

Register No.:

553

October 2023

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. Define wireframe modelling and surface modelling.
2. Define GKS.
3. What are the advantages of CAPP?
4. What is Computer Integrated Production Management system?
5. List the CNC programming procedure.
6. Write about incremental dimensioning method.
7. Draw the FMS layout with its components.
8. List out the benefits of AS/RS.
9. Write about quality function deployment.
10. What is augmented reality?

[Turn over.....

PART - B

11. (a) (i) Explain the procedure for point plotting. (6 marks)  
(ii) Explain the procedure for drawing lines. (8 marks)
- (Or)
- (b) (i) Discuss about the 3D transformations. (8 marks)  
(ii) Explain the DXF graphic standard format. (6 marks)
12. (a) (i) Discuss about the Capacity Planning. (7 marks)  
(ii) Explain the Master Production Control. (7 marks)
- (Or)
- (b) (i) Explain the Opitz system of coding. (8 marks)  
(ii) Discuss about Master Production Schedule. (6 marks)
13. (a) (i) Explain the thread cutting code with suitable examples. (7 marks)  
(ii) Explain the peck drilling code with suitable examples. (7 marks)
- (Or)
- (b) Explain the part program using canned cycles for the stock removal process.
14. (a) Discuss about Intelligent manufacturing system.
- (Or)
- (b) Discuss about the robot application in (i) welding and (ii) material transfer.
15. (a) (i) Explain the steps in failure modes and effects analysis. (7 marks)  
(ii) Explain the concept of house of quality. (7 marks)
- (Or)
- (b) (i) Explain the different types of values used in value engineering. (7 marks)  
(ii) Discuss about the new product development process. (7 marks)

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