

## **FAQ (Manufacturing Systems)**

### **Introduction**

1. Explain role of computers in manufacturing and manufacturing systems.
2. Explain product life cycle and its importance.
3. Explain technology life cycle.

### **Group Technology And Cellular Layout**

1. Define Group Technology and explain its need , scope and benefits.
2. Explain GT layout and compare it with conventional layout.
3. Explain concept of Part Family.
4. Explain types of GT coding system and method of coding.
5. Explain steps of cell design and cell layout.

### **Flexible manufacturing system**

1. Explain FMS and various elements of FMS and also explain function of each element.
2. What is AGV. Explain various types of it with functions.
3. Explain AS/RS and its components.
4. Explain different types of FMS layouts with their features and application.

### **Robotics**

1. Define Robot and explain its concept. Also give its benefits and applications.
2. Explain various types of Robots.
3. Explain various types of configurations of Robot.
4. Explain working principle of sensors and give brief classification of sensors.
5. Explain various methods and languages of Robot Programming.

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**DEPARTMENT OF DIPLOMA MECHANICAL ENGINEERING**

**Programmable logic controller and micro controllers**

1. Explain open and close loop control system with block diagram.
2. Explain various digital logic gates with their symbol , operation and truth table.
3. Explain PLC with its applications in manufacturing systems.
4. Explain various micro controllers and their application.

**Recent Trend**

1. Explain computer aided process planning (CAPP).
2. Explain computer integrated manufacturing (CIM) with block diagram.
3. Explain computer aided inspection (CAI).
4. Explain Lean manufacturing.
5. Explain coordinate measuring machine (CMM) with working and applications.