

**Flexible Manufacturing Systems, Automation in  
Manufacturing (MIEG 6452)  
M.Sc in Mechanical Engineering (Manufacturing Engineering)  
Year: I      Sem: II**

**Assignment: #01**

**Questions**

- 1) Justify the need to FMS in today's competitive manufacturing 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 in to unattended machining cell or FMS. Give necessary suggestions to the company management to fulfill this requirement. Also give beneficial reasons of unattended machining or FMS.
- 4) Explain the general layout, benefits and limitation of FMS.
- 5) Differentiate: Traditional stand alone NC machine tool and flexible manufacturing cell (FMC).
- 6) What types of flexibilities are offered by flexible manufacturing systems? Explain in brief the strategies in which any of these flexibilities can be achieved.
- 7) Enlist & explain all the physical components of FMS.