

2008

COMMERCE

(*Managerial Economics and
International Business Finance*)

PAPER—V

Full Marks : 100

Time : 4 hours

*The figures in the right-hand margin indicate 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) The 'Discounting Principle' and 'Incremental Cost' concepts are both special applications of 'opportunity cost reasoning'. Explain.

(Turn Over)

- (b) Discuss O. Williom's Model of Managerial utility as the alternative objective of firm.
- (c) Prove that price elasticity of demand for a commodity is determined by
- (i) Income elasticity of demand
 - (ii) Proportion of income spent on the commodity.
 - (iii) Elasticity of substitution.
- (d) Find out the optimum quantity of purchase by a consumer whose utility function and budget constraint are $u = x^{1.5}y$ and $3x + 4y = 100$, respectively.
- (e) Define isoline. Distinguish between ridge line and expansion path.
- (f) Consider the production function $Q = x_1x_2 - 0.2x_1^2 - 0.8x_2^2$. Assuming $x_2 = 10$, determine the equations of AP and MP curves of x_1 . At what values of x_1 will AP and MP of x_1 be Zero?

(g) Prove that $MR = AR \left(1 - \frac{1}{|e_p|} \right)$, where e_p is

the price elasticity of demand.

(h) Define 'Two Person Zero-sum Game' with an example. Distinguish between mixed strategy and pure strategy.

GROUP—A

Answer any *one* question

2. (a) Show that on a straight line demand curve the price elasticity of demand varies between zero and infinity.

(b) How would you derive the 'Law of Demand' from 'Revealed Preference Approach'? 8 + 7

3. (a) Distinguish between 'demand forecasting' and 'demand planning'.

(b) Discuss one of the important statistical techniques of demand forecasting.

(c) The total sales of Electricity in India during 1997-2007 are given below :

Year	Sales (kWH hours)
1997	140,374
1998	151,071
1999	156,931
2000	161,664
2001	173,925
2002	185,423
2003	193,907
2004	199,442
2005	206,370
2006	220,591
2007	213,888

(i) Fit a trend line equation to estimate the sales following least square method.

(ii) Estimate the expected sales of electricity in 2010.

- (iii) Assuming present trends will continue in which year would you expect 1998 sales to be doubled? 4 + 5 + 6

GROUP—B

Answer any *one* question

4. (a) Explain graphically the equilibrium condition of a discriminating monopolist.
- (b) Let the total cost (TC) function for a competitive firm be

$$TC = 0.1q^3 - 2q^2 + 15q + 15$$

- (i) Find out the supply curve of this firm and for the industry, if the industry has 50 firms.
- (ii) What is the industry supply for $P = 15$?
- (c) Why Long-run average cost curve (LRAC) is called envelope of short-run average cost curves (SRAC)? 6 + (3 + 1) + 5
5. (a) Explain how equilibrium price and output are determined in kinked demand curve model of oligopoly.

(b) Is the game strictly determinable and fair in the following case ?

		Player B		
		B_1	B_2	B_3
Player A	A_1	-5	-4	7
	A_2	3	0	4
	A_3	6	4	-5

Find out the optimal strategies of player A and B .

(c) What do you mean by 'economies of scale' ?

8 + 5 + 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) Explain the theory of absolute advantage with a suitable example.

- (b) What are the major components of information technology (IT) ?
- (c) Discuss briefly the advantages of foreign direct investment.
- (d) What do you understand by transaction exposure ?
- (e) Explain the meaning of a foreign exchange market and foreign exchange risk.
- (f) Suppose that the annual interest rate in United States and Japan are 9% and 6% respectively. The spot rate is ¥ 142 : \$ 1 and the 90-day forward rate is ¥ 139 : \$ 1.

Under the given condition, is there any scope of making profits through arbitrage ? (Assume that funds have been borrowed, and 1 year = 360 days).

- (g) What is an option ? How is a call option used for hedging ?

(h) A US-based firm XYZ provides the following data relating to its subsidiary in Germany :

**Balance Sheet of XYZ Germany
as on 31.12.2006**

<i>Liabilities</i>	Euros	<i>Assets</i>	Euros
Common Stock	18,00,000	Net Plant &	
Retained earnings	62,00,000	Machinery	48,00,000
Long-term debt	16,00,000	Inventory	24,00,000
Short-term loan	16,00,000	Accounts	
Accounts payable	8,00,000	receivable	32,00,000
		Cash	16,00,000
	<u>120,00,000</u>		<u>120,00,000</u>

Additional Information :

(i) The historical exchange rate is
€ 1 = \$ 1.20.

(ii) When the business reopened on
02.01.07, the euro had dropped
16.67% to \$ 1.00/€ .

(iii) Common stock was issued when the
exchange rate was \$ 1.2760 / € .

- (iv) The translated amount of retained earnings is \$ 74,40,000.

You are required to calculate on the basis of information given above the translation gain/loss arising on account of depreciation of the euro. Using current/non-current method.

GROUP—A

Answer any *one* question

7. (a) Analyse briefly how economic, socio-cultural and political components affect international business environment.
- (b) Distinguish between Current Account and Capital Account of Balance of Payments. 10 + 5
8. (a) Do you think that the operation of MNC in less developed countries can generate higher employment, reduce wage inequality and supply the products at cheaper rate? Explain.
- (b) Present a brief summary of adverse effects associated with technology transfer by MNC.

8 + 7

GROUP—B

Answer any *one* question

9. (a) Explain with the help of an example the meaning of spread.

(b) The following is the data provided by two different banks 1 and 2 relating to bid and ask rate—

Bank 1 : Rs. 42.0722 — 54 / US\$

Bank 2 : Rs. 42.0739 — 66 / US\$

Can you make profit in the given situation ?

(c) The following information relating to exchange rates are available from three financial markets :
In New York, the pound sterling is quoted at \$ 1.3422. The euro is offered at \$ 0.9240 in Frankfurt. At the same time London banks are offering pound sterling at € 1.6645.

Is triangular currency arbitrage possible ?
How will the arbitrage process come to an end ?

(d) Give one example each of a direct quote and an indirect quote.

$$3 + 3 + (4 + 3) + 2$$

10. (a) Write a short note on futures contract.
- (b) Explain the concept of margin in the case of trading of futures contract.
- (c) Mr. X, an investor buys a Swiss Franc contract on Tuesday that matures on Thursday afternoon. The futures price is \$ 0.800 for SFr 1,25,000 (standard size of a Swiss Franc futures contract). The futures price as at the end of Tuesday and the following two days is given below :

End of Tuesday	\$ 0.805
End of Wednesday	\$ 0.795
End of Thursday	\$ 0.798

The initial margin is \$ 1485 and the maintenance margin is \$ 1000.

You are asked to mark-to-market for the above (by adjusting the margin account balance). 6 + 4 + 5