

## B. TECH.

THEORY EXAMINATION (SEM-VIII) 2016-17  
COMPUTER AIDED PROCESS PLANNING

Time : 3 Hours

Max. Marks : 100

*Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.*

## SECTION - A

1. Attempt all parts of the following questions: 10 x 2 = 20
- State the principle of CAPP.
  - What do you understand by forward and backward planning?
  - What do you understand by CIM?
  - Define totally integrated process planning system
  - What do you understand by the term Group Technology?
  - What is the importance of Generative CAPP system?
  - Define manufacturing tolerances.
  - What is the reason for selection of machining parameters?
  - Explain benefits of CAPP.
  - What do you understand by capacity planning system

## SECTION - B

2. Attempt any five parts of the following questions: 5 x 10 = 50
- Differentiate between manual and experienced based process planning.
  - What are the capabilities that a manufacturing system must possess in order to be flexible?
  - How we use process planning for rotational and prismatic part.
  - What do you mean by cellular manufacturing? Enlist its advantages.
  - Explain expert system. How it helps in process of CAPP.
  - Explain tolerance/cost relationship using graph.
  - What are the major advantages of mathematical approach over conventional approach in determination of machining parameters?
  - What are the major criteria for selecting a CAPP system and what are benefits of CAPP.

## SECTION - C

Attempt any two parts of the following questions: 2 x 15 = 30

- Explain with net sketches the variant and generative approaches of CAPP system with advantages and disadvantages.
- Explain any three generative process planning system. What are the advantages of process planning system?
- What is flexibility in a manufacturing system? Explain the components of a manufacturing system.