



Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

**POST GRADUATE DIPLOMA IN MANAGEMENT (2019 - 21)**  
**END TERM EXAMINATION (TERM - II)**

Subject Name: Operations Management  
Sub. Code: PG 14

Time: **02.30 hrs**  
Max Marks: **60**

**Note:**

- 1. Writing anything except Roll Number on question paper will be deemed as an act of indulging in unfair means and action shall be taken as per rules.**
- 2. All questions are compulsory in Section A& C. Section A carries 8 questions of 2.5 marks each, Section B carries 5 questions of 04 marks each and Section C carries 1 Case Study of 20 marks.**

**SECTION - A**

**Attempt all questions. All questions are compulsory.**

**2.5×08 = 20 Marks**

- Q. 1 (A): What do you understand by operations management? How it is different from production management?
- Q. 1 (B): What do you understand by MRP? Briefly discuss the use of MRP in the real world.
- Q. 1 (C): State and explain the various factors contributing to productivity improvement.
- Q. 1 (D): How does a supply chain make any company more competitive?
- Q. 1 (E): Bring out the stages in the development of new product.
- Q. 1 (F): Compare and contrast the characteristic features of job order, batch order and mass production.
- Q. 1 (G): "JIT" is philosophy or technique. Discuss.
- Q. 1 (H): What do you understand by Lean technique?

**SECTION - B**

**Attempt any five out of six questions**

**04×05 = 20 Marks**

- Q. 2: Why facility location study is necessary for establishing a new organization?
- Q. 3: What do you understand by Technology Life Cycle? Discuss its various stages.
- Q.4: "Good Times" restaurant in the city of Patna has introduced quality control measures in running the restaurant. One such measure is to record the time of arrival and of the departure of each guest (or the group of guests) on the bill. At the end of a day, five bills are randomly picked up and the "amount of time spent in the restaurant" for each of those bills (i.e. by the guests) is noted. For the last week, the following data were obtained. With these figures of the last week, construct the sample means and Range charts. (For a sample size of 5, the factors are  $A_2 = 0.577$ ,  $D_4 = 2.115$  and  $D_3 = 0$ )

Day	Time Spent in Restaurant (minutes)				
Sunday	55	63	73	84	75
Monday	46	41	88	53	59
Tuesday	82	89	65	77	37
Wednesday	30	48	27	43	77
Thursday	42	29	28	69	37
Friday	81	71	47	49	52
Saturday	87	59	92	81	95

- Q. 5: Discuss the ABC model of inventory control. How is this model separate from EOQ model?
- Q. 6: A factory uses a part at the rate of 2,000 units per year. Cost of that part is Rs. 2. Ordering cost is Rs. 1, while carrying cost is 10% of cost of that product. Find
- Optimum order quantity
  - Time between two consecutive orders
  - Number of orders per year
  - The optimal cost
- Q. 7: Describe the inputs, the transformation process, and outputs of the productive system of a hospital.

### SECTION - C

**Read the case and answer the questions**

**10×02 = 20 Marks**

Q. 8: Case Study:

Mandar Morgaonkar is a final semester student of PGDBA in Siddhivinayak Management Institute in Prabhadevi, Mumbai. As a part of the curriculum, Mandar is doing a project for Kapadia Mills and helping them to make a decision on the location for their first showroom in Mumbai. After strategic considerations, mandar is left with three locations to choose from. These are Fort, Vashi, and Worli. Each location has its relative merits in terms of three key characteristics, viz. Accessibility to its desirable customer segment, Local attitudes towards business and Future expansion possibilities. Mandar considers the importance of the key characteristics to be A+, B- and B+ on a letter-grade scale similar to that in this PGDBA programme. He also assigns a letter-grade to each of the three locations for the three key characteristics and arrives at the following matrix.

**Table: Letter Grade Matrix**

<b>Factors</b>	<b>Fort</b>	<b>Vashi</b>	<b>Worli</b>
Assessibility	A+	C+	A
Lacal Attitudes	A	C	A+
Future Expansion	D	A	B-
IR Climate	Fair	Good	Excellent
Skills availability	Fair	Excellent	Good
Quality of life	Good	Fair	Excellent
Geographical Climate	Excellent	Excellent	Fair

If A+, A, A-, B+, B, B-, C+, C, C- and D can be given numerical values from 10 to 1 respectively. Mr Mandar also evaluated for important qualitative factors of Industrial Relations Climate, Skills availability, Quality of life Available and Geographical Climate.

Q8(A): Which location would Mandar recommend?

Q8(B): Rank the locations on the basis of said factors. Suggest other factors to consider for location.

<b>Question Number</b>	<b>CLO</b>
Q 1 (A)	CLO 1
Q 1 (B)	CLO 1
Q 1 (C)	CLO 1
Q 1 (D)	CLO 2
Q 1 (E)	CLO 1
Q 1 (F)	CLO 1
Q 1 (G)	CLO 3
Q 1 (H)	CLO 1
Q 2	CLO 3
Q 3	CLO 1
Q 4	CLO 3 and CLO 4
Q 5	CLO 2 and CLO 3
Q 6	CLO 4
Q 7	CLO 3
Q 8 (A)	CLO 4
Q 8 (B)	CLO 4