

**2071**

**Advanced Database Management System**

Full Marks : 60

Pass Marks : 24

Time : 3 hours

**New Course**

*Candidates are required to give their answers in their own words as far as practicable.  
The questions are of equal value.*

**Attempt all questions.**

- 1.) Explain the following terms :
  - a.) Data Warehouse
  - b.) Distribution Transparency
  - c.) X Query
  - d.) Distribution transaction
  - e.) Knowledge base
  - f.) Classification and clustering
- 2.) Distinguish multiple inheritance and selective inheritance in OO concepts.
- 3.) Define state of an object. Distinguish between persistent and transient objects.
- 4.) Discuss how time is represented in temporal databases and compare the different time dimensions.
- 5.) What is the difference between structured and unstructured complex object? Differentiate identical versus equal objects with examples.
- 6.) What are the advantages and disadvantages of OODBMS?
- 7.) What are the differences and similarities between objects and literals in the ODMG object model?
- 8.) Describe the main reasons for the potential advantage for distributed database. What additional functions does it have over centralized DBMS?
- 9.) Describe the characteristics of mobile computing environment in detail.
- 10.) Differentiate between XML schema and XML DTD with suitable example .