

- 1) What is Database Management System? [2]
- 2) Why physical data independence is important in data modeling? [2]
- 3) Distinguish between the degree and cardinality of a relationship in a n ER diagram. [4]
- 4) Explain 3NF and BCNF. [4]
- 5) What is immediate database modification technique in context to log based recovery approach? Explain. [4]
- 6) Explain generalization in ER diagram with an example. [2]
- 7) Describe the basic steps in query processing. [4]
- 8) Explain how the pipelining can be used to improve query evaluation efficiency. [4]
- 9) Why is database system more preferred over file system? Explain briefly. [4]
- 10) Define total participation with example. [2]
- 11) Explain weak entity set with an example. [2]
- 12) Explain the distinction between static and dynamic hashing with approximate example. [4]
- 13) Define transaction and explain the various states of transaction. [4]
- 14) What do you mean by concurrent execution and describe about two phase locking protocol along with its limitations? [4]
- 15) What is the role of functional dependency on normalization? [2]
- 16) Explain why normalization is necessary. [4]