

MANAGEMENT (Paper II)

Time Allowed : Three Hours

Maximum Marks : 250

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

The number of marks carried by a question/part is indicated against it.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

SECTION 'A'

1. (a) An FMCG company G & P Ltd. is in the business of making and selling diapers through its supply chain. It is facing a serious problem of huge inventory in one period followed by a large number of stock-outs in the next period. The pattern is getting repeated again and again. On analyzing the problem, the company found that as demand information moves upstream in the supply chain, the demand variability is getting amplified. A supply chain consultant was approached by G & P Ltd. who suggested that this problem is due to Bullwhip Effect. (i) What are the possible reasons of Bullwhip Effect? (ii) How can Bullwhip Effect be contained? (iii) What is the role of Point of Sales (PoS) information on the Bullwhip Effect? 10
- (b)(i) How would you apply the principles of value analysis to reduce cost overruns in Indian projects? 5
- (b)(ii) What are the phases that you will follow in the process of value analysis? 5
- (c) A study is conducted on 200 residents of a colony who were between the ages of 36 and 50 years, and on 200 residents of the same colony who were over the age of 50 years, to determine whether the source of their daily news is from newspapers or otherwise. Of the 200 residents who were between the ages of 36 and 50 years, 82 got their news primarily from newspapers. Of the 200 residents who were over the age of 50 years, 104 got their news primarily from newspapers. (i) If a resident is selected at random, what is the probability that he or she— (1) got news primarily from newspapers; (2) got news primarily from newspapers and is over 50 years old; (3) got news primarily from newspapers or is over 50 years old? (ii) Suppose that two residents are selected. What is the probability that both got news primarily from newspapers? 10
- (d)(i) Suggest at least three strategies for better waste management in Indian cities and towns. 5
- (d)(ii) What are the two main factors which you would use for vendor evaluation and selection for providing security services at office premises? 5
- (e)(i) Enumerate the objectives and importance of MIS in business and industry. State its advantages and limitations. 5
- (e)(ii) What is an expert system (ES)? Describe the advantages and limitations of ES. 5
2. (a) Arora Electronics Company (AEC) is receiving a lot of customers' complaints and returns of DVD players that it manufactured. When a DVD is pushed into the loading mechanism, it can stick inside and it is difficult to get the DVD out. Consumers will try to 20

pull the DVD drawer out with their finger or pry it out with an object like knife, pencil or screwdriver, frequently damaging the DVD or hurting themselves. AEC is keen to improve this quality problem. (i) What are the different dimensions of quality? How can quality be measured by AEC? (ii) Explain the three main classifications of quality costs. Are these related with one another? (iii) Suggest the seven basic quality tools that are used in total quality management. How can these be used by AEC? (iv) Crosby, a leading quality Guru, said, "Quality is free." AEC management fails to understand this because for better quality management they need money. How will you explain to them the rationale of what Crosby said?

- (b) Technology has led to the rise of workaholics, who are on the job 60 hours or more per week. One of the reasons cited by employees as to why they worked long hours was that they loved their job, because it is stimulating and challenging. A survey of 1564 workaholics included 786 men and 778 women and the results showed that 707 men and 638 women loved their job, because it is stimulating and challenging. At 0.05 level of significance, is the proportion of workaholic men, who loved their job because it is stimulating and challenging, different from the proportion of women? 15

- (c)(i) What is meant by DSS in context to business and management decision-making? Explain with an example that you are aware. State ten characteristics and capabilities of DSS. 5

- (c)(ii) Highlight the major functions of ERP system. State five factors, which are driving ERP adoption by small and medium enterprises. 10

3. (a) A small manufacturing firm wants to produce two types of products, 'Normal' and 'Premium'. The profit from selling either of these products is same and equal to ₹ 100 per piece. Each of these products requires processing in three departments—Casting, Welding and Finishing. 'Normal' needs 9 hours, 1 hour and 4 hours in Casting, Welding and Finishing, respectively. 'Premium' needs 4 hours, 1 hour and 7 hours, respectively in these departments. The capacities of these departments are 36 hours, 5 hours and 28 hours, respectively. (i) Formulate the problem as a typical Linear Programming Problem (LPP) so as to find the optimal number of 'Normal' and 'Premium' to be produced. (ii) Find the maximum achievable profit. (iii) What is the right product mix? 20

- (b) Paintkart Internet website stocks and sells paint online on 360 days of a year. Paintkart store stocks several brands of paint; however, its biggest brand is WeWe paint. WeWe paint has an estimated annual demand of 10000 litres of paint, an annual carrying cost of ₹ 0.75 per litre, and an ordering cost of ₹ 150 per order. Assuming that the demand is uniform and is known with certainty, lead time for receipt of orders is constant and certain, answer the following: (i) What is the optimal order size (in litres) for the WeWe paint? (ii) What is the minimum total inventory cost for the WeWe paint? (iii) What is the number of orders per year for optimal ordering policy? (iv) What is the time between two orders (i.e., the order cycle)? (v) If the lead time is 9 days, what is the reorder level? 15

- (c) (i) Why are micro-payments so important for the future of e-commerce? Explain why traditional payment systems are inadequate for e-commerce. (ii) What are the phases of the system development life cycle (SDLC)? Explain the duties and functions involved in each stage. State in detail the role of system analyst in the system development. 15

4. (a) Consider the (simplified) list of activities and predecessors that are involved in building a small house as given below, along with their duration (in days):

Activity	Description of Activity	Predecessor Activity	Duration (in days)
A	Build foundation	–	5
B	Build walls and ceilings	A	8
C	Build roof	B	10
D	Do electrical wiring	B	5
E	Fix doors and windows	B	10
F	Painting	C, E	3

20

We assume that the builder works everyday once work is started on building the house. Each day of work implies working from morning 9 AM to evening 6 PM. (i) If the foundation work is started on morning 9 AM of 1st November, when can the builder complete all the activities involved in building the house? (ii) If the electrical wiring work takes 10 days, when can the builder complete all the activities involved in building the house? (iii) If the painting work takes 5 days, when can the builder complete all the activities involved in building the house?

- (b)(i) What is 'central limit theorem'? Give three managerial examples, where 'central limit theorem' is applicable. 5
- (b)(ii) A set of parts coming out from a process are measured for their weights. Assuming that the weights are normally distributed with a mean of 73 kg and a standard deviation of 8 kg, what is the probability that a part coming out from this process will weigh between 65 kg and 89 kg? 5
- (b)(iii) Explain the concept of shadow price in a linear programming problem. How can this concept be used for managerial decision? 5
- (c) (i) What is information system planning? Describe Nolan's six-stage model for IS planning. State the advantages and disadvantages of the model. (ii) Suppose we wish to implement a transaction processing system that maintains ACID properties even in the presence of crashes. In the event of a crash, any information stored on disk can be retrieved but any data stored in memory will be lost. Describe one serious shortcoming of each of the following implementations: (1) The database is updated on disk on each transaction. (2) The database is kept in memory and on disk, with the copy on disk updated every fifty transactions. (3) The database is kept in memory. A log file is maintained on disk recording every transaction. 15

SECTION 'B'

5. Answer the following questions:
- (a) With reference to Industry Life Cycle, explain the term 'embryonic industry'. 10
- (b) Since India's independence, there has been a changing ideology from 'nationalization' to 'privatization'. What economic factors have triggered this change? 10
- (c) Distinguish between 'business strategy' and 'corporate strategy'. How can value chain analysis be applied to determine strengths and weaknesses at the level of 'business' and the 'firm' level? 10
- (d) India is the world's most attractive destination for sourcing services with abundance of manpower, both skilled and semi-skilled. Explain various 'modes' of trading services under the GATT Agreement. Critically evaluate the conflict between developing countries including India and developed countries in international expansion of services. 10
- (e) Elucidate the concept of 'multilateral netting' and explain how it influences management of cash flows in a multinational enterprise (MNE). 10
6. Answer the following questions:
- (a) Most Indians find it difficult to understand how Western people eat beef, particularly since cow gives milk and is a revered animal. Korea and other East Asian countries' love for foods such as bloodworm soup, snake and dog meats is not easy to understand for outsiders. In India and other South Asian countries, the fairness of skin is the most important parameter of women's beauty. There is, for example, a huge market in Indian subcontinent for fairness creams such as 'Fair and Lovely' which is growing annually at 25% to 35%. A large number of firms have attempted to exploit this opportunity by introducing a variety of fairness products in the market. On the contrary, most Africans are surprised at 'fairness' being considered a key parameter of beauty. In Africa, brands

like 'Dark and Lovely' for personal care products are highly popular. Thus domestic marketing experiences often conflict with international reality.

- (a)(i) In view of the above, explain the concept of Self-Reference Criteria (SRC) that influence a manager's ability to make objective decisions while operating in international firm. 5
- (a)(ii) How do these impact ability of managers to perform effectively in international business? 5
- (b) "Environmental conservation can go hand in hand with economic development by keeping sustainability as the cornerstone of the policy." Critically examine this statement. 10
- (c) For years, stockbrokers with expensive computer hardware traded online and charged individual investors hefty commission to buy or sell a stock. Full-service stockbrokers such as Merrill Lynch offered clients detailed research reports, recommendations and financial planning services for as much as 2.5% of the value of the order in commission. In 1994, a small discount broker K. Authaurer & Co. became the first to offer online trading over the Internet at much lower cost and commission. With rapid expansion in information and communication technology (ICT), entry of number of small companies offering clients online trading services with low commissions, America's long bull market drew ever more individuals into stock market. By 2000, over 150 firms were offering online trading over Internet due to low entry barriers. Commissions further dropped due to intense competition. By early 1999, online brokers charged deep discount fees of \$ 14.95 per market order of up to 5000 shares compared to \$ 500 charged by full-service brokers for the order up to 1000 shares trading at \$ 20 per share. By mid-2000s, the volume of online trading accounted for 40% of all the stock trades. Full-service brokers had to change their strategy. In 1999, Merrill Lynch, a full-service broker, announced online trading service for a fee of \$ 29.95 for trades up to 1000 shares. The company also shifted to a new uniform fee structure with a flat new rate allowing unlimited number of trades for many individual clients, although the company faced internal rebellion from its army of stockbrokers due to decline in income. For many of Merrill's clients, a combination of research and online trade was a better value proposition than discount online trading houses. By late 2000, NASDAQ declined in value by 60% due to multiple factors drying up the online trading. The same was the fate of other stockbrokers.
- (c)(i) Do you think that the decline in online trading was a watershed event? Comment. 10
- (c)(ii) What is a good framework to analyze the changes in competitive forces to shape the competitive strategy? 10
- (c)(iii) How did change in competitive forces in the brokerage industry change the strategies required for success in the industry? 10

7. Answer the following questions:

- (a) A summary of major trade partners of France in 2013 is given in the table below: Major Trade Partners of France

Country	Exports: Value (US \$ billion)	Exports: Share (%)	Imports: Value (US \$ billion)	Imports: Share (%)
Germany	93.2	16.4	114.2	17.1
Belgium	43.6	7.7	52.4	7.8
Italy	40.3	7.1	47.7	7.1
UK	39.1	6.9	27.5	4.1
Spain	38.3	6.8	40.7	6.1
USA	35.8	6.3	43.4	6.5
Netherlands	23.3	4.1	28.9	4.3
China	19.6	3.5	53.8	8.1

In your opinion, which of the international trade theories explains the above trade patterns? Explain the above trade patterns with the theory that you think is most appropriate.

20

(b) “Protection of intellectual property regime has been relatively weak in India.” In view of this, what measures will you recommend to strengthen and bring the intellectual property regime at par with internationally accepted framework of intellectual property protection in the context of patents, trademarks and copyrights? **15**

(c) “In the appointment of independent directors on corporate boards, it is important to ensure the ‘independence’.” Do you think that ‘independence’ is a matter of structure of the board or application of mind? Substantiate your argument. **15**

8. Answer the following questions:

(a) Four business units V, X, Y and Z of a firm P have been characterized as follows, after carrying out the Business Portfolio Analysis:

Business Unit	V	X	Y	Z
Category	Dog	Cash Cow	Star	Question Mark

(a)(i) How will you use the ‘general electric’ framework to determine the strategic investment options for these business units? **10**

(a)(ii) A competitor firm Q is keen to acquire firm P’s business unit Y and is willing to pay an attractive amount for this purpose. Should the firm P accept the offer? What are the pros and cons to firm P of selling the business unit Y to competitor firm Q? **10**

(b)(i) Briefly explain the concept of ‘dumping’. Elaborate various forms of dumping and their impact on the target market. **10**

(b)(ii) Explain the concept of ‘terms of trade’ and its significance. Differentiate between ‘net’, ‘gross’ and ‘income’ terms of trade. Identify the reasons for differences of ‘terms of trade’ between developed and developing countries. **10**

(c) “Managing external debt portfolio of a multinational firm is crucial to profitability, as otherwise operational efficiency will jeopardize.” Explain this in the context of enhancing corporate value. **10**