



# **TRINITY COLLEGE FOR WOMEN NAMAKKAL**

## **NAAC –SSR CYCLE-I**

### **2.5 Evaluation Process and Reforms**

#### **2.5.1 Mechanism of Internal/External Assessment and Grievance Redressal system**

**Internal Assessment-Mid & Model Exam Question Papers**



TRINITY COLLEGE FOR WOMEN, NAMAKKAL  
MID-TERM EXAM-APRIL 2022  
III B.Sc [CS] A & B  
UNIFIED MODELING LANGUAGE (UML)

DATE: 22.4.2022  
PAPERCODE: 19UC5E05

TIME: 2 HRS  
MARKS: 50

PART-A

(10\*1=10)

ANSWER ALL THE QUESTIONS

1. UML stands for  
a) Unified Modeling Language b) Uniform Modeling Language  
c) Universal Modeling Language d) Unique Modeling Language
2. Which of the following UML diagrams has a static view?  
a) Activity b) Use case c) State Chart d) Collaboration
3. Use cases -----  
a) Describe Flow b) Identify System Goals  
c) Identify Business Process d) prioritize System Procedures
4. Simple name in UML Class and Objects consist of  
a) Letter b) Punctuation c) Digits d) All of the above
5. How many diagrams are there in UML.  
a) 5 b) 6 c) 8 d) 9
6. Which of the following is not a UML Diagram?  
a) Class Diagram b) Object Diagram c) Interface Diagram d) Use Case Model
7. ----- Diagram is Time Oriented.  
a) Activity b) Sequence c) Collaboration d) Both A & B
8. An Operation can be described -----  
a) Class b) Object c) Function d) Both A & B
9. Interaction diagram is a combined term for ----  
a) Activity Diagram + State chart Diagram b) Sequence Diagram + Collaboration  
c) Deployment Diagram + Collaboration d) None of these
10. Which symbol is used to represent Protected Visibility in UML ?  
A) + B) # C) % D) \*

PART-B

(2\*5=10)

ANSWER ALL THE QUESTIONS

- 11) Define UML. Explain its Goal.  
12) Explain Validation & Verification.

PART-C

(3\*10=30)

ANSWER ANYTHREE QUESTIONS

13. Explain in detail about Object Orientation.  
14. What are the various types of OOAD Methodologies?  
15. How to find the Actors and their goals.  
16. Explain about use case Relationship.

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TRINITY COLLEGE FOR WOMENS, NAMAKKAL  
MIDTERM EXAMINATIONS  
PHP SCRIPTING LANGUAGE

CLASS: III-B.sc(CS)  
PAPER CODE: 19UCSS04  
DATE: 25.04.22

TIME: 2-HOURS  
MAXIMUM: 50 MARKS

SECTION-A

(10x1=10)

Answer ALL the questions

1. 1. PHP stands for – a. Hypertext Preprocessor b. Pretext Hypertext Preprocessor.  
Personal Home Processord. None of the above
2. Variable name in PHP starts with – a. ! (Exclamation) b. \$ (Dollar) c. &  
(Ampersand) d. # (Hash)
3. Which of the following is the default file extension of PHP? a. Php b. hphp c. xml  
d. .html
4. Which of the following is not a variable scope in PHP? a. Extern b. Local c. Static  
d. Global
5. Which of the following is correct to add a comment in php? a. & ..... &b // c. /\* .....  
\*/ d. Both (b) and (c)
6. Which of the following is used to display the output in PHP? a. echo b. write c. print  
d. Both (a) and (c)
7. Which of the following is the use of strlen() function in PHP?
  - a. The strlen() function returns the type of string
  - b. The strlen() function returns the length of string
  - c. The strlen() function returns the value of string
  - d. The strlen() function returns both value and type of string
8. Which of the following is used for concatenation in PHP? a. \* b. \* c. (dot) d. append
9. Which of the following starts with \_\_ (double underscore) in PHP?
  - a. Inbuilt constants
  - b. User-defined constants
  - c. Magic constants
  - d. Default constants
10. Which of the following is the use of strpos() function in PHP?
  - a. The strpos() function is used to search for the spaces in a string
  - b. The strpos() function is used to search for a number in a string
  - c. The strpos() function is used to search for a character/text in a string
  - d. The strpos() function is used to search for a capital character in a string

SECTION-B (2x5=10)

Answer Any TWO the questions

11. Explain PHP code Cohabitation with ex
12. Explain Apache.
13. Explain Instruction terminator with example
14. Explain Commenting in PHP
15. Explain File modes

SECTION-C

(3x10=30)

Answer All the questions

16. a) Discuss about PHP Variables & Operators with example (OR) b) Explain about  
Environmental Variables with Example.
17. a) Explain PHP Platform Specification HTML Displaying with examples  
(OR) b) Describe about String Functions.
18. a) Explain How to send simple Feedback Form with suitable examples (OR) b)  
How to display Directory Content with suitable Examples.

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TRINITY COLLEGE FOR WOMEN, NAMAKKAL  
DEPARTMENT OF COMPUTER SCIENCE  
MID TERM EXAM- APRIL 2022

CLASS: II B.Sc (C.S) – A & B & II BCA

MAX.MARKS:50

SUBJECT: RELATIONAL DATABASE MANAGEMENT SYSTEMS

TIME : 2 HRS


P.CODE : 19UCS05 & 19UCA06

DATE: 25.4.22

PART-A (10X1=10)

Answer All the Questions.

- 1) A collection of interrelated records is called a  
a. Database    b. Spreadsheet    c. Management information system    d. Text file
- 2) Which of the following is generally used for performing tasks like creating the structure  
Of the relations, deleting relation?  
a. DML(Data Manipulation Language)    b. Query    c. Relational Schema  
d. DDL(Data Definition Language)
- 3) In general, a file is basically a collection of all related \_\_\_\_\_.  
a. Rows & Columns    b. Fields    c. Database    d. Records
- 4) Rows of a relation are known as the \_\_\_\_\_.  
a. Degree    b. Tuples    c. Entity    d. All of the above
- 5) Which of the following command is a type of Data Definition language command?  
a. Create    b. Update    c. Delete    d. Merge
- 6) In a relation database, every tuples divided into the fields are known as the \_\_\_\_\_.  
a. Queries    b. Domains    c. Relations    d. All of the above
- 7) Which one of the following commands is used to restore the database to the last committed state  
a. Save point    b. Rollback    c. Commit    d. Both A & B
- 8) The term "SQL" stands for

  
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a. Standard query language b. Sequential query language c. Structured query language d. Server-side query language

9) What is the relation calculus?

a. It is a kind of procedural language b. It is a non-procedural language  
c. It is a high-level language d. It is Data Definition language

10) Which of the following keys is generally used to represent the relationships between the tables?

a. Primary key b. Foreign key c. Secondary key d. None of the above

### **PART-B (2X5=10)**

( Answer any TWO Questions)

11. Explain DBMS vs File system.

12. Explain views in SQL.

13. Explain E-R Diagram?

### **PART-C (3X10=30)**

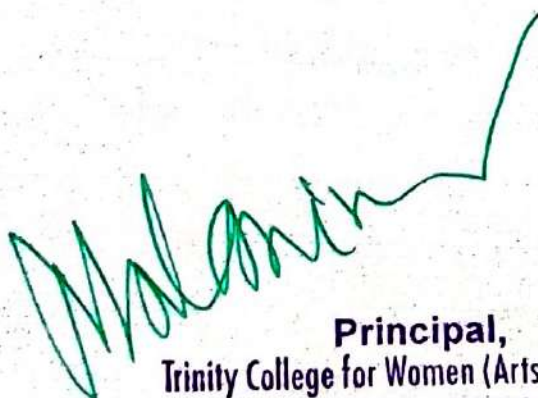
(Answer ANY THREE questions)

14. Explain different types of Data models ?

15. What is aggregate function? Give Eg.

16. Explain fundamental operations in relational algebra ?

17. Explain Basic SQL structure ? Give Eg.



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**TRINITY COLLEGE FOR WOMENS, NAMAKKAL**  
**MIDTERM EXAMINATIONS**  
**COMPUTER ORGANIZATION AND ARCHITECTURE**

CLASS: I BSc (CS) / I BCA

TIME: 2-HOURS

PAPER CODE: 21UCS03 / 21UCA03

MAXIMUM: 50 MARKS

Date: 26.04.22  
**SECTION-A**

(10x1=10 marks)

Answer ALL the questions

Choose the best answer.

1. Which of the following format is used to store data?  
a. Decimal      b. Octal      c. Binary      d. Hexadecimal
2. Which of the following circuit is used to store one bit of data?  
a. Flip Flop      b. Decoder      c. Encoder      d. Register
3. The collection of 8-bits is called as  
a. Byte      b. Nibble      c. Word      d. Record
4. Analog signals are generally used for \_\_\_\_\_  
a. Large and non-linear      b. small and linear      c. Large and linear      d. small and non linear
5. The formula for frequency \_\_\_\_\_  
a)  $f=1/T$       b.  $f=t$       c.  $T=1/f$       e.  $F=tf$
6. A digital circuit designed to keep track of a number of events called as \_\_\_\_\_  
a. Flip-flop      b. Register      c. Counter      d. None of the above
7. An Arithmetic logic unit (ALU) is capable of performing \_\_\_\_\_  
a. arithmetic operation      b. Logic Operations      c. Both a and b      d. None of the above
8. A \_\_\_\_\_ gate gives the output as 1 only if all the inputs signals are 1  
a. AND      b. OR      c. EXOR      d. NOR
9. In Boolean laws  $A+A.B =$  \_\_\_\_\_  
a. 1      b.  $A^1$       c. A      d. 0
10. The group of eight 1's is called \_\_\_\_\_  
a. Octet      b. Quads      c. Pairs      d. None of the above

**SECTION-B**

(2x5=10 marks)

Answer Any TWO the questions

11. Explain about Voltage levels in Digital Waveforms
12. Explain about basic gates AND, OR and NOT with suitable truth table and diagram.
13. Discuss about multiplexer and Demultiplexer

**SECTION-C**

(3x10=30 marks)

Answer Any THREE the questions

- 14 a) Discuss about Digital Operations in detail. (OR)  
b) Explain about basic Computer Architecture.
15. a) i) Draw a Gate diagram for  $Q = A.B.C + A.B.C + A.B.C + A.B.C$   
ii) Explain about basic gates NAND and NOR with suitable truth table and diagram (OR)  
b) Describe about moving and storing digital information
16. a) Solve the K-map problem for sum of Product given below  
 $F(A,B,C,D) = \sum m(0,1,3,4,5,7,12,13,15)$   
(OR)  
b) Solve the K-map problem for sum of Product given below  
 $F(A,B,C,D) = \sum m(1,4,6,9,10,11,14,15)$

  
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**TRINITY COLLEGE FOR WOMEN, NAMAKKAL**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**MID TERM EXAMINATIONS-APRIL 2022**

CLASS: I-M.Sc. (CS)      MAX.MARKS: 50

SUBJECT: Advanced Web Technology

P.CODE:      DATE: 20.04.2022

**PART-A (1X10=10)**

**I. ANSWER THE FOLLOWING QUESTIONS**

1. Dot Net Framework consists of

- a. Common language runtime      b. Set of class libraries
- c. Common language runtime and set of class libraries
- d. All the Above

2. C# and Visual Basic .NET belong to this type of programming language.

- a. Assembly language      b. Machine language
- c. High level programming language      d. Object oriented programming language

3. This view is not present in VB.NET

- a. Project Explorer      b. Class View      c. Resource View
- d. Server Explorer

4. ASP stands for?

- a. Active Server Pages      b. Access Server Pages
- c. Active Server Platform      d. Active Server Programming

5. ASP.NET is?


- a. client side technologies      b. server side technologies
- c. Both A and B      d. None of the above

6. Attribute must be set on a validator control for the validation to work

- a. Control To Validate      b. Control To Bind      c. Validate Control
- d. Validate

7. Which of the following control is used to validate that two fields are equal?

- a. Regular Expression Validator      b. Compare Validator
- c. equals() method      d. Required Field Validator

  
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8. Which is the String method used to compare two strings with each other ?

- a. Compare To ()      b. Compare ()      c. Copy ()  
d. ConCat()

9. Web.config file is used...

- a. Configures the time that the server-side code behind module is called  
b. To store the global information and variable definitions for the application  
c. To configure the web server      d. To configure the web browser

10. Which of the following tool is used to manage the GAC?

- a. RegSvr.exe      b. GacUtil.exe      c. GacSvr32.exe  
d. GacMgr.exe

### PART -B

ANSWER ANY 2 QUESTIONS

2x5=10

11. Explain about Architecture of .Net Frame work.  
12. Explain about Date Time and Time Span objects.  
13. Discuss about Classes and its concepts.

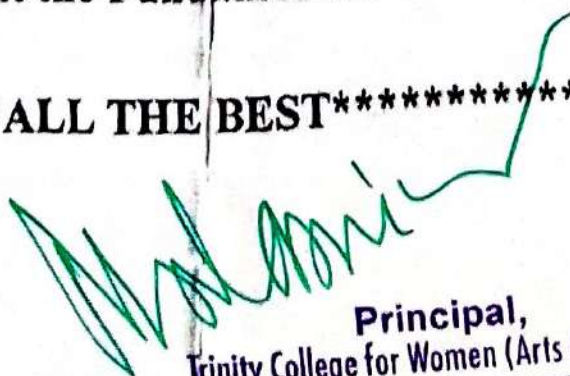
### PART-C

ANSWER ALL THE QUESTIONS

3x10=30

14. a. Write notes on Data types in .Net (OR)  
b. Discuss about the Conditional structures and Loop structures in .Net.  
15. a. Discuss about the Namespaces and Assemblies (OR)  
b. Discuss about functions and subroutines.  
16. a. Explain about the Applications of ASP.net. (OR)  
b. Write about the Fundamentals of Webforms.

\*\*\*\*\*ALL THE BEST\*\*\*\*\*



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**TRINITY COLLEGE FOR WOMEN, NAMAKKAL**  
**MID-TERM EXAMINATION - APRIL - 2022**  
**Advanced Data Base Management System**  
**I M.Sc(cs) (II SEMESTER)**

Paper Code:

Date: 23/04/2022

Marks: 50

Time: 2 HRS

**PART - A**

10\*1=10

**Answer All The Questions**

1. Which type of data can be stored in the database?

- a) Image oriented data   b) Text, files containing data  
c) Data in the form of audio or video   d) All of the above

2. Which of the following is not a type of database?

- a) Hierarchical   b) Network   c) Distributed   d) Decentralized

3. Which of the following is not an example of DBMS?

- a) MySQL   b) Microsoft Access   c) IBM DB2   d) Google

4. Which of the following is not a function of the database?

- a) Managing stored data   b) Manipulating data  
c) Security for stored data   d) Analysing code

5. Which of the following is a component of the DBMS?

- a) Data   b) Data Languages   c) Data Manager   d) All of the above


6. Which one of the following given statements possibly contains the error?

- a.     select \* from emp where empid = 10003;  
b.     select empid from emp where empid = 10006;  
c.     select empid from emp;  
d.     select empid where empid = 1009 and Lastname = 'GELLER';

7. In the following Query, which of the following can be placed in the Query's blank portion to display the salary from highest to lowest amount, and sorting the employees name alphabetically?

1. **SELECT \* FROM instructor ORDER BY salary \_\_, name \_\_;**

- a. Ascending, Descending  
b. Asc, Desc  
c. Desc, Asc  
d. All of the above

  
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8. A Database Management System is a type of \_\_\_\_\_ software.

- a. It is a type of system software
- b. It is a kind of application software
- c. It is a kind of general software
- d. Both A and C

9. A huge collection of the information or data accumulated from several different sources is known as \_\_\_\_\_:

- a. Data Management
- b. Data Mining
- c. Data Warehouse
- d. Both B and C

10. Which one of the following refers to the "data about data"?

- a. Directory
- b. Sub Data
- c. Warehouse
- d. Meta Data

**PART-B**

2\*5=10

**Answer All The Questions**

11. (a) Explain Basics of Parallel Database Design. (Or)  
(b) Give details about data Query Processing.

12. (a) Explain the Distributed data Transaction. (Or)  
(b) Explain about table Inheritance.

**PART-C**

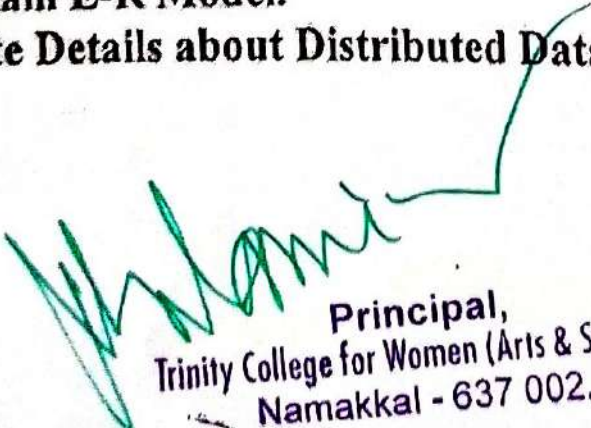
3\*10=30

**Answer Any Two Questions**

13. Describe about Normalization with example.

14. Explain E-R Model.

15. Write Details about Distributed Database Architecture Types.

  
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**DEPARTMENT OF COMPUTER SCIENCE**  
**MODEL EXAMINATION-MAY 2022**  
**III BSC CS A & B**  
**PROGRAMMING IN JAVA**

**DATE :**

**PAPERCODE : 19UCS09**

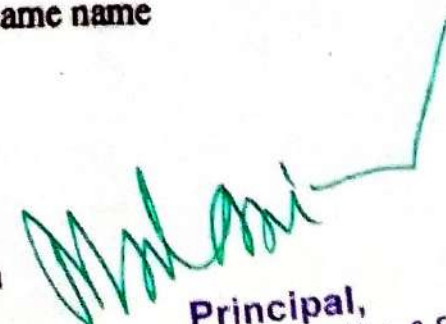
**TIME : 3 HRS**

**MARKS : 75**

**(15\*1=15)**

**PART A [Answer All The Questions]**

1. Who invented Java Programming?  
a) Guido van Rossum b) James Gosling c) Dennis Ritchie d) Bjarne Stroustrup
2. Which component is used to compile, debug and execute the java programs?  
a) JRE b) JIT c) JDK d) JVM
3. Which one of the following is not a Java feature?  
a) Object-oriented b) Use of pointers c) Portable d) Dynamic and Extensible
4. What is the extension of java code files?  
a) .js b) .txt c) .class d) .java
5. Which keyword is used for accessing the features of a package?  
a) Package b) import c) extends d) export
6. How many threads can be executed at a time?  
a) Only one thread b) Multiple threads c) Only main (main() ) thread d) Two threads
7. Which one of the following is not an access modifier?  
a) Protected b) Void c) Public d) Private
8. Which method can we use in an applet to output a string?  
a) transient() b) drawString() c) print() d) display()
9. Which exception is thrown when java is out of memory?  
a) MemoryError b) OutOfMemoryError  
c) MemoryOutOfBoundsException d) MemoryFullException
10. Which of these are selection statements in Java?  
a) break b) continue c) for() d) if()
11. Which of the following is a superclass of every class in Java?  
a) ArrayList b) Abstract class c) Object class d) String
12. Which of these keywords are used for the block to be examined for exceptions?  
a) check b) throw c) catch d) try
13. What is the numerical range of a char data type in Java?  
a) 0 to 256 b) -128 to 127 c) 0 to 65535 d) 0 to 32767
14. What is not the use of "this" keyword in Java?  
a) Referring to the instance variable when a local variable has the same name  
b) Passing itself to the method of the same class  
c) Passing itself to another method  
d) Calling another constructor in constructor chaining
15. Which of the following is not an OOPS concept in Java?  
a) Polymorphism b) Inheritance c) Compilation d) Encapsulation

  
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**PART B [Answer Any Two Questions] (2\*5=10)**

16. Explain different data Types in java.
17. Discuss about Class and its member in Java.
18. Explain about Interface with an Example.
19. Discuss about Thread Priority.
20. Write a program to draw Bar Chart in Java.

**PART C [Answer All The Questions] (5\*10=50)**

- 21a). Explain different types of Operators in Java. (or)  
b) What is an Operator. Explain the various types of Operators in detail.
- 22a) Describe the various Conditional Control Statements with suitable example. (or)  
b) Define Constructor. Explain the different types of Constructor with an example.
- 23a) Write a program to create Packages in Java. (or)  
b) Explain in detail about Polymorphism with an example program.
- 24a) What is an Applet? Discuss the attributes in Applet tag. (or)  
b) Discuss about Applet Life Cycle in Java.
- 25a) Discuss the Random Access File with an Example Program. (or)  
b) Write a program to draw various Shapes in Graphics Class.

\*\*\*\*\*Do Well\*\*\*\*\*



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**TRINITY COLLEGE FOR WOMEN, NAMAKKAL**  
**MODE EXAM-MAY 2022**  
**III B.Sc. [CS] (A & B)**  
**UNIFIED MODELING LANGUAGE**

**DATE: 21.5.2022**  
**PAPERCODE:19UCSE05**


**TIME: 3 HRS**  
**MARKS: 75**

**PART-A**

**(15\*1=15)**

**ANSWER ALL THE QUESTIONS**

1. Constraint can be represented in UML by  
a) {text} b)[text] c) Constraint d)None of these
2. UML Interface are used to  
a) Specify required services for types of object b) Program in java, but not in c++  
c) Define an API for all classes d) Define executable logic to reuse across classes.
3. Which among these are the common notations for deployment diagrams?  
a) Artifacts and nodes b) Stereotype c) Component d) All of the above
4. What does a deployment diagram consist of?  
a) Computational resources b) Communication path between resource  
c) Artifacts that execute resource d) All of the above
5. Which of the following are the valid relation in use case Diagrams?  
a) Generalization b) Include c)External d) All of the above
6. At Conceptual level class diagrams should include  
a) Operation only b) Attributes only c)Both A & B d) None of the above
7. What is Interaction Diagram?  
a) Interaction Diagrams are the UML Notations for Dynamic Modeling.  
b) Interaction Diagrams are central focus of Engineering Design.  
c) All of the Above d) None of the above.
8. What are the three different types of message arrows?  
a) Synchronous, Asynchronous, Asynchronous with certain  
b) Self,Multiplaid,Instance Generator  
c) Synchronous, Asynchronous, synchronous with instance Creation  
d) None of the above.
9. Which of the following UML Diagrams has a Static view  
a) Activity b) Use case c) State Chart d) Collaboration
10. Simple Name in UML Class & Objects consists of \_\_\_\_\_  
a) Letters b) Punctuation c) Digits d) All of the above
11. Which of the following is not a UML Diagram?  
a) Class Diagram b) Object Diagram c) Interface Diagram d) Use case Model
12. An Operation can be described \_\_\_\_  
a) Class b)Object c) Functions d) Both A & B
13. UML Stands for \_\_\_\_\_  
a) Unified Modeling Language b) Uniform Modeling Language c) Universal Modeling Language d) Unique Modeling Language

  
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14. How many diagrams are there in UML?

a) 5 b) 6 c) 8 d) 9

15. Which symbol is used to represent protected Visibility in UML

a) + b) # c) % d) \*

**PART-B**

(2\*5=10)

**ANSWER ANY TWO QUESTIONS**

16. Write about the Goals of UML.

17. Write a Short note on Visibility of Attributes & Operations.

18. Write in detail about Recursion with Diagrams.

19. Draw a Activity Diagram for Update user Record?

20. Explain Deployment Diagrams.

**PART-C**

(5\*10=50)

**ANSWER ANYTHREE QUESTIONS**

21. Explain in detail about OOAD Methodologies. (OR)

Write in detail about Actors and their Goals.

22. Explain briefly about Association (OR)

Explain in detail about Packages and Grouping of Classes.

23. List down the detail about Interaction Diagrams.(OR)

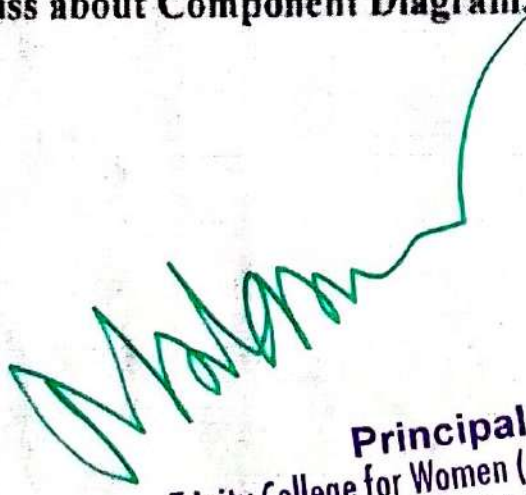
Discuss about Communication Diagram.

24. Explain about Activity Diagram. (OR)

Draw Activity Diagram for Registering the Student.

25. Explain about Subsystem. (OR)

Discuss about Component Diagram.



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DEPARTMENT OF COMPUTER SCIENCE

PRE UNIVERSITY EXAMINATION MAY 2022

RELATIONAL DATABASE MANAGEMENT SYSTEMS

CLASS: II BCA & II BSC(CS) 'A' & 'B'

Time : 3 hrs

Paper Code: 19UCS05, 19UCA06

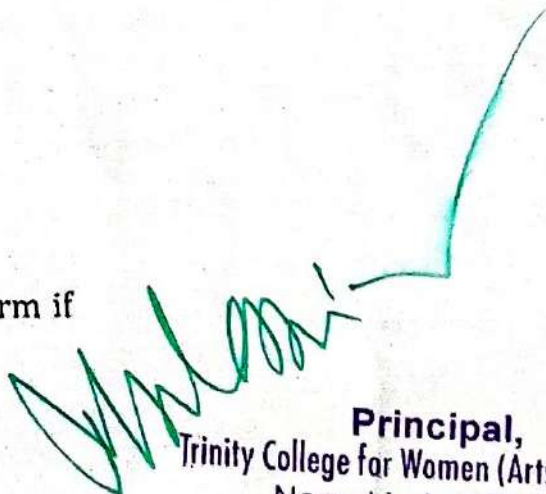
Maximum : 75 marks

Date: 24.05.2022

PART A — (15 × 1 = 15 marks)

Answer ALL questions

1. Model uses a collection of tables to represent data and the relationships among those data.  
(a) E-R  
(b) Relational  
(c) Object-Based Data  
(d) Semi structured Data
2. Which is the logical design of database?  
(a) Schema  
(b) Entity  
(c) Relation  
(d) Attributes
3. Set of permitted values are called -----  
(a) Null  
(b) Data  
(c) Field  
(d) Domain
4. Expand DDL  
(a) Data Definition Language  
(b) Data Design Language  
(c) Domain Definition Language  
(d) Dual Definition Language
5. ----- Function takes a collection of value as input and return a single value  
(a) Date  
(b) Ceil  
(c) Aggregate  
(d) Time
6. SQL allows programs to construct and submit SQL queries at run time is known as -----  
(a) Static SQL  
(b) Dynamic SQL  
(c) Nested SQL  
(d) None
7. ----- is used to maintain Accuracy and consistency of data in the table.  
(a) Lock  
(b) Tuple  
(c) Integrity  
(d) Domain
8. What is a predicate expressing a condition?  
(a) Role  
(b) Trigger  
(c) View  
(d) Assertion
9. ----- is a privilege provided by the Database Administrator  
(a) Authorization  
(b) Security  
(c) Rule  
(d) SQL
10. A relation schema R is in ----- normal form if the domain of all attributes of R are atomic.  
(a) Second  
(b) Third  
(c) First  
(d) SQL
11. Full form of BCNF  
(a) Boyce Codd Normal Function



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- (b) Boyce Codd Neutral Form  
 (c) Boyce Codd Normal Form  
 (d) Boyce Codd Natural Form
12. The process of taking a normalized schema and making it nonnormalized is called -----  
 (a) Procedure (b) Denormalization  
 (c) Normalization (d) Function
13. A ----- is a unit of program execution that accesses and updates various data items.  
 (a) Transaction (b) Protocol  
 (c) Queries (d) Function
14. Each transaction in the system follow a set of rules, called a -----  
 (a) Graph (b) Commit  
 (c) Roll Back (d) Locking Protocol
15. A ----- is a condition where two or more transactions are waiting indefinitely for one another to give up locks.  
 (a) Grant  
 (b) Revoke  
 (c) Dead lock  
 (d) Protocol

**PART B — (2 × 5 = 10 marks)**

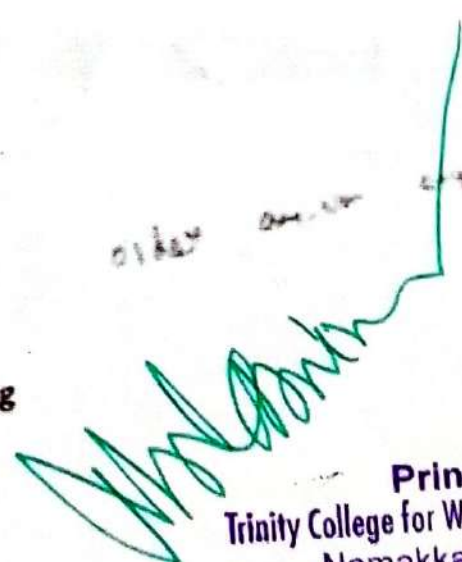
Answer any TWO questions out of FIVE

16. Write the Entity-Relationship Diagrams.
17. List down the Basic Domain Types with an example.
18. Discuss about Referential integrity.
19. Explain Third Normal Form with suitable example.
20. Describe Transaction State.

**PART C — (5 × 10 = 50 marks)**

Answer ALL questions

21. (a) Explain the following :  
 (i) Database Schema  
 (ii) Keys. Or  
 (b) Discuss about various types of Data Model.
22. (a) Briefly explain SELECT clause, WHERE clause and FROM clause. Or  
 (b) Elaborate Nested Sub queries.
23. (a) What is Trigger? Explain it briefly. Or  
 (b) Elucidate about Encryption in SQL.
24. (a) Write about Multivalued Dependencies and explain. Or  
 (b) Brief note on 1NF and 2 NF.
25. (a) Explicate about Timestamp Ordering Protocol. Or  
 (b) Discuss in detail about Deadlock Detection and Recovery.



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TRINITY COLLEGE FOR WOMEN, NAMAKKAL  
DEPARTMENT OF COMPUTER SCIENCE  
PRE UNIVERSITY EXAM

COMPUTER ORGANIZATION AND ARCHITECTURE

DATE : 26.05.2022

TIME : 3.00hrs

COURSE : I B.SC CS/I B.C.A

PAPER CODE: 21UCS03/21UCA03

MARKS : 75

PART-A

1\*15=15

Answer all the questions

1. Analog signals are \_\_\_\_\_.  
a) Discrete b) Continuous c) line d) numbers
2. Four Flip-flop counter counts decimal number \_\_\_\_\_.  
a) 0 to 3 b) 0 to 7 c) 0 to 15 d) 0 to 31
3. The Large Scale Integration (LSI) has \_\_\_\_\_ number of gates.  
a) 10 to 12 gates b) more than 12 to 100 gates c) more than 100 to 1000 gates  
d) more than 1000 gates.
4. A digital circuit having one or more input signals but only one output signal is called \_\_\_\_\_.  
a) Multiplexer b) Encoder c) Decoder d) Gates.
5. A system in which H=1 and L=0 is \_\_\_\_\_ logic.  
a) Negative b) Positive c) AND d) OR.
6. In OR Gate two inputs A=1 and B=0 generate \_\_\_\_\_ output.  
a) 0 b) 1 c) x d) 1
7. In the following which one is called as a universal gate.  
a) AND b) OR c) NOT d) NAND
8. In Boolean Laws  $A + (B \cdot C) =$  \_\_\_\_\_.  
a)  $A + B \cdot C$  b)  $AB + C$  c)  $(A + B) + C$  d)  $ABC$
9. How many fundamental products (minterms) are there for two variables.  
a) 4 b) 8 c) 16 d) 32
10. On Karnaugh map, an Octet contains how many 1's?  
a) 2 b) 4 c) 8 d) 1
11. On a Karnaugh map two adjacent 1's are called a \_\_\_\_\_.  
a) Quad b) Pair c) Octet d) minterms.
12. Binary Number system use \_\_\_\_\_ digits.  
a) 8 digits b) 10 digits c) 2 digits d) 16 digits
13. What is the decimal equivalent of 10010?  
a) 39 b) 38 c) 37 d) 36
14. The Octal number base \_\_\_\_\_.  
a) 2 b) 10 c) 8 d) 16
15. When is the output of an exclusive OR gate high?  
a. Odd number of inputs is high. b) Even number of number input is high  
b. Anyone of the input is high d) Anyone of the input is low

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**PART-B**

**Answer any two questions:**

**2\*5=10**

- ✓16. Explain about basic gates-NOT,OR,AND.  
✓17. What is pairs, Quads and Octets in Karnaughmap?  
18. Convert the following binary number to decimal number in streamline method.  
a)10101 b)110.001  
19. What is the use of Adder-Subtractor? Explain in detail.  
20. Explain different types of registers.

**PART-C**

**Answer All questions**

**5\*10=50**

- 21.a)Explain in detail about Digital Operations. (Or)  
b)What is Digital logic? Explain in detail.  
22. a) Explain about Sum-of -Product method (Or)  
b)Explain about Karnaugh map with examples.  
23.a)Explain about hexadecimal number system.  
Convert this hexadecimal to binary number i)9AF ii)C5E2  
And convert Binary to hexadecimal numbers iii) 10001100 iv) 111010001101

Or

- b) Write the Four rules for binary addition and subtraction.  
i) Add these 8-bit numbers 0101 0111 and 0011 0101 then show this number to hexadecimal notation.

ii) Show the binary subtraction of 12510 from 20010

24. a)Explain in detail about arithmetic and logic unit.

Or

b)What is FLIPFLOP? Explain the following FLIPFLOPS

i)RS-FLIP FLOP ii)Edge-triggered/JK-FLIPFLOPS

25. a) Elaborately explain about optical memory.

Or

b)Explain different types of memories in detail.

  
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TRINITY COLLEGE FOR WOMEN, NAMAKKAL  
DEPARTMENT OF COMPUTER SCIENCE  
MODEL EXAMINATION-MAY -2022  
I-M.SC(CS) DATA MINING


TIME : 3 Hrs  
MARKS: 75

DATE: 24.5.2022  
PAPER CODE:

(15\*1=15)

PART-A

1. What are the functions of Data Mining?  
a. Association and correctional analysis classification b. Prediction and characterization c. Cluster analysis and Evolution analysis d. All of the above
2. In data mining, how many categories of functions are included?  
a. 5 b. 4 c. 2 d. 3
3. Which of the following is an essential process in which the intelligent methods are applied to extract data patterns?  
a. Warehousing b. Data Mining c. Text Mining d. Data Selection
4. What is KDD in data mining?  
a. Knowledge Discovery Database b. Knowledge Discovery Data c. Knowledge Data definition. d. Knowledge data house
5. Which one of the following can be considered as the correct application of the data mining?  
a. Fraud detection b. Corporate Analysis & Risk management c. Management and market analysis d. All of the above
6. Which of the following also used as the first step in the knowledge discovery process?  
a. Data selection b. Data cleaning c. Data transformation d. Data integration
7. The primary use of data cleaning is  
a. Removing the noisy data b. Correction of the data inconsistencies c. Transformations d. None of above
8. Which one of the following refers to querying the unstructured textual data?  
a. Information access b. information update c. Information retrieval d. Information manipulation
9. Which one of the clustering technique needs the merging approach?  
a. Partitioned b. Naïve Bayes c. Hierarchical d. Both A and C
10. \_\_\_\_\_ must be considered before investing in data mining.  
a. Functionality b. Compatibility c. Both (a) and (b) d. None of the above
11. The classification of the data mining system involves:  
a. Database technology b. Information Science c. Machine learning d. All of the above
12. The term "DMQL" stands for \_\_\_\_\_  
a. Data Marts Query Language b. DBMiner Query Language c. Data Mining Query Language d. None of the above
13. Which one of the following can be considered as the final output of the hierarchal type of clustering?  
a. A tree which displays how the close thing are to each other

  
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- b. Assignment of each point to clusters c. Finalize estimation of cluster centroids  
d. None of the above
14. Which one of the following correctly defines the term cluster?  
a. Group of similar objects b. Dissimilar objects c. Symbolic representation d. All of the above
15. Which one of the following correctly refers to the Class study in the data categorization?  
a. Final class b. Study class c. Target class d. Both A and C

(2\*5=10)

### **PART-B**

#### **Write any TWO Questions**

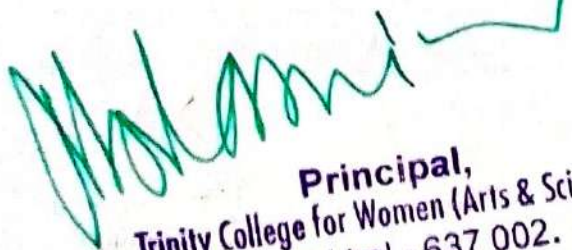
16. Define Data mining with its applications & Motivation.
17. Explain Multidimensional data model.
18. Notes on Bayesian classification.
19. Write about partitioning method in Cluster Analysis.
20. Write any 5 data mining applications.

### **PART-C**

#### **Answer All Questions**

(5\*10=50)

21. Discuss about Data Integration & Transformation. (OR) Write in detail about Data Cleaning.
22. Explain about Data Warehouse Architecture. (OR) Explain about i) OLAP ii) OLAM
23. Explain Rule based Classification. (OR) Detail about Apriori algorithm.
24. Explain briefly BIRCH algorithm. (OR) Explain briefly ROCK algorithm.
25. Explain about Text Mining (OR) Write briefly about trends in data mining.

  
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