

Reg. No. :

--	--	--	--	--	--	--	--	--	--

**Question Paper Code: 47704**

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2020

Seventh Semester

Mechanical Engineering

14UME704- COMPUTER INTEGRATED MANUFACTURING

(Regulation 2014)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any six of the following questions)**

1. The system environment in a mainframe computer consists of
  - (a) central processing
  - (b) storage devices
  - (c) printers and plotters
  - (d) both central processing and storage devices
2. The basic geometric building blocks provided in a CAD/CAM package are
  - (a) Points, lines, and circles
  - (b) Rectangles and squares
  - (c) Semi circles and squares
  - (d) Rectangles and semi circles
3. By using CIM to control all phases of manufacturing, firms hope to reap what benefits?
  - (a) Lower productivity and quality
  - (b) Improved quality and increased productivity
  - (c) Medium productivity and quality
  - (d) All of the above
4. In ring network communication the individual stations are connected in a
  - (a) Discontinuous ring
  - (b) Copper ring
  - (c) Continuous ring
  - (d) Polymer ring

5. The part has dissimilar in geometric shape & size but similar machining operation is known as
  - (a) Group Technology
  - (b) Manufacturing Attributes
  - (c) Machine Cell Design
  - (d) Part Family
6. CAPP integrates and optimizes system performance into
  - (a) The inter-organizational flow
  - (b) The work flow
  - (c) The process flow
  - (d) The inter-material flow
7. The systems that accomplish the production planning, development of master schedule, capacity planning and materials requirement planning is called
  - (a) Material flow control
  - (b) Shop floor control
  - (c) Control of process flow
  - (d) Machine control
8. Which one is type of FMS?
  - (a) Flexible machining group
  - (b) Flexible material group
  - (c) Flexible manufacturing group
  - (d) Flexible process group
9. The correct sequence of operations in production planning and control is
  - (a) Routing-Scheduling-Dispatching-Follow up
  - (b) Scheduling-Routing- Dispatching-Follow up
  - (c) Dispatching-Routing-Scheduling- Follow up
  - (d) Routing-Scheduling-Follow up-Dispatching
10. Lean manufacturing is a (n):
  - (a) Fad
  - (b) Method for reducing labour
  - (c) Way to improve customer value
  - (d) Efficiency improvement technique

PART – B (3 x 8= 24 Marks)

**(Answer any three of the following questions)**

11. Explain CIM. What are the components of CIM? Discuss with neat chart (8)
12. Explain the nature and role of the elements of CIM system. (8)
13. What are the three general methods for solving part families grouping?  
Describe in detail. (8)
14. Write a brief notes on the factory data collection system in Shop floor. (8)

15. Describe the concept of a production monitoring system.

(8)