

**CHOICE BASED CREDIT SYSTEM SEMESTER SCHEME**  
**BCA THIRD SEMESTER DEGREE EXAMINATION NOVEMBER/DECEMBER 2023**  
**COMPUTER APPLICATIONS**  
**Database Management Systems**

**Duration:2 Hours****Max Marks:60**

**PART A**

**Answer any FIVE questions:****(5×2= 10)**

- 1) Define DBMS.
- 2) What is a tuple and an attribute?
- 3) What are single-user systems?
- 4) Expand SDL and VDL.
- 5) Write relational algebra operation to retrieve employees where DNO = 4.
- 6) How is sorting of data done in a table?

**PART B**

**Answer any FIVE questions :****(5×6= 30)**

- 7) Explain the various ER diagram notations.
- 8) a) Explain the types of participation constraints  
b) Explain the terms Relationship, relationship type, degree of a relationship type.
- 9) Write SQL query to a) Find the maximum SALARY from the table EMPLOYEE  
b) Find the sum of all the SALARY from the table EMPLOYEE.
- 10) Explain the PL/SQL block structure.
- 11) Explain Armstrong's Inference rules for functional dependencies.
- 12) What are Spurious Tuples? Explain with example.

**PART C**

**Answer any TWO questions :****(2×10= 20)**

- 13) Explain the types of functions provided by Database System Utilities.
- 14) Explain the disadvantages of file processing system.
- 15) a) Explain with example Iterative control in PL/SQL  
b) Conditional control with example.

**CHOICE BASED CREDIT SYSTEM SEMESTER SCHEME**  
**BCA THIRD SEMESTER DEGREE EXAMINATION NOVEMBER/DECEMBER 2023**  
**COMPUTER APPLICATIONS**  
**C# and NET Framework**

Duration:2 Hours

Max Marks:60

**PART A**

Answer any FIVE questions:

(5×2= 10)

- 1) How do you add single line comment in a C# program? Give an example.
- 2) List any four string methods in C#.
- 3) What is a constructor? Write its syntax.
- 4) Define delegate. Write its syntax.
- 5) List any four properties of CheckBoxList server control.
- 6) What is the usage of SqlDataSource control?

**PART B**

Answer any FIVE questions :

(5×6= 30)

- 7) Explain .Net strategy with a neat diagram.
- 8) Explain if-else and else-if ladder statements in C# with an example each.
- 9) Explain method overloading with a help of an example.
- 10) Explain multilevel inheritance in C# with an example.
- 11) Explain user defined exceptions with a help of an example.
- 12) Explain any six common properties of a server control.

**PART C**

Answer any TWO questions :

(2×10= 20)

- 13) Explain a) Arithmetic operators      b) Relational operators in C# with an example each.
- 14) Explain any five public properties of i) DetailsView control      ii) Repeater control
- 15) Write a note on i) Timer      ii) TrackBar windows control.

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**CHOICE BASED CREDIT SYSTEM SEMESTER SCHEME**  
**BCA THIRD SEMESTER DEGREE EXAMINATION NOVEMBER/DECEMBER 2023**  
**COMPUTER APPLICATIONS**  
**Computers Communication and Networks**

Duration:2 Hours

Max Marks:60

**PART A**

Answer any FIVE questions:

(5×2= 10)

- 1) Write the types of computer network architecture.
- 2) Write the use of CRC.
- 3) Write the difference between HTTP and HTTPS.
- 4) Define De'Multiplexing.
- 5) What is Coaxial Cable?
- 6) What is Shielded Twisted pair cable?

**PART B**

Answer any FIVE questions :

(5×6= 30)

- 7) Explain the working of Network Layer.
- 8) Write a note on MAC.
- 9) What is Link State Routing in Computer Network? Give an example.
- 10) Write a note on Elements of Protocol.
- 11) How does the World Wide Web work? Explain with the neat diagram.
- 12) Explain the classification of transmission Media.

**PART C**

Answer any TWO questions :

(2×10= 20)

- 13) Explain MAN network briefly. Write its advantages and disadvantages.
- 14) Detect an error by using the two dimensional parity check, Original data is 11001110,10111010, 01110010, 01010010.
- 15) Write a note on noiseless channel.