GIET UNIVERSITY, GUNUPUR – 765022

M. Tech. (Third Semester) Examinations, December – 2022

MPEMT3023 – Flexible Manufacturing Systems

(Manufacturing Technology)

Time: 3 hrs   Maximum: 70 Marks

(The figures in the right hand margin indicate marks.)

PART – A   **(2 x 10 = 20 Marks)**

Q1. Answer all questions

		CO#	Blooms Level
a.	What is the importance of databases in FMS?	CO1	K2
b.	What are the components of FMS?	CO2	K2
c.	What is a machining center explain its features?	CO2	K2
d.	What are the three most common machining processes?	CO3	K2
e.	Which type of conveyor system is used for bulk material handling?	CO3	K2
f.	What do you mean by material handling system?	CO3	K2
g.	What is AGV and mention its types?	CO4	K2
h.	What is FMS scheduling?	CO4	K2
i.	Write various aspects of scheduling in FMS.	CO4	K3
j.	What are the 4 methods of production?	CO4	K2

PART – B   **(10 x 5 = 50 Marks)**

Answer *ANY FIVE* questions

		Marks	CO#	Blooms Level
2. a.	Explain various functions of computers in FMS?	8	CO2	K3
b.	Write few examples of flexible manufacturing system.	2	CO2	K2
3. a.	List the applications of FMSs.	5	CO2	K2
b.	Write the various advantages and disadvantages of FMS.	5	CO2	K2
4. a.	Explain the salient features of processing stations.	7	CO3	K3
b.	What is machining center used for?	3	CO3	K2
5. a.	Explain the working principle of AGV system in industry.	7	CO3	K3
b.	Write the advantages of AGV.	3	CO3	K2
6. a.	Write the function of tool magazine.	5	CO4	K2
b.	What are the main parts of a magazine?	5	CO4	K2
7. a.	Describe the working principle of Coordinate measuring machine (CMM)	8	CO4	K3
b.	Write four advantages of CMM machine .	2	CO4	K2
8. a	Shortly explain about various steps in production planning and control?	5	CO4	K4
b.	Write the major problems in production planning and control?	5	CO4	K4

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