Roll No. ..... Total Pages: 02

2704

B.C.A. SECOND YEAR EXAMINATION, 2019

DATABASE MANAGEMENT SYSTEM

Time: Three Hours

Maximum Marks: 100

Answer of all the questions (short answer as well as descriptive) are to be given in the main answer-book only. Answers of short answer type questions must be given in sequential order. Similarly, all the parts of one question of descriptive part should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book. Write your roll numbers on question paper before starting to write the answers of questions.

Question paper consists of three parts.

All THREE parts are compulsory.

PART – A *[Marks: 20]*

(Very Short Answer)

Consists 10 questions of ***two marks*** *each.*

Maximum limit for each question is upto ***40*** *words.*

PART – B *[Marks: 20]*

(Short Answer)

Consists 5 questions of ***four marks*** *each.*

Maximum limit for each question is upto ***80*** *words.*

PART – C *[Marks: 60]*

(Long Answer)

Consists 5 questions of ***twelve marks*** *each with internal choice.*

PART – A

Q.1 (i) Define data model.
(ii) Define entities.
(iii) Define catalog.
(iv) Define candidate keys.
(v) Define table expressions.
(vi) Define views.
(vii) Define network system.
(viii) Define virtual records.
(ix) Define nullist.
(x) Define overall system structure.

PART – B

Q.2 (i) Explain purpose of database system.
(ii) Explain E-R diagram.
Q.3 (i) Explain domains & relations.
(ii) Explain foreign keys.
Q.4 (i) Explain conditional expressions.
(ii) Explain SQL support.
Q.5 (i) Explain DBTG CODASYL Model.
(ii) Explain data retrieval faulty.
Q.6 (i) Explain logical & physical file organisation.
(ii) Explain B-tree index files.

PART – C

Q.7 (i) Explain DDL and DML.
(ii) Explain design of an E-R database design.
Q.8 (i) Explain relational database.
(ii) Explain primary & alternate keys.
Q.9 (i) Explain embedded SQL in detail.
(ii) Explain views for (DD & DM) Data Definition & Data Manipulation.
Q.10 (i) Explain data structure diagrams.
(ii) Explain Hierarchical Model.
Q.11 (i) Explain file organisation.
(ii) Explain indexing & hashing.
