275 Register No.: [ ]

April 2018

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B

(2) Answer division (a) or division (b) of each question in PART – C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and 10 marks in PART – C.]

PART – A

1. What are the types of CAD system?
2. Define IGES standard.
3. What are the benefits of CAM?
4. Define part families.
5. What is three dimensional printing?
6. Write the concept of CIM.
7. Define AGV.
8. What is value engineering?

PART – B

9. List out FEA advantages.
10. Write short notes on JIT.
11. Describe material requirement planning.
12. What is meant by peck drilling? Give an example.
13. What is FDM?
14. Write short notes on FTC.
15. What are the types of robot sensors?
16. Describe product life cycle.

[Turn over.....

PART – C

17. (a) Briefly explain 2D and 3D transformations.

(Or)

(b) Explain solid modelling techniques.

18. (a) Explain about part classification and coding system.

(Or)

(b) Briefly explain shop floor control system.

19. (a) Explain stereo lithography.

(Or)

(b) Explain canned cycle programming used in thread cutting.

20. (a) Explain AGV working principle.

(Or)

(b) Explain various robot configurations.

21. (a) Explain FMEA steps.

(Or)

(b) Explain AR concept and list out the applications of AR.
