

Register No.:

320

April 2024

Time - Three hours
(Maximum Marks: 100)

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

PART - A

1. List the benefits of CIM.
2. Write about basic steps in FEM.
3. Write short notes on group technology.
4. What are the benefits of JIT?
5. Distinguish between NC and CNC machine.
6. Classify the types of slideways used in CNC machine
7. What is meant by tool offsets?
8. What is meant by pocketing?
9. List out the different types of AGV.
10. What is internet of things (IOT)?

[Turn over.....

PART – B

11. (a) Explain 2D transformations with neat sketch and example.
(Or)
(b) Explain the following:
(i) Boundary representation. (7)
(ii) Constructive solid geometry. (7)
12. (a) Explain generative type of CAPP with neat sketch.
(Or)
(b) Explain the stereo lithography method of rapid prototyping with a neat sketch.
13. (a) Explain the construction and working principle of turning centre with a neat sketch.
(Or)
(b) Explain the construction and working principle of coordinate measuring machine with a neat sketch.
14. (a) Explain the part program using canned cycle for the thread cutting operation.
(Or)
(b) Explain the following methods with an example: (5+5+4)
(i) Point to point control.
(ii) Paraxial(straight line method).
(iii) Contouring.
15. (a) Explain the following:
(i) Flexible manufacturing cell.
(ii) Flexible transfer line.
(Or)
(b) Explain about Automatic Storage and Retrieval System (ASRS) with neat diagram.
