VELAMMAL INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
Anna University Exams Nov / Dec 2017 – Regulation 2013
ME6703 Computer Integrated Manufacturing Systems –Part A questions

UNIT-I

1.	**Define** manufacturing metrics.	02M	Remember	(CO1)
2.	**Define** Concurrent Engineering.	02M	Remember	(CO1)
3.	**Where** is Manufacturing Control applied?	02M	Remember	(CO1)
4.	**Define** the production Performance	02M	Remember	(CO1)
5.	**Define** Manufacturing Planning	02M	Remember	(CO1)
6.	**Name** the relationship between CAD and CAM?	02M	Remember	(CO1)
7.	**What** are the concepts of CIM.	02M	Remember	(CO1)
8.	**What** are the elements of CIM system.	02M	Remember	(CO1)
9.	**List** the types of production.	02M	Remember	(CO1)
10	**Define** manufacturing models.	02M	Remember	(CO1)
11.	**Define** manufacturing metrics.	02M	Remember	(CO1)
12	**Define** mathematical Models.	02M	Remember	(CO1)
13	**What** are the basic elements of automated system.	02M	Remember	(CO1)
14	**List** the levels of automation.	02M	Remember	(CO1)

UNIT-II

1.	**What** are the of inputs data to MRP and outputs of MRP?	02M	Remember	(CO2)
2.	**What** are important function of PPC?	02M	Remember	(CO2)
3.	**What** are the basic approaches of CAPP?	02M	Remember	(CO2)
4.	**Classify** the functions of shop floor control?	02M	Understand	(CO2)
5.	**what** is meant by process planning?	02M	Remember	(CO2)
6.	**List** the activates associated with process planning.	02M	Remember	(CO2)
7.	**Name** any two advantages of CAPP.	02M	Remember	(CO2)
8.	**what** is master production schedule (MPS)?	02M	Remember	(CO2)
9.	**List** out the important function of PPC?	02M	Remember	(CO2)
10	**Define** aggregate production planning?	02M	Remember	(CO2)
11.	**Define** MRP and capacity planning.	02M	Remember	(CO2)
12	**List** the benefits of MRP.	02M	Remember	(CO2)
13	**Name** the of inputs data to MRP and outputs of MRP.	02M	Remember	(CO2)
14	**Define** enterprise resource planning (ERP)?	02M	Remember	(CO2)

UNIT-III

1.	**Classify** the steps involved in production flow analysis.	02M	Understand	(CO3)
2.	**List** factors to be considered in selection of coding systems.	02M	Remember	(CO3)
3.	**what** are the limitations for implementation cellular manufacturing?	02M	Remember	(CO3)
4.	**List** the steps in ROC algorithm.	02M	Remember	(CO3)
5.	**List** the roles of group technology in CAD/CAM integration?	02M	Remember	(CO3)
6.	**what** do you understand concept of part family?	02M	Remember	(CO3)
7.	**List** components of GT.	02M	Remember	(CO3)
8.	**What** are the steps involved in production flow analysis.	02M	Remember	(CO3)
9.	**List** the three basic code structure used in GT application.	02M	Remember	(CO3)
10	**List** the factors to be considered in selection of coding systems.	02M	Remember	(CO3)
11.	**What** is a MICLASS system	02M	Understand	(CO3)
12	**What** do you understand concept of DCLASS?	02M	Remember	(CO3)
13	**What** do you understand concept of Opitz classification system?	02M	Remember	(CO3)
14	**What** are the limitations for implementation cellular manufacturing?	02M	Remember	(CO3)

UNIT-IV

1.	**What** are the functions performed to operate AGVS?	02M	Remember	(CO4)
2.	**What** are the applications of AGVS?	02M	Remember	(CO4)
3.	**How** an AGV will differ with Robot?	02M	Remember	(CO4)
4.	**Classify** the factors should be considered in selection of AGV?	02M	Understand	(CO4)
5.	**Define** flexible manufacturing system.	02M	Remember	(CO4)
6.	**Name** any four functions of the material handling systems in a FMS	02M	Remember	(CO4)

7.	**Name** the different types of layout configuration prevalent in FMSs	02M	Remember	(CO4)
8.	**List** types of material handling equipment that is commonly employed in FMS.	02M	Remember	(CO4)
9.	**How** FMS classified does based on number of machines?	02M	Remember	(CO4)
10	**List** out the FMS layout configurations.	02M	Remember	(CO4)
11.	**Classify** different types of data files required for a FMS.	02M	Understand	(CO4)
12	**What** are the application of FMS.	02M	Remember	(CO4)
13	**How** FMS classified does based on level of flexibility?	02M	Remember	(CO4)
14	**What** are AGVs? How do they operate?	02M	Remember	(CO4)

UNIT-V

1.	**Define** robot control system.	02M	Remember	(CO5)
2.	**Classify** the various joint types in robot.	02M	Understand	(CO5)
3.	**what** is repeatability of robot?	02M	Remember	(CO5)
4.	**what** is meant by resolution?	02M	Remember	(CO5)
5.	**What** are the commonly used robot configuration system.	02M	Remember	(CO5)
6.	**what** is meant by yaw, pitch, and accuracy?	02M	Remember	(CO5)
7.	**List** the types of path control.	02M	Remember	(CO5)
8.	**what** is end effector? Give some examples.	02M	Remember	(CO5)
9.	**what** are the methods of robot programming?	02M	Remember	(CO5)
10	**What** is a robot?	02M	Remember	(CO5)
11.	**List** the main functions of robot.	02M	Remember	(CO5)
12	**List** out the objective of using industrial robot.	02M	Remember	(CO5)
13	**Define** what is meant by robot anatomy?	02M	Remember	(CO5)
14	**What** is meant by degrees of freedom?	02M	Remember	(CO5)