

B.Tech. SEM -VI Production 2014 Course (CBCS) : WINTER - 2018
SUBJECT-COMPUTER AIDED DESIGN AND MANUFACTURING

Day: Thursday
Date: 15/11/2018

W-2018-2502

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to be the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data necessary.

Q.1 What is the configuration of typical CAD system? Explain application of computers in design. (10)

OR

Q.1 A triangle ABC with vertices A (5,7), B (8,9) and C(4,9) is to be reflected about line $Y=0.5x+3$ (10)

Determine-

- i) The concatenated transformation matrix.
- ii) The coordinates of the vertices for a reflected triangle.

Q.2 What is feature based modeling? Explain with suitable sketches feature operations. (10)

OR

Q.2 a) What is Geometry and Topology? Explain. (05)

b) Explain primitive instancing in detail. (05)

Q.3 What do you understand by parts classification and coding? Explain Opitz system in detail. (10)

OR

Q.3 a) Describe part families in detail. (05)

b) Discuss types of automation. (05)

Q.4 Describe the NIST-AMRF Hierarchical model in detail. (10)

OR

Q.4 Explain the Siemens model of CIM in detail. (10)

Q.5 What are the programmes formats being used for part programming? Explain it with suitable examples. (10)

OR

Q.5 Describe in brief 'Rapid Prototyping'. (10)

Q.6 Describe Retrieval type process planning systems in detail. (10)

OR

Q.6 Describe APPAS and AUTOPLAN Process planning systems in detail. (10)

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