

## MVSE-105

M. E./M. Tech. (First Semester)

EXAMINATION, March, 2010

(Civil Engg. Branch)

(Specialization in Computer Aided Structural Design)

COMPUTER AIDED DESIGN

(MVSE-105)

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 40

Note : Attempt any five questions. Each question carries equal marks.

1. ✓ (a) Describe the following data types with example :
  - (i) Integer
  - (ii) Float
  - (iii) Character
  - (iv) Structure
- ✓ (b) What is an array ? How a matrix can be represented using array ? Write a program to add two matrices.
2. (a) Describe the 'switch' and 'if-else' statement with example.
- (b) Explain call-by value and call-by reference parameters with example of function call.

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21

3. (a) Describe the following terms of OOP :
  - (i) Data encapsulation (NB)
  - (ii) Polymorphism (Ans)
  - (iii) Class and object
- ✓ (b) What are various types of inheritance ? Explain each with example of classes.
4. (a) What are the constructor and destructor ? Explain with example. How the constructor is overloaded ?
- (b) Write short notes on the following :
  - (i) Inline function
  - (ii) Pure virtual function
  - (iii) Abstract class
- ✓ 5. Write different draw commands in AutoCAD and explain any four of them briefly.
- ✓ 6. Describe the following terms in AutoCAD :  
Zoom, Area, Dist., Offset, Trim, Mirror, Shift, Stretch, Undow, Erase.
- ✓ 7. Write short notes on the following :
  - (a) Function key
  - (b) Dimensioning
  - (c) Layer
  - (d) 3D command