

B.Sc. 2nd Semester (Honours) Examination, 2019

COMPUTER SCIENCE

(Introduction to Database Systems)

Paper : 203/GE-2

Course ID : 21514

Time: 1 Hour 15 Minutes

Full Marks: 25

The figures in the margin indicate full marks.

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

1. Answer *any five* questions: 1×5=5
 - (a) Write down the full forms and meanings of DDL & DML.
 - (b) What is alternate key? Give one example.
 - (c) What is partial dependency?
 - (d) What do you mean by mapping cardinality?
 - (e) Define tuple and domain in database.
 - (f) What is data abstraction?
 - (g) Write two advantages of E-R data model.
 - (h) What is integrity constraint?

2. Answer *any two* questions: 5×2=10
 - (a) Write differences between DBMS and FMS.
 - (b) Write down responsibilities of DBA.
 - (c) Explain 2NF briefly. Distinguish 3NF & BCNF. 3+2=5
 - (d) Draw an E-R diagram of Hospital Management System.

3. Answer *any one* question: 10×1=10
 - (a) What are the different DDL commands in SQL? Consider the following Database scheme:
Employee (Emp_ID, Name, Salary, DOT, Dep_name)
Incentives (Emp_ID, Incentive_date, amount)
Write down the following queries in SQL:
 - (i) Display no. of departments.
 - (ii) Get all employee details from the above tables ordered by salary descending.
 - (iii) Display the names of employees having minimum salary.
 - (iv) Display details of employee who has no incentives on 01/12/2018. 2+(2×4)=10
 - (b) Explain overall system structure of a DBMS. 10