

Roll No. ....

**23066**

**M. Tech. 1st Semester  
(Computer Sc. Engg.)  
Examination-May, 2015  
COMPUTER SYSTEM SOFTWARE**

**Paper : MTCE-601-A**

**Time : 3 hours**

**Max. Marks : 100**

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Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

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**Note :** Attempt any **five** questions. All questions carry equal marks.

1. (a) Explain the various features of object oriented design.  
  
(b) What is dynamic modelling ? Explain with examples.
2. Explain the concept of links and association in detail with examples.

3. (a) Differentiate between function overloading and function overriding.
- (b) Explain with an example the virtual function.
4. (a) Explain Liskov's substitution principle in detail.
- (b) Explain package cohesion principle.
5. (a) What is state chart diagram ? Explain state chart diagram for telephone cell.
- (b) Explain activity diagram with examples.
6. Explain the deployment diagram for inventory management system.
7. (a) Explain different system software design issues in detail.
- (b) Explain two pass assembler in detail.

**8. Write short notes on the following :**

(a) Macro processor

(b) Abstraction

(c) Encapsulation

(d) Dependency inversion principles.

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