WORK SHEET
UNIT-V

1. FMS stands for:
   A) Flexible Manufacturing System
   B) Fast Manufacturing System
   C) Functional Manufacturing Setup
   D) Flexible Machine Setup

Answer: A) Flexible Manufacturing System

2. The main objective of an FMS is:
   A) Reduce flexibility
   B) Increase production flexibility and efficiency
   C) Eliminate automation
   D) Increase manual work

Answer: B) Increase production flexibility and efficiency

3. Which of the following is an important component of an FMS?
   A) CNC machines
   B) Material handling systems
   C) Computer control systems
   D) All of the above

Answer: D) All of the above

4. An FMS layout refers to:
   A) Product design
   B) Arrangement of machines and workstations
   C) Inventory management
   D) Quality standards

Answer: B) Arrangement of machines and workstations

5. One major benefit of FMS is:
   A) Increased setup time
   B) Reduced flexibility
   C) Higher productivity
   D) More manual operations

Answer: C) Higher productivity

6. Computer Aided Quality Control mainly focuses on:
   A) Product inspection and quality assurance
   B) Product marketing

WORK SHEET

C) Material purchasing
D) Packaging operations

Answer: A) Product inspection and quality assurance

7. Off-line inspection is performed:
   A) During machining
   B) After removing the part from the machine
   C) Before production only
   D) During packaging only

Answer: B) After removing the part from the machine

8. On-line inspection is carried out:
   A) During the manufacturing process
   B) After product delivery
   C) During storage
   D) Before design

Answer: A) During the manufacturing process

9. Which inspection method requires physical contact with the workpiece?
   A) Laser inspection
   B) Optical inspection
   C) Contact inspection
   D) Machine vision inspection

Answer: C) Contact inspection

10. Which is an example of a non-contact inspection method?
    A) Probe measurement
    B) Vernier caliper
    C) Optical scanning
    D) Micrometer measurement

Answer: C) Optical scanning

11. CMM stands for:
    A) Computer Measurement Machine
    B) Coordinate Measuring Machine
    C) Central Measuring Method
    D) Coordinate Manufacturing Machine

Answer: B) Coordinate Measuring Machine

WORK SHEET

12. A Coordinate Measuring Machine is used for:
    A) Material handling
    B) Dimensional measurement of components
    C) Product assembly
    D) Inventory control

Answer: B) Dimensional measurement of components

13. Machine vision systems primarily use:
    A) Cameras and image processing
    B) Cutting tools
    C) Conveyors
    D) Sensors only for temperature

Answer: A) Cameras and image processing

14. CIM stands for:
    A) Computer Integrated Manufacturing
    B) Computerized Industrial Management
    C) Central Integrated Manufacturing
    D) Computerized Inspection Method

Answer: A) Computer Integrated Manufacturing

15. One major benefit of CIM is:
    A) Increased paperwork
    B) Improved integration of manufacturing activities
    C) Reduced automation
    D) Higher production delays

Answer: B) Improved integration of manufacturing activities

Fill in the Blanks

1. FMS stands for Flexible Manufacturing _____.
   Answer: System
2. FMS combines machines, computers, and material _____ systems.
   Answer: Handling
3. One major benefit of FMS is increased production _____.
   Answer: Flexibility
4. Inspection performed after machining is called _____ inspection.
   Answer: Off-line
5. Inspection carried out during production is called _____ inspection.
   Answer: On-line

WORK SHEET

6. Physical contact with the workpiece is required in _____ inspection.
   Answer: Contact
7. CMM stands for Coordinate Measuring _____.
   Answer: Machine
8. Machine vision uses cameras and image _____ techniques.
   Answer: Processing
9. CIM stands for Computer Integrated _____.
   Answer: Manufacturing
10. A key benefit of CIM is better _____ of manufacturing functions.
    Answer: Integration

Fill in the Blanks:

1. System
2. Handling
3. Flexibility
4. Off-line
5. On-line
6. Contact
7. Machine
8. Processing
9. Manufacturing
10. Integration