douglas production function  $q = Ax_1^\alpha x_2^\beta$  the expansion path is a straight line through the origin where the symbols have their usual meaning.
- (e) Distinguish between returning to scale and returns to factors.
- (f) Prove that Lerner's index of monopoly power is the reciprocal of the absolute value of the elasticity of demand.
- (g) What is a two person zero sum game ? When is it said to be strictly determinable and fair ?
- (h) Explain the concept of break even point with the help of a diagram.

#### Group—A

Answer any *one* questions.

2. Define average revenue, marginal revenue and elasticity of demand. State and prove the relation involving them. 6+9
3. Show how the consumer reaches equilibrium in the indifference curve approach. How will the equilibrium be affected if all prices and money income are doubled? 10+5

#### Group—B

Answer any *one* question.

4. (a) Prove that a profit-maximising monopolist always sets price on the elastic portion of the demand curve.
- (b) Find the conditions that a firm must fulfill to maximise output subject to cost constraint.

- (c) Calculate the value of elasticity of substitution for Cobb-Douglas Production function. 5+6+4
5. (a) Explain the following concepts in the context of game theory with suitable examples :
- (i) Maximum Principle, (ii) Nash equilibrium.
- (b) Solve the following game problem and determine the value of the game.

		Player B	
		I	II
Player A	I	-2	6
	II	5	1

- (c) Give an example of a Won-Zero Sum Game. 7+6+2

### Second Half

*(International Business Finance)*

[Marks : 50]

Answer Q. No. 6 and any *two* from the rest taking *one* from each Group.

6. Answer any *four* of the following : 5×4
- (a) (i) What is balance of payments ?
- (ii) Mention the components of service account and unilateral transfer account in the balance of payment statement.

- (b) (i) Define the term 'transfer of technology'.  
 (ii) What are the methods of transfer of technology?
- (c) Explain the theory of comparative advantage with suitable example.
- (d) State the reasons why firms have to be engaged in international business.
- (e) Explain the concept of a FOREX market?
- (f) Distinguish between arbitraging and speculating.
- (g) Calculate the translation gain/loss using the current non-current method from the information given below.
- XY Ins. is a US Company having its subsidiary in India. The balance sheet of the Indian subsidiary is given below :

<b>Liabilities</b>	<b>Rs.</b>	<b>Assets</b>	
	<b>Cr</b>		<b>Cr</b>
Share Capital	200	Fixed Assets	
Reserve & Surplus	50	Stock	
Long-term Debt	300	Bills Receivable	
Current Liabilities	200	Cash	
	<u>750</u>		<u>—</u>

The Indian Rupee depreciates from Rs. 44.00 to Rs. 48.50 against the US dollar.

- (h) Write a short note on "netting" technique.

**Group—A**

Answer any one question.

7. (a) Critically examine the role of multinational corporations (MNC) in less developed countries. 10  
 (b) Analyse the effect of geographical and economic environment on international business. 15
8. (a) Present an overview of benefits and costs associated with transfer of technology through multinational corporations (MNC) 10  
 (b) Discuss the major issues in information technology. 5

**Group—B**

Answer any one question.

9. (a) What is a currency swap? Explain its advantages.  
 (b) Virginia Corporation will need £ 3,00,000 in 90 days. It has to decide whether to hedge the payables or not. The following information is given —
- Spot rate of pound = \$ 1.80  
 90-day forward rate of pound = \$ 1.74  
 Interest rates are :
- 90-day deposit rate in both US and UK = 2.20%  
 90-day borrowing rate in both US and UK = 2.60%
- Two options are available :
- A call option on pound that expires in 90 days has an exercise price of \$ 1.72 and a premium of \$ 0.03.  
 A put option on pound that expires in 90 days has an exercise price of \$ 1.74 and a premium of \$ 0.02.

In addition to this, Virginia forecasted the future spot rate in 90 days as follows —

<u>Possible outcome</u>	<u>Probability</u>
\$ 1.68	30%
\$ 1.76	32%
\$ 1.78	38%

- (i) What are the different alternatives available to Virginia Corporation ?
- (ii) Also, suggest whether it should go for hedging or not. (3+4)+(6+2)
10. (a) Correlation between currencies is an important factor in determining the risk arising due to transaction exposure. Elucidate the statement.
- (b) What do you understand by the internal techniques of hedging ?
- (c) An exporting firm, ABC Co., would like to convert itself against a likely depreciation of pound sterling. The following data are given :

Receivables of ABC Co. = £ 1,50,000

Spot rate = Rs. 75/£

Payment date = 3 months.

Interest rate : India - 12% p.a.

UK - 5% p.a.

What should the exporter do ?

5+5+5