

**Total No. of Questions : 08**

**Ph.D. (Civil Engineering)  
COMPUTER AIDED DESIGN METHODS**

**M.Codo : 92305**

**Date of Examination : 20-08-22**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carry TWELVE marks.
3. Discuss various peripheral devices commonly used for computer input and output.
4. Find the centre and diameter of an ellipse defined by its circumscribing rectangle when the major and minor axes of the ellipse are not parallel to x-y axis of the coordinate system.
5. What do you understand by Interactive computer graphics? Explain briefly various interaction tasks and methods to accomplish them.
6. What do you understand by parametric and non-parametric forms of curves? Obtain an algorithm for displaying hyperbola.
7. a) Describe Windowing and Clipping.  
b) Explain different types of coherences? Explain an algorithm highlighting the use of coherence.
8. Discuss applications of DBM. What is the importance of normalization in DBM?
9. Discuss in brief the sequence of commands to be used for pre-processing and post-processing of any structure using ANSYS.
10. Write short notes on :  
a) Hidden surface elimination  
b) Graphic input technique.

**NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.**