21COAC301 Reg No :

CHOICE BASED CREDIT SYSTEM SEMESTER SCHEME B.C.A. THIRD SEMESTER DEGREE EXAMINATION JANUARY 2023 COMPUTER APPLICATIONS

Database Management Systems

Duration:2 Hours Max Marks:60

PART A

Answer any FIVE questions:

 $(5 \times 2 = 10)$

- 1) What is Data independence?
- 2) What is an Assertion?
- 3) What is SQL?
- 4) Define Schema & Instances.
- 5) Define 3NF relation.
- 6) How is sorting of data done in a table?

PART B

Answer any FIVE questions:

 $(5 \times 6 = 30)$

- 7) Explain the various categories of Data Models.
- 8) Explain Recursive Relationship Type.
- 9) What are the possible reasons for a transaction to fail?
- Explain the DBMS System Utilities.
- 11) Explain Conditional control in PL/SQL with syntax & example.
- 12) Consider the relation schema OWNER(Licenseno, Registrationno, Name, Address) CAR (Registrationno, Carname, Color).

Write Relational Algebra Operation to

- a) Display License no of all white color cars
- b) Display Name, Address, Car names of all owners.

PART C

Answer any TWO questions :

 $(2 \times 10 = 20)$

- a) Explain the main categories of Database users.
 - b) What is data dictionary? Explain. (7+3)
- 14) Explain in detail Update operations on relations and the types of integrity constraints that must be checked for update operations.
- 15) Explain the component modules of a DBMS with a neat diagram.

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CHOICE BASED CREDIT SYSTEM SEMESTER SCHEME B.C.A. THIRD SEMESTER DEGREE EXAMINATION JANUARY 2023 COMPUTER APPLICATIONS

C# and .Net Framework

Duration:2 Hours Max Marks:60

PART A

Answer any FIVE questions:

 $(5 \times 2 = 10)$

- 1) What is a variable? How do you declare a variable in C# program?
- 2) How do you initialize values in one dimensional array in C#? Give an example.
- 3) What are static members? How is it defined?
- 4) How do you invoke a delegate? Give an example.
- 5) Differentiate RadioButton server control and RadioButtonList server control.
- 6) List any four properties of SqlDataSource control.

PART B

Answer any FIVE questions:

 $(5 \times 6 = 30)$

- 7) Write a note on .Net framework.
- 8) Explain if-else statement and foreach loop in C# with an example each.
- 9) Define structure. How do you create and assign values to a structure? Explain with a help of an example.
- 10) Explain subclass constructors in C# with an example.
- 11) Explain multiple catch statements with an example.
- 12) What are Button server controls? Explain any two types.

PART C

Answer any TWO questions :

 $(2 \times 10 = 20)$

- 13) Explain
 - a) Assignment operators b) Bitwise operators in C# with an example each.
- 14) Explain any five public properties of i) DataList control ii) DetailsView control
- 15) Write a note on i) Timer ii) ProgressBar windows control.

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CHOICE BASED CREDIT SYSTEM SEMESTER SCHEME B.C.A. THIRD SEMESTER DEGREE EXAMINATION JANUARY 2023

COMPUTER APPLICATIONS

Computers Communication and Networks

Duration:2 Hours

Max Marks:60

PART A

Answer any FIVE questions:

 $(5 \times 2 = 10)$

- 1) What is Coaxial Cable?
- 2) Write the use of CRC.
- 3) What is Congestion in network? Write the two types of congestion in network.
- Define De'Multiplexing.
- 5) What is OSI Reference Model?
- 6) What is Burst Error?

PART B

Answer any FIVE questions:

 $(5 \times 6 = 30)$

- 7) Write the advantages of client-server network.
- 8) Explain two dimensional parity check.
- 9) Explain Token bucket algorithm with a diagram.
- 10) Write a note on WWW.
- Explain the types of twisted pair cabel.
- 12) Explain Internet Transport protocol.

PART C

Answer any TWO questions:

 $(2 \times 10 = 20)$

- 13) What is an Email? How to create an email?
- 14) Detect an error by using the checksum method, original data is 1001100,11100010,00100100,10000100.
- 15) Write a note on Go BACK N ARQ.
