Unit - 4
Question bank

2-Mark Questions:

1. What is automatic identification?
2. What are the advantages of using automatic identification techniques?
3. What is a barcode?
4. What is the difference between 1D and 2D barcodes?
5. What is RFID?
6. What is the role of automated data collection systems in manufacturing?
7. What is the difference between agile and flexible manufacturing?
8. What is an enterprise integration system?
9. What is a factory information system (FIS)?
10. What are the challenges associated with implementing automatic identification techniques?

16-Mark Questions:

1. Discuss the various automatic identification methods used in manufacturing. Explain the advantages and disadvantages of each.
2. Explain the principles and applications of barcode technology in manufacturing. Discuss the different types of barcodes and their uses.
3. Explain the working principle of RFID systems. Discuss the different types of RFID tags and their applications in manufacturing.
4. How can automated data collection systems be used to improve efficiency and productivity in manufacturing?
5. Explain the concepts of agile and flexible manufacturing. How do automatic identification techniques support these manufacturing paradigms?
6. Discuss the role of enterprise integration systems and factory information systems in enabling automatic identification and data collection.
7. How can automatic identification techniques be used to improve inventory management and supply chain visibility?
8. What are the challenges associated with implementing and maintaining automatic identification systems?
9. Discuss the future trends in automatic identification technology, such as near-field communication (NFC) and image recognition.
10. How can automatic identification techniques be used to improve product traceability and quality control?