

## INDIAN INSTITUTE OF MATERIALS MANAGEMENT Post Graduate Diploma in Materials Management 3 years/Lateral

## PAPER – 18 C OPERATIONS STRATEGY

# Dec 2019

DATE: 29.12.2019

TIME: 2.00 to 5.00 p.m

#### Instructions:

- 1. The question paper is in two parts.
- 2. Part A is compulsory. Each question carries one mark
- 3. In part B answer3 questions . Each question carries 15 marks.
- 4. Part C is a case study which is compulsory

Max. Marks: 100 Duration: 03 Hrs.

> Total 32marks Total 48 marks Total 20 marks

## PART A

32 marks

## Compulsory -Each question carries 1 mark

#### Q. 1. Expand the following [8 marks]

- a) GIS
- b) CRAFT
- c) ISCM
- d) PLC
- e) SCF
- f) FMS
- g) DSS
- h) CAM

### Q.2. Fill in the blanks. (Do not reproduce the statement) [8 marks]

- a) Process that produce high variety and low volume products are termed \_\_\_\_\_ process.
- b) The overall purpose and scope of the business to meet stakeholder expectations is \_\_\_\_\_\_ strategy.
- c) Psychological benefits that customers sense is called \_\_\_\_\_\_ service.
- d) Market share increases during the \_\_\_\_\_ stage of a product.
- e) The independent firm engaged in bringing buyers and sellers together for an exchange are \_\_\_\_
- f) \_\_\_\_\_ is defined as the path or route which goods move from producers to ultimate consumers.
- g) Services cannot be separated from the \_\_\_\_
- h) Possession of the required knowledge and skills to provide the service is critical and known as\_\_\_\_\_\_.

## Q.3. Please state True of False. (Do not reproduce the statement) [ 8 marks]

- a) Tactical decisions are routine decisions taken by middle management.
- b) Quick Response can be a competitive advantage.
- c) Zero defects require a top down approach.
- d) Vertical integration occurs when the scope of production processes is broadened.
- e) E commerce is the commercial transaction that involves the transfer of products across the internet.
- f) Secondary services are not directly involved in the provision of goods or service.
- g) The top of the pyramid in mechanization is automation.
- h) Entropy is the degree of disorder.

### Q.4. Match A and B

#### [ 8 marks]

No.	A		В
1	Spiral analysis	A	A systematic approach to improve the value of goods or services
2	Economies of scale	В	Difficult to assess through any of the physical senses
3	Empathy	С	Process of making a product available for use
4	Mass customization	D	Defining goals and refining their meaning
5	Distribution	E	Provision of individualized attention to customers
6	Value Engineering	F	Ability to personalize a product at a variable cost
7	Intangibility	G	Leads to cost advantage
8	Goal analysis	Н	Technique to arrange departments to reduce material handling costs

### PART B

## (Attempt any 3 Questions, each question carry 16 marks)

- Q.5. a) Discuss the six principal drivers of service quality and cost.[8 marks]
  b) What is meant by strategic decision making? Enumerate its characteristics. .[8 marks]
- Q.6 a) Explain factor rating analysis with an example. .[8 marks]b) Explain operational excellence. .[8 marks]
- Q.7 a) What are service quality dimensions? .[8 marks]b) Explain E commerce. .[8 marks]
- Q.8. a) What is distribution? Explain channel network of distribution. .[8 marks]b) Explain franchising along with its structures. .[8 marks]

#### Q.9. Write short notes on any four.[4 x4 = 16 marks]

- a) Product innovation
- b) Value engineering

c) JIT

- d) Differentiation strategy
- e) Flexible manufacturing systems

#### PART C - Case Study - compulsory (20 marks)

**Q.10.** Jack Haley, a senior buyer for the Dynamite Truck Company, was confronted with an interesting predicament – and possibly a trip overseas. Rising gasoline costs and increased competition had caused the management at the Dynamite Truck to develop a new truck powered by an air-cooled diesel engine. From bumper to tailgate, the new vehicle was designed as a full performance diesel truck. It was heavy-duty throughout: frame, suspension, brakes, axles and steering. It was built to endure. Under normal operating conditions, the new truck, using an efficient air-cooled diesel engine, was designed to yield 18 to 20 miles per gallon. The warranty was for 100,000 miles or two full years, whichever came first.

Jack had been actively involved in the development of the new truck. He provided the Dynamite engineers with information on the availability and cost implications of various materials, components, and subassemblies under consideration. From a technical, cost, availability, and service point of view, the diesel engine was the most crucial item to be purchased for the new truck.

Jack obtained technical data on four air-cooled diesel engines that appeared to satisfy Dynamite's requirements. Two of the manufacturers of these engines were located in Europe, one in Japan, and one in the United States.

Discussions with the program manager indicated that from a technical point of view, each of the diesel engines was acceptable. Accordingly, all four manufacturers were invited to submit bids. The request for bids stipulated an estimated requirement of 10,000 engines per year for each of the next three years.

All four firms submitted bids by the established date. Dutzel Diesel of Gailsdorf, Germany, was the low bidder with an FOB destination price of \$14,263 for the first year, and a standard price escalation clause for the second and third years. The second lowest bidder was a US firm, the Great American Diesel Company. Its price bid for the first year was \$16,287 per engine. The price for the second and third years contained the same economic escalation clause as Dutzel's bid.

Jack sat contemplating a course of action. He wondered if the \$2,024 per unit differential required to buy the US engines could be justified. He also wondered about the necessity of a trip to Gailsdorf to perform a survey on Dutzel prior to awarding the contract.

#### **Questions:**

- a) Is a strategic issue involved in the sourcing of the engines? Analyze.
- b) Would you support Jack's trip to Germany to visit Gailsdorf? Give reasons.
- c) What type of supplier relationship would you recommend for the engine supplier? Why?

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