Production and Operations Management (DSC 13)

Module No.1: Introduction to Production and Operations Management
1. Define the concept of Production and Operations Management (Knowledge)
2. Differentiate between Production and Operations Management (Comprehension)
3. Analyze the scope of Production Management (Analysis)
4. Identify the types of Production Systems (Comprehension)
5. Evaluate the benefits of Production Management (Evaluation)
6. Describe the responsibilities of a Production Manager (Knowledge)
7. Discuss the key decisions involved in Production Management (Comprehension)

Module No. 2: Plant Location and Layout
1. Define the factors affecting plant location (Knowledge)
2. Explain the cost factors in plant location decisions (Comprehension)
3. Apply plant layout principles to optimize space requirements (Application)
4. Differentiate between various types of facilities and their organizational layout (Analysis)
5. Analyze the importance of building, sanitation, lighting, air conditioning, and safety in plant layout (Analysis)

Module No.3: Production Planning and Control
1. Define Production Planning and Control and its characteristics (Knowledge)
2. Identify the objectives of Production Planning and Control (Comprehension)
3. Describe the stages and scope of Production Planning & Control (Comprehension)
4. Analyze the factors influencing Production Planning and Control (Analysis)
5. Evaluate the role of Production Planning and Control in the manufacturing industry (Evaluation)

Module No. 4: Inventory Management
1. Define Inventory Management and its concepts (Knowledge)
2. Classify inventory and identify its objectives (Comprehension)
3. Analyze the factors affecting Inventory Control Policy (Analysis)
4. Evaluate inventory management systems and scientific techniques (Evaluation)
5. Apply EOQ Model, Re-order Level, ABC Analysis, VED, and FSN techniques (Application)
6. Discuss Quality Management concepts and tools such as Control Charts and acceptance sampling (Comprehension)

Module 5: Maintenance and Waste Management
1. Define maintenance and its objectives (Knowledge)
2. Classify types of maintenance and discuss spares planning and control (Comprehension)
3. Evaluate the advantages of preventive routine maintenance (Evaluation)
4. Analyze maintenance scheduling and equipment reliability (Analysis)
5. Discuss modern scientific maintenance methods and waste management strategies (Comprehension)