

Tribhuvan University
Institute of Science and Technology
2077

Bachelor Level / seventh-semester / Science

Computer Science and Information Technology(O-CSC401)

(Advanced Database Management System(old syllabus))

Time: 3 hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Full marks: 60

Pass marks: 24

Attempt all questions.(10 x 6 = 60)

- 1. Discuss query optimization with suitable example. What is the importance of query optimization in database? (4 + 2)**
- 2. How can you convert an EER design to a relational design? Discuss with suitable example.(6)**
- 3. Discuss various type constructors used in object-oriented database. How are they used to create complex objects?(4+2)**
- 4. What is complex object? What is the difference between structured and unstructured complex objects?(1+5)**
- 5. Define object relational database. Discuss different types of knowledge discovered during data mining.(1+5)**
- 6. What is active database ? Discuss generalized mode for active databases?(2+4)**
- 7. Discuss how time is represented in temporal databases and compare the different time dimensions.(3+3)**
- 8. What is data mining ? Discuss different types of knowledge discovered during data mining.(1+5)**
- 9. What is data warehouse ? How does it differ from a databases ?(2+4)**
- 10. What is mobile database? Discuss mobile computing architecture in detail.(1+5)**