**Reg. No. :** | | | | | | | | | | |

# Question Paper Code: 37704

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

Seventh Semester

Mechanical Engineering

01UME704 - COMPUTER INTEGRATED MANUFACTURING

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. What is meant by wire frame modeling?
2. Differentiate between redraw and regenerate.
3. Elucidate the role of CIM in manufacturing.
4. What is meant by MAP?
5. Define Part family.
6. What is meant by process planning?
7. List out the components of FMS.
8. How does FMS classified based on level of flexibility?
9. List the inputs to the MRP system.
10. Differentiate lean production and agile manufacturing.

PART - B (5 x 16 = 80 Marks)

11. (a) Explain about the drawing features in CAD package. (16)

Or

(b) Discuss about surface modeling in detail with suitable sketch. (16)

12. (a) Discuss the changes in manufacturing and management scenes in the recent past that led to the development of CIM. (16)

Or

(b) Explain the functions of each layer in ISO-OSI model. (16)

13. (a) Demonstrate in brief of the following part classification and coding techniques. (16)

Or

((b) Discuss about the two main approaches of CAPP systems with suitable sketch. (16)

14. (a) Discuss in detail about the phases of shop floor control system. (16)

Or

(b) (i) Explain the major components of an FMS in detail. (8)

(ii) Discuss the various aspects of FMS layout configurations. (8)

15. (a) Describe the major applications of MRP II software. (16)

Or

(b) (i) Compare the lean and agile manufacturing. (8)

(ii) Describe the components of direct digital control with neat sketch. (8)