275	Register No.:	
		·

# April 2018

#### <u>Time - Three hours</u> (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?
- 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

- 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?
- Write short notes on FTC.
- 15. What are the types of robot sensors?
- 16. Describe product life cycle.

[Turn over.....

185/583-1

## 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 c. .cept and list out the applications of AR.

----