

[03 - 4203]

IV/IV B.E. DEGREE EXAMINATION.

Second Semester

Mechanical Engineering

COMPUTER AIDED DESIGN

(Common for Mechanical and M.P. & I Engineering)

(Effective from the Admitted batch of 1999-2000)

Time : Three hours

Maximum : 70 marks

First Question is compulsory.

Answer any FOUR out of the remaining questions.

Answer to question no. 1 must be at one place.

All questions carry equal marks.

Assume suitable data wherever necessary.

1. (a) Classify different types of CAD systems in terms of storage capacity.

(b) What are the different CAD tools used in CAD environment?

(c) What are the various forms of models?

(d) What is a spline?

- (e) What is a primitive used in 3-D modeling?
- (f) What is clipping?
- (g) What are the various database methods used in CAD environment?
2. (a) What are graphic standards? What are the various graphic standards used?
- (b) Explain about the type of hardware used in CAD applications.
3. (a) Explain the working of a Raster display.
- (b) What are the various modeling techniques used in CAD? Differentiate them.
4. (a) What is a graphic user interface? Explain.
- (b) What is a transformation in CAD? Explain.
5. (a) What is windowing in CAD? Explain.
- (b) State important features of a graphics package.
6. (a) Explain finite element modeling.
- (b) Explain the concept used in surface modeling.

7. (a) Explain about the computer aided design of a coil spring in detail.

(b) How is AI helpful in CAD? Justify.

8. Write short notes on :

(a) Secondary storage devices

(b) Windowing

(c) Analysis softwares.

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