

Faculty of Science

**B.Sc. (Computer Science) II Year, CBCS - III Semester Examinations, Dec 2017
Paper-III (Database Management System)**

Time: 3 hours

Max Marks: 80

Section – A

- I. Answer any **Five** of the following questions. (5x4=20 Marks)
1. What is the purpose of database systems?
 2. Write a note on structure of Relational Database?
 3. Define Entity? Discuss in brief about Entity Relationship Model?
 4. Write a note on functional Dependency?
 5. Discuss about parallel system.
 6. Write a note on set operations in SQL
 7. What is a transaction? Explain when the transaction will be aborted and committed? Give example.
 8. What is the difference between functions and procedures in SQL?

Section - B

- II. Answer all of the following questions. (4x15=60 Marks)
9. (a) Explain Database Architecture and Role of Database Administrator?
(Or)
(b) i) Explain different types of keys?
ii) What are the various Relational Algebra operations? Explain.
 10. (a) Explain the constraints used in database design? Illustrate the process of removing Attribute in Entity sets
(Or)
(b) i) List out the features of good Relational Design?
ii) Write a note on Decomposition using multivalued dependencies?
 11. (a) Explain Client server Architecture and server system Architecture?
(Or)
(b) Explain Aggregate functions and Nested sub queries in SQL? Give Examples.
 12. (a) What is view? Explain different SQL data types and schemas?
(Or)
(b) What is trigger? Explain various types of triggers in SQL?