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

Autonomous Institute Affiliated to VTU

May 2023 Semester End Main Examinations

Programme: B.E.

Branch: Aerospace Engineering

Course Code: 22AS3PCMNT

Course: Manufacturing Technology

Semester: III

Duration: 3 hrs.

Max Marks: 100

Date: 19.05.2023

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

UNIT - I

1	a) Describe the types of manufacturing process.	6
	b) Illustrate about pattern allowances with appropriate sketches.	8
	c) Illustrate about the casting defects with remedies.	6

UNIT - II

2	a) Describe with a neat sketch hot rolling process.	10
	b) Differentiate between hot rolling & cold rolling process & also list the advantage & disadvantage of cold rolling process.	10

OR

3	a) With a neat sketch illustrate the stretch forming process.	10
	b) Explain the principle & working of diffusion welding along with its advantages.	10

UNIT - III

4	a) Illustrate the nomenclature of single point cutting tool with a neat sketch.	7
	b) Explain about orthogonal cutting & oblique cutting with appropriate sketches.	7
	c) Outline the types of cutting fluids.	6

OR

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.

5 a) Explain with a neat sketch ultrasonic machining process & also list its **10** disadvantages.

b) Illustrate with a neat sketch plasma arc machining process & state its **10** advantages.

UNIT - IV

6 a) Explain the principle of CNC machine along with its application & advantages. **10**

b) With a neat sketch explain direct material deposition technique. **10**

UNIT - V

7 a) Describe the gear manufacturing process by powder metallurgy process. **10**

b) Illustrate about gear manufacturing process with a neat diagram. **10**
