Computer Aided Manufacturing (2171903)

Assignment-2

- 1. Why is part classification and coding required in GT. Explain OPTIZ system of coding.
- 2. What is Production Flow Analysis in GT? Explain with suitable example.
- 3. Explain the variant type CAPP system. State the benefits and limitations of variant type CAPP systems.
- 4. Write short note on Automatic Storage and Retrieval Systems and their applications areas in FMS.
- 5. What is Automated Guided Vehicles? Explain different types of AGVs with their advantages and limitations.
- 6. What are the different types of drives used in robots?
- 7. What is FMS? Explain the basic components of FMS.
- 8. Explain with neat sketch the various types of layouts used in FMS design and their applications.
- 9. Differentiate between a SCARA and a gantry robot.
- 10. Classify and explain Robots.
- 11. Define robot and explain different joints used in robots.
- 12. Write short notes on: (i) Robot sensors & (ii) End-effectors in robots.
- 13. Explain how robot is programmed? Explain different programming methods.
- 14. Explain robot configurations with neat sketches.

Note: Assignment-2 to be submitted on or before Dt. 10/10/2019

Subject coordinator:

Prof. K.P. Patel