Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 01**

Total No. of Questions : 08

Ph.D Examination
COMPUTER AIDED DESIGN METHODS (CIVIL)
M.Code : 78006

Time : 3 Hrs.   **Max. Marks : 100**

INSTRUCTIONS TO CANDIDATES :
1. **Attempt any FIVE questions out of EIGHT questions.**
2. **Each question carries TWENTY marks.**

Q1 a) How Computer-aided design (CAD) is used for analysis and optimization of a design?   10

    b) Write the role of importance of memory in CAD.   10

Q2 a) Explain line drawing display in computer graphics.   10

    b) Describe the use of translation, rotation and scaling in two dimensional transformations.   10

Q3 a) What is hidden surface elimination algorithm? Write its uses.   10

    b) Explain what is MATLAB? Where MATLAB can be applicable?   10

Q4 a) Discuss objectives of interactive acceleration analysis.   10

    b) Write applications of Graphic Packages in painting and drawing of structures.   10

Q5 Explain how STAAD PRO is used for Physical modeling in Civil Engineering.   20

Q6 a) Differentiate STAAD PRO and ETABS design and analysis software.   10

    b) Write the steps to optimize query in database.   10

Q7 Explain data manipulation language. How they are used in SQL commands? Give the example.   20

Q8 Define following :

    a) ANSYS Simulation software   10

    b) Clipping and windowing   10

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