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BCA-202

B.C.A. (Second Year) EXAMINATION, 2018

Paper-II

(Database Management System)

Time allowed : Three Hours

Maximum Marks : 100

Part A (खण्ड 'अ') [Marks : 20]

Answer all questions (50 words each).

All questions carry equal marks.

सभी प्रश्न अनिवार्य हैं । प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

Part B (खण्ड 'ब') [Marks : 50]

Answer five questions (250 words each),

*selecting **one** question from each Unit.*

All questions carry equal marks.

प्रत्येक इकाई से एक प्रश्न चुनते हुए कुल पाँच प्रश्न कीजिए । प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

Part C (खण्ड 'स') [Marks : 30]

Answer any two questions (300 words each).

All questions carry equal marks.

कोई दो प्रश्न कीजिए । प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो । सभी प्रश्नों के अंक समान हैं ।

P.T.O.

Part A

1.
 - (a) Define data abstraction.
 - (b) Define data independence.
 - (c) What is relation ?
 - (d) Define NULL.
 - (e) Write query for create table.
 - (f) Write query for create views.
 - (g) Draw network model diagram.
 - (h) Draw hierarchical model diagram.
 - (i) Define inverted.
 - (j) What is nullist ?

Part B

Unit I

2. Who is database administration ? Explain different roles of a database administrator.
3. Explain all symbols used in ER diagram. Draw an ER diagram with any suitable example.

Unit II

4. Explain Domains and Relations.
5. What are the primary and alternate keys ? Explain with example.

Unit III

6. Explain embedded SQL.
7. What are views ? Explain with example.

Unit IV

8. Explain :
 - (i) DBTG update facility
 - (ii) DBTG set processing facility.
9. What is Hierarchical model ? Explain its data retrieval facility and update facility.

Unit V

10. Explain overall system structure.
11. Differentiate :
 - (a) Logical and physical file organization
 - (b) Sequential and Random file organization.

Part C

12. What is DBMS ? Why DBMS is preferred over file system ?
13. Write short notes with example :
 - (a) Candidate keys
 - (b) Foreign key
14. Explain :
 - (a) Data Definition
 - (b) Data Manipulation
15. What is network model ? Explain with DBTG CODASYL model.
16. What is file organization ? Explain indexing and hashing.