



**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**

- (a) State the principle of CAPP.
- (b) What do you understand by forward and backward planning?
- (c) What do you understand by CIM?
- (d) Define totally integrated process planning system
- (e) What do you understand by the term Group Technology?
- (f) What is the importance of Generative CAPP system?
- (g) Define manufacturing tolerances.
- (h) What is the reason for selection of machining parameters?
- (i) Explain benefits of CAPP.
- (j) What do you understand by capacity planning system

**SECTION – B**

**2. Attempt any five parts of the following questions:**

**5 x 10 = 50**

- (a) Differentiate between manual and experienced based process planning.
- (b) What are the capabilities that a manufacturing system must possess in order to be flexible?
- (c) How we use process planning for rotational and prismatic part.
- (d) What do you mean by cellular manufacturing? Enlist its advantages.
- (e) Explain expert system. How it helps in process of CAPP.
- (f) Explain tolerance/cost relationship using graph.
- (g) What are the major advantages of mathematical approach over conventional approach in determination of machining parameters?
- (h) 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**

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

