CODE: 17CD03105

M. Tech I Year I Semester Supplementary Examinations, May 2018

COMPUTER AIDED PROCESS PLANNING (CAD/CAM)

Time : 3 hours Max Marks : 60

Answer all **five** units. (5 x 12 = 60 Marks)

UNIT-I

1. (a) Explain about the basic requirements of a process planning system? List out the advantages of CAPP over conventional Process planning.

(b) What is concurrent engineering? Explain in detail with benefits.

OR

2. (a) Elaborate the principle of Generative CAPP system with its advantages.

(b) Describe feature recognition in the CAPP with example.

UNIT-II

3. (a) Explain about Variant CAPP approach and discuss the advantages.

(b) Explain different alternative manufacturing processes.

OR

4. (a) Illustrate the influence of Group technology in the retrieval CAPP system. Explain the benefits of Retrieval approach.

(b) Briefly describe various quantitative methods for optimal selection of manufacturing sequence.

UNIT-III

5. (a) What is machining and why it is used? Explain machining parameters and their effect on production rate.

(b) What are the tolerance allocation techniques? Explain with neat sketch

OR

6. (a) Explain mathematical approach in optimization of machining parameters in detail.

(b) Distinguish between design tolerance and manufacturing tolerance.

UNIT-IV

7. Briefly explain about the simulation of machining processes.

OR

8. Explain about the graphical implementation of NC tool path in manufacturing sequence

UNIT-V

9. (a) Write about the MIPLAN technique for implementation of CAPP.

(b) Discuss about the AUTOPLAN system.

OR

10. Explain about Capacity planning system in detail with neat sketch.

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