

**Questions**

- 1) Justify the need for FMS in today's competitive environment.
- 2) Differentiate between flexible manufacturing cell and flexible manufacturing system.
- 3) XYZ manufacturing company management wants to change its single machine cell having CNC machining center into unattended machining cell or FMS. Provide necessary suggestions to the company management to fulfill this requirement.
- 4) Explain the general layout used, benefits and limitation of FMS.
- 5) What types of flexibilities are offered by flexible manufacturing systems? Explain in brief the way in which any of these flexibilities can be achieved.
- 6) Explain the various roles of computers in manufacturing.
- 7) Differentiate the role of humans and computers in various stages of engineering design process.
- 8) Describe how the use of computers improves the productivity of process planner.
- 9) ABC manufacturing company has been working with traditional manual - experienced process planning system for the last 15 years. Suppose you get a chance to work in the company and asked to introduce a CAPP system; respond the followings:
  - a) What are the expected challenges associated with the current traditional manual process planning system?
  - b) How do you convince the workers and managers of the company to fully implement the new CAPP system?
  - c) Describe the benefits that can be achieved by implementing the new computerized PP system.