S.D.E.

B.C.A. SEM – II (CBCS - 2018 Course) : SUMMER - 2019

SUBJECT: DATA BASE MANAGEMENT SYSTEM - I

Day: Friday
Date: 03/05/2019

S-2019-4948

Time: 10.00 AM TO 1.00 PM
Max. Marks: 70

N.B.:

1) Attempt **ANY FOUR** questions from **Section - I** and **ANY TWO** questions from **Section – II**.
2) Figures to the right indicate **FULL** marks.
3) Answers to both the section should be written in SAME answer book.

SECTION - I

Q.1 What is transaction? Explain ACID property of transaction. **(10)**

Q.2 Explain different types of failures in DBMS. Discuss checkpoint as a recovery technique. **(10)**

Q.3 **a)** What are advantages of DBMS? **(05)**
b) What is multi programming and multiprocessing? **(05)**

Q.4 Explain different file organization techniques used in DBMS. **(10)**

Q.5 Explain users of DBMS with appropriate example. **(10)**

Q.6 Write short note on **ANY TWO** of the following : **(10)**

a) CODD's rules
b) B+ Tree index
c) Deadlock detection and prevention

SECTION - II

Q.7 Consider the following Relational Database. **(15)**
'Star' is an agency for flat booking and it has number of builders and agents who are jointly working. A customer can get a flat for residential or commercial purpose. If customer is approached through an agent, the agency and builders are giving some commission to the agent. Study above case and
i) Design an ER diagram
ii) Identify all entities

Q.8 What is normalization? Explain 1NF, 2NF and 3NF with example. **(15)**

Q.9 Define DBMS. Explain advantages of DBMS over traditional file system. **(15)**

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