478 Register No.:

October 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. Define CAD.
2. What is capacity planning?
3. What is canned cycles?
4. What are the benefits of FMS?
5. What is a robotic sensor?
6. What is concurrent engineering?
7. State the advantages of DFMA.
8. What are the benefits of graphic standards?

PART – B

9. What are the advantages of solid modelling?
10. What is finite element analysis?
11. What is JIT?
12. What are the applications of rapid prototyping?
13. What is intelligent manufacturing system?
14. Describe about vacuum grippers.
15. What is the concept of AR?
16. Write about the methods of NC dimensioning with examples.

[Turn over.....

PART – C

17. (a) Explain the activities of CAD.

(Or)

(b) Explain the IGES graphic standard.

18. (a) Explain the generative type of CAPP.

(Or)

(b) Explain the structure of MRP system.

19. (a) Explain stock removal canned cycle with an example.

(Or)

(b) Explain the 3D printing used is RPT.

20. (a) Explain the FMS components in detail.

(Or)

(b) Write briefly about the assembly and inspection of robot.

21. (a) Explain the concept of product development cycle.

(Or)

(b) Explain the guidelines for DFMA.
