Register No	Register No.:	
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# 921

## April 2023

#### Time - Three hours (Maximum Marks: 100)

- N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
  - Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.

#### PART - A

- Define the term CAD and list CAD activities.
- List out the solid modeling entities.
- 3. Write about the CODE system of coding structure.
- Define MPS.
- Write the code for thread cutting.
- Define virtual machining.
- List out the types of FMS.
- Ust the industrial applications of robots.
- What is the basic concept of augmented reality?
- 10. What are the benefits of concurrent engineering?

Turn over....

### PART - B

(a) Explain 2D and 3D transformations.

(Or)

- (b) Discuss about the three types geometric modeling techniques.
- 12. (a) Draw the CIM wheel and explain its components.

(Or)

- (b) Discuss about the two types of CAPP in detail.
- (a) (i) Explain the rectangular pocketing operation with suitable examples.(7marks)
  - (ii) Explain the peck drilling program with suitable examples. (7 marks)

(Or)

- (b) Discuss about rapid proto typing.
- (a) Explain the basic robot motion with neat sketches.

(Or)

- (b) Explain any two types of AGVs with neat sketches.
- 15. (a) Explain the process of Design for Manufacture and assembly.

(Or)

(b) Discuss about quality function deployment.