

**EXAMINATION FOR INTERNAL STUDENTS**

*For The Following Qualification:-*

*M.Sc.*

**Inf Science GS.1: Database Applications**

**COURSE CODE : INSTGS.1**

**DATE : 03-JUN-03**

**TIME : 10.00**

**TIME ALLOWED : 3 Hours**

## **S.1: Database applications**

Answer **THREE** questions.

1. Explain and discuss the roles of entity-relationship modelling and normalization in database design. Does one method have any advantages over the other as an aid to effective modelling?
2. SSADM is often referred to as a 'three-views' methodology. What are these three views? Why, when modelling systems, is it considered important to have more than one 'view'?
3. How might a database of scanned images of textual documents be made searchable? Explain the different options that might be available and the advantages and disadvantages of each.
4. What are the implications of designing and delivering XML-encoded documents? What would be needed for a collection of XML-encoded documents to be used as a database in practice?
5. How does the nature of data to be included within a database affect the choice of implementation software for a database?
6. **EITHER**  
(a) Discuss the proposition that end-user searching can be cheaper and more efficient than employing a specialist intermediary.  
**OR**  
(b) What types of retrieval tools/mechanisms would you expect to have available to you in an online database search language to enable you to express and execute your search in the most effective way?

**END OF PAPER**