2019

B.Sc. (General)

2nd Semester Examination

COMPUTER SCIENCE

Paper - DSC 1BT

Full Marks : 40 Time : 2 Hours

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 : 5×2=10

   (a) Define DBMS.

   (b) What is data independence?

   (c) What do you understand by attribute?

   (d) What do you mean by record?

   (e) What is foreign key?

   (f) What do you mean by data redundancy?

[Turn Over]

(g) What do you know about weak entity set?

(i) Write down the function of database administration.

2. Answer any *four* questions : 4×5=20

(a) Explain the three tire architecture of DBMS. 5

(b) What are the advantages of DBMS compared to traditional file system? 5

(c) Discuss different types of constraints used in DBMS. 5

(d) Write down suitable SQL statement to create table student (std-name, reg-no., DOB, fname) and enter two record into it. Consider reg-no as primary key. 3+2

(e) What is normalization? What are the differences between 2NF and 3NF? 2+3

(f) Discuss different part of an ER diagram with suitable example. 5

3. Answer any *one* question : 1×10=100

(a) Draw an ER diagram of a student management system with entity student, course and department. 10

(b) Write short note : 5+5

(i) Data Abstraction.

(ii) SQL.
