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3007PWC20

B.Com. (Computer Applications) (CBCS) DEGREE EXAMINATIONS, FEBRUARY/MARCH - 2023

(Examination at the end of Third Semester)

Part-II: Computers

PROGRAMMING WITH C AND C++

(Regulation 2020-21)

Time : 3 Hours **Maximum Marks : 75**

SECTION - A

Answer any FIVE questions. **(5×5=25)**

1. Explain about various operators in C.
2. Describe the break and continue statements in C.
3. Write a C-program to search a given number in the array.
4. What is recursion? Explain recursion with example.
5. Explain about friend functions in C++.
6. What is method overloading?
7. Explain about different types of constructors in C++.
8. What is Hybrid Inheritance in C++?

SECTION - B

Answer FIVE of the following questions. **(5×10=50)**

9. a) Explain about various control statements in C.

(OR)

b) What are various built-in datatypes in C ? Discuss with examples.

10. a) What is difference between call by value and call by reference ? Explain with example.

(OR)

b) Explain various string handling functions in C.

11. a) Explain the C++ program structure with example.

(OR)

b) Explain about static members in C++.

12. a) What are the rules for operator overloading?

(OR)

b) Write a C++ program to overload binary operators.

13. a) Explain different types of Inheritance in C++.

(OR)

b) How to implement multiple inheritance? Explain with C++ program example.

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3003CSC15

B.Sc. DEGREE (CBCS) EXAMINATIONS, FEBRUARY/MARCH - 2023

(Examination at the end of Third Semester)

Part-II: Computer Science/Multimedia

Object Oriented Programming Using Java

(Regulation 2015-16)

Time : 3 Hours **Maximum Marks : 75**

SECTION - A

Answer any **Five** questions. **(5×5=25)**

1. Explain OOP features with suitable examples.
2. Discuss about type casting in JAVA with suitable examples.
3. Explain each keyword in public static void main(string args[ ]) statement in JAVA program.
4. Write differences between While and do-While statements in JAVA with suitable examples.
5. Explain Final variables and Final methods.
6. What is an exception? Explain different types of exceptions in JAVA.
7. What are the differences between an Applet and standalone Java application.
8. How do we set priorities for threads?

SECTION - B

Answer **ALL** questions. **(5×10=50)**

9. a) What is JAVA Token? Explain with suitable examples.

(OR)

b) Write a JAVA program to find minimum and maximum Value among three numbers.

10. a) Explain decision making statements in JAVA.

(OR)

b) What is method overloading? Explain it with an example.

11. a) Explain different types of inheritances.

(OR)

b) What is an array? How do you create and initialize one and two dimensional arrays in JAVA?

12. a) Explain thread life cycle.

(OR)

b) Explain Exception handling mechanism in JAVA.

13. a) Describe the process of importing and accessing a package with suitable examples.

(OR)

b) Explain input and output streams in JAVA.

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3003CSC15

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3003CSC20

B.Sc. (CBCS) DEGREE EXAMINATIONS, FEBRUARY/MARCH - 2023

(Examination at the end of Third Semester)

Database Management System

Part-II: Computer Science

(Regulation:2020-21)

Time : 3 Hours Maximum Marks : 75

SECTION - A

Answer any FIVE of the following questions. Each question carries 5 marks. (5×5=25)

1. What is file-based system? List the Drawbacks of file-based system.
2. Discuss briefly costs and risks of database approach.
3. What are the building blocks of ER Diagram? Define them.
4. Write about IS-A Relationship and attribute Inheritance.
5. Define Functional Dependency and Normalization.
6. List the advantages and limitations of Relational Algebra.
7. Write about Sub Query with example.
8. Discuss the differences between functions and procedures in PL/SQL.

SECTION - B

Answer ALL the following questions. Each question carries 10 marks. (5×10=50)

9. a) What is DBMS? Explain the components of DBMS with neat diagram.

(OR)

b) Define Data, information and Database. Explain the three-schema Architecture for Database.

10. a) Explain the classifications of Entities, Attributes and Relationships.

(OR)

b) Define generalization and specialization. Explain the constraints on specialization and generalization.

11. a) Explain CODD Rules for relational model.

(OR)

b) Explain all relational set operations with suitable examples.

12. a) Explain the Data types and Aggregate functions in SQL.

(OR)

b) What is view? Explain the process of creating different types of views.

13. a) Explain the control structure and iterative controls in PL/SQL.

(OR)

b) What is trigger? Explain different types of triggers in PL/SQL.

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