Question Bank

Advance Manufacturing Process

(6th Sem)

By Bhrugupati Hansda

Chapter 1.0 Modern Machining Processes

02/03 Marks Questions

1. Define USM and write it's two uses.
2. Define EDM and write it's two uses.
3. Define wire cut EDM and write it's two uses.
4. Define AJM and write it's two uses.
5. Define LBM and write it's two uses.
6. Define EBM and write it's two uses.
7. Define PAM and write it's two uses.
8. Define ECM and write it's two uses.
9. Write principle & process parameters USM.
10. Write principle & process parameters EDM.
11. Write principle & process parameters wire cut EDM.
12. Write principle & process parameters AJM.
13. Write principle & process parameters LBM.
14. Write principle & process parameters EBM.
15. Write principle & process parameters PAM.
16. Write principle & process parameters ECM.
17. Differentiate between traditional mfg. process & advance manufacturing process.

05/10 Marks Questions

1. Write principle, description of equipment and applications of USM.
2. Write principle, Description of equipment, Dielectric fluid, tools (electrodes), Process parameters, Output characteristics, applications of EDM.
3. Write Principle, Description of equipment, controlling parameters; applications of wire cut EDM.
4. Write principle, description of equipment, Material removal rate, application of AJM.
5. Write principle, description of equipment, Material removal rate, application of LBM.
6. Write principle, description of equipment, Material removal rate, application of ECM.
7. Write principle, description of equipment, Material removal rate, Process parameters, performance characterization, Applications of PAM.
8. Write principle, description of equipment, Material removal rate, Process parameters, performance characterization, Applications of EBM.

Chapter 2.0 Plastic Processing

02/03 Marks Questions

1. Define plastics.
2. What do you understand by processing of plastics?
3. State different types of moulding processes.
4. Define injection moulding.
5. Define compression moulding.
6. Define transfer moulding.
7. Define extruding.
8. Define casting.
9. Define calendaring.
10. State different plastic fabrication methods.
11. What is sheet forming.
12. What is blow moulding.
13. What is laminating plastics.
14. What is reinforcing.

05/10 Marks Questions

1. Write different application of plastics.
2. State different plastic fabrication methods and explain them.
3. State different plastic extruding methods and explain them.
4. State different plastic moulding methods and explain them.

Chapter 3.0 Additive Manufacturing Process

02/03 Marks Questions

1. Define additive manufacturing process.
2. What is the need for additive manufacturing?
3. Explain fundamental of additive manufacturing.
4. Explain AM process chain.
5. Write 02 advantages and limitations of AM process.
6. Write Distinction between AM and CNC
7. Classify AM process.
8. Define Web Based Rapid Prototyping Systems
9. Define Flexible manufacturing process.
10. Define concurrent engineering.

05/10 Marks Questions

1. Write advantages and limitations of AM process.
2. Write various applications of AM process.
3. Explain Web Based Rapid Prototyping Systems.
4. Explain Concept of Flexible manufacturing process, concurrent engineering,
5. Explain production tools like capstan and turret lathes and rapid prototyping processes.

Chapter 4.0 Special Purpose Machines (SPM)

02/03 Marks Questions

1. Define Special purpose machines.
2. What is the concept of SPM.

05/10 Marks Questions

1. How Productivity improvement by SPM is done? Explain.
2. What are the principles of SPM.
3. What are the guidelines for a machine design engineer to proceed with design.

Chapter 5.0 Maintenance of Machine Tools

02/03 Marks Questions

1. Define reactive maintenance.
2. Define Run to fail maintenance.
3. Define Routine maintenance
4. Define Corrective maintenance.
5. Define Preventive maintenance.
6. Define Condition-based maintenance.
7. Define Predictive maintenance.
8. Define Prescriptive maintenance.
9. What is repair cycle analysis?
10. What is maintenance manual?
11. What are 08 pillars of TPM?

05/10 Marks Questions

1. What are the different types of machine maintenance.
2. What are the components of maintenance manual.
3. Why keeping maintenance record is important? Explain.
4. Define TPM. What are the 5-S of Total Productive Maintenance (TPM).