

# MODEL QUESTION PAPER - I

Time - Three hours

(Maximum Marks: 100)

- [N.B:- (i) Answer all the TEN questions in PART - A. Each question carries THREE marks.
- (ii) Answer either division (a) or division (b) of each question in PART - B. Each question carries FOURTEEN marks.

## PART - A (10 x 3 = 30 Marks)

1. List the applications of surface modeling.
2. What is meant by integrated CAD/CAM.
3. List the objectives of JIT.
4. What is part family? What are the method of forming part family?
5. What is interpolation? List the different type of interpolation.
6. Name three M-codes and their function.
7. List the components of FMS.
8. List the robot programming method.
9. List the types of values in value engineering.
10. List the advantages of FEM.

## PART - B (15 x 4 = 70)

11. (a) Explain shigley's design process.  
(Or)  
(b) Explain in details about IGES methodology.

M.Q 2

12. (a) What is meant by CAPP? Explain any one CAPP in details.

(Or)

- (b) Explain following system.  
(i) Opitz classification and coding system  
(ii) CODE system.

13. (a) Assume suitable component and write the part program to perform turning and thread cutting in CNC lathe.

(Or)

- (b) What is meant by rapid prototyping? How they are classified? Write their advantages and applications.

14. (a) Discuss in detail about different types of AGV's.

(Or)

- (b) List the different applications of robot. Explain any one in details.

15. (a) Discuss in details about design for manufacture and assembly guidelines.

(Or)

- (b) Discuss in details about FMEA.