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GIET UNIVERSITY, GUNUPUR - 765022
M. Tech. (Third Semester) Examinations, December - 2023
MPENT3023 - 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. Briefly explain the importance of layout in FMS.	CO2	K2
b. What are the Objectives of FMS?	CO2	K2
c. List any two advantages and disadvantages of FMS implementation.	CO2	K2
d. What is the main feature of machining centers?	CO3	K2
e. What is the importance of machining process?	CO3	K2
f. What are the types of material conveyor system?	CO3	K2
g. What do you mean by material handling system?	CO3	K2
h. What are the common types of tool magazines?	CO4	K2
i. For what purpose CMM is used in industry?	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 FMS layout configurations with diagram.	7	CO2	K3
b. List out various limitations of FMS.	3	CO2	K2
3.a. Describe various benefits of FMS.	7	CO2	K2
b. What is the process of deburring?	3	CO2	K3
4. a. Explain the salient features of processing stations.	7	CO3	K3
b. What is a machining center used for?	3	CO3	K2
5.a. Describe the working principle of Coordinate measuring machine (CMM)	8	CO3	K3
b. Write four advantages of CMM machine.	2	CO3	K2
6. a. Describe the type of conveyor system used for bulk material handling.	7	CO4	K2
b. Write the advantages of AGV.	3	CO4	K3
7.a. Explain various types of tool magazines.	5	CO4	K3
b. Write the main parts of a magazine.	5	CO4	K3
8.a. Write the major problems in production planning and control?	5	CO4	K4
b. Shortly explain about various steps in production planning and control?	5	CO4	K4

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