Time: Three hours

Maximum: 75 marks

SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer any TEN questions.

- 1. Define the term 'Product Design'.
- 2. What is the object of location analysis?
- 3. State the information required to do process planning.
- 4. What are the types of plant layout?
- 5. What is the difference between product layout and process layout?
- 6. What are inventory models?
- 7. How would you determine Economic Order Quantity?
- B. Define Material Requirement Planning.
- 9. What is work sampling?
- 10. What is control chart?
- 11. Write a short note on Service Encounter.
- 12. Mention the different types of services.

SECTION B — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

- 13. Define the concept and importance of plant location.
- 14. Explain the principles of a good layout.
- 15. Describe the general procedure for implementing ABC techniques.
- 16. Define Method Study and state its objectives.
- 17. Explain the benefits of statistical quality control.
- 18. Explain the techniques of work measurement.
- 19. Write a short note on:
 - (a) Service process
 - (b) Service delivery.

SECTION C —
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 20. What is process planning? Explain the procedure of designing a manufacturing process.
- 21. State the factors which should be kept in mind while deciding upon a suitable type of plant layout.

- 22. What purpose does safety shock serve? What are some of the benefits and cost associated with safety shock?
- 23. Describe the procedure for conducting time study.
- 24. What do you understand by acceptance sampling? Explain in detail the fundamentals of inspection.