Roll No. ....   Total No. of Sections : 3

Total No. of Printed Pages : 4

Annual Online Examination 2021
Code No. : A.B.C-292

B.C.A. Part II

Paper II

[Database Management System]

Time : Three Hours]   [Maximum Marks : 80

Note : Section 'A' containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

Section 'A'

Answer the following Very Short Answer Type Questions in one or two sentences.   **1×10=10**

1. What is data processing ?

2. Define model.

3. What is entity ?

4. What is UML ?

5. Define Relational model in DBMS.

6. Define SQL.

P. T. O.

7. Why we need decomposition of relational schema.

8. What do you mean by logical view of database ?

9. Write the syntax of ORDER by construct in select Query.

10. Define Assertion.

Section 'B'

Answer the following Short Answer Type Questions in about 150-200 words :   **4×5=20**

1. Explain the concept of data independence.

Or

Discuss about DBA roles.

2. What do you mean by strong key and weak key ? Explain.

Or

What is class diagram ? Explain with suitable example.

3. Explain select operation and project operation of Relational Algebra.

Or

Explain tuple relational calculus.

4. Explain functional dependencies.

Or

Discuss about multi-valued depedencies.

5. Explain DDL and DCL languages with suitable example.

Or

Explain inner and outer join with example.

Section 'C'

Answer the following Long Answer Type Questions in about 300-350 words :　　　**10×5=50**

1. Explain different types of data models with suitable diagram.

Or

Explain DBMS architecture with suitable diagram.

2. Draw an E-R diagram of library management system and explain.

Or

Explain the following terms :

(a) Generalization,

(b) Specialization.

3. Write short notes on :

(a) Domain Relational Calculus,

(b) Set Operations.

Or

Explain stand alone and embedded Query languages.

4. What is normalization ? Explain 1 NF, 2 NF and 3 NF in brief.

Or

Write short notes on :

(a) De-normalization,

(b) Join Dependencies

5. What is the use of SQL ? Explain INSERT, DROP, DELETE and VIEW Queries with example.

Or

What is Integrity ? Explain Triggers, Security and Authorization in SQL.

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