Tribhuwan University
Institute of Science and Technology

2070

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 :
   - Extent
   - Temporal database
   - Degree of homogeneity of DBMS
   - X Path
   - Classification and clustering
   - OLAP

2.) Draw an ER Diagram for a hospital with a set of patients and set of doctors associated with each patient a log of various tests and examinations conducted.

3.) What is the difference between an object and a….. in the object oriented data model (OOBM) ?

4.) What are the main difference between designing a relational database and an object database?

5.) Discuss some applications of active database. How do spatial databases differ from regular database?

6.) Write a schema that provides tags for a person's first name, last name, weight, and shoe size. Weight and shoe size tags should have attributes to designate measuring systems.

7.) Distinguish between structured and unstructured complex objects.

8.) What is data warehouse? List the characteristics of data warehouse.

9.) What are the advantages and disadvantages of extending the relational data model by means of ORDBMS?

10.) Enumerate the limitations of conventional database compared to multimedia database.