

Mid-West University  
Examinations Management Office  
Surkhet, Nepal  
Chance Examination-2082  
Master of Business Studies (MBS)  
Semester - III

Subject: Operations Management

Course Code: MGMT532

Full Marks: 60 Pass Marks: 30

Time: 3: 00 Hours

*You are required to answer in your own words as far as applicable. Figures in the margins indicate full marks.*

**SECTION A: CRITICAL THINKING QUESTIONS (10 X 1 = 10 MARKS)**

Answer **ALL** the questions:

1. What do you mean by transformation process?
2. Enlist the functions of operations management.
3. Write any two differences between intermittent production system and continuous production system.
4. Enlist the process of product development.
5. What is design for manufacturability?
6. Enlist the four considerations of aggregate production planning.
7. Write the meaning of job enrichment.
8. What do you mean by lean management?
9. Why is inventory called a necessary evil?
10. What is ISO 9000?

**SECTION B: SHORT ANSWER QUESTIONS (3 X 8 = 24 MARKS)**

Answer any **THREE** questions:

11. What is operations strategy? Outline the process of operations strategy formulation. [2+6]
12. What do you mean by work measurement? Explain the techniques of work measurement. [2+6]
13. A manufacturing company produces 60,000 units of a product annually. The cost to produce each unit is Rs. 10. The setup cost for each production run is Rs. 180, and the carrying cost of finished goods is 20% of the unit cost per year. The company operates on a production schedule of 600 units per day, while customer demand is 150 units per day. Assuming there are 250 working days in a year, calculate:
  - a. The optimal production lot size [4]
  - b. The number of production runs per year [2]
  - c. The length of each production cycle in days [2]
14. What do you mean by total quality management? Explain the obstacles that organizations might face in successfully implementing total quality management. [2+6]
15. Write short note (Any two): [4×2]
  - a. Concurrent engineering
  - b. Facility layout
  - c. Capacity planning

**SECTION C: LONG ANSWER QUESTIONS (2 X 13 = 26 MARKS)**

Answer any **TWO** questions:

16. What do you mean by operations management? Discuss the emerging trends in operations management. [3+10]
17. Why is choosing the right location for a new factory vital? Discuss the various factors that a company should evaluate when choosing a site for a new factory. [3+10]

18. A food processing company monitors the weight (in grams) of biscuit packets produced every hour. Each sample contains six packets, and the data for six consecutive samples are as follows:

Sample	1	2	3	4	5	6
1	205	210	208	200	207	212
2	208	204	206	209	202	215
3	207	210	205	208	212	220
4	203	208	206	204	209	218
5	209	207	206	210	200	198
6	198	198	198	198	198	198

- a. Construct the  $\bar{X}$  (mean) control chart and assess whether the process is in control. [7]  
b. Construct the R (range) control chart and evaluate the stability of the process. [6]  
[ $A_2 = 0.483$ ,  $D_3 = 0$ ,  $D_4 = 2.004$ ]

**THE END**