

4E1215

Roll No. _____

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4E1215

B. Tech. IV-Sem. (Back) Exam., Oct.-Nov. - 2020

Computer Science & Engineering

4CS4 – 05 Database Management System

CS, IT

Time: 2 Hours

Maximum Marks: 82

Min. Passing Marks: 29

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Instructions to Candidates:

Attempt all ten questions from Part A, four questions out of seven questions from Part B and two questions out of five from Part C.

Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used /calculated must be stated clearly.

*Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)*

1. NIL

2. NIL

PART – A

(Answer should be given up to 25 words only)

[10×2=20]

All questions are compulsory

- Q.1 What is Database Management System?
- Q.2 What is Queries in DBMS?
- Q.3 What structure of a DBMS?
- Q.4 What is Entity & Attributes?
- Q.5 What is Set Operations?
- Q.6 What is Nested Queries?
- Q.7 What is ODBC and JDBC?
- Q.8 What is Concurrency?
- Q.9 What do you mean by Referential integrity?
- Q.10 Explain the concepts of Primary key.

[1620]

PART - B

(Analytical/Problem solving questions)

[4×8=32]

Attempt any four questions

- Q.1 Explain the File System v/s DBMS.
- Q.2 Explain the features of the E-R model.
- Q.3 Explain Entity v/s Attribute.
- Q.4 Explain the Boyce – Codd Normal forms.
- Q.5 Explain the testing for Serializability.
- Q.6 Explain Cascadeless Schedules.
- Q.7 Explain the Validation – based protocols.

PART - C

(Descriptive/Analytical/Problem Solving/Design Questions)

[2×15=30]

Attempt any two questions

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- Q.1 Describe the advantage of DBMS.
 - Q.2 Explain the Entity Relationship model.
 - Q.3 Describe the relationship Algebra selection and projection with example.
 - Q.4 What you mean by Null Values and Embedded SQL?
 - Q.5 Explain the recovery schemes in Database.
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