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B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

February / March 2023 Semester End Main Examinations

Programme: B.E.

Semester: V

Branch: Mechanical Engineering

Duration: 3 hrs.

Course Code: 20ME5DEFMS

Max Marks: 100

Course: Flexible Manufacturing Systems

Date: 07.03.2023

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may suitably be assumed.

UNIT - I

1	a) Describe the types of FMS layouts.	10
	b) List the advantages and disadvantages of FMS implementation.	10

UNIT - II

2	a) Explain the steps in going from CAD to CAM to FMS ready data.	10
	b) Describe the classification of flexible manufacturing cell.	10

UNIT - III

3	a) Elaborate the benefits of group technology affecting many areas of a company.	10
	b) List the primary quantity of JIT principles and list the benefits of JIT.	10

UNIT - IV

4	a) Describe the retravel CAPP system with flow chart.	10
	b) List the MRP outputs and benefits.	10

OR

5	a) Describe the CMM construction.	10
	b) Elaborate CMM application.	10

UNIT - V

6	a) Describe the types of AGV's.	10
	b) Elaborate the basic components of a robotic system with flow chart.	10

OR

7	a) Describe the tool strategies.	10
	b) Elaborate the identification system.	10

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.
