

Register Number:

C-4051

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER-2021

(FOR AFFILIATED COLLEGES)

(COMPUTER SCIENCE)

(FIRST SEMESTER)

21PCSEC11 - RELATIONAL DATABASE MANAGEMENT SYSTEM

Time : 3 Hours

Maximum : 75 Marks

Part-B

Marks: 10X2 = 20

(Answer ALL questions)

1. Define any two Database System Applications.
2. What is meant by DML? Give an example.
3. Differentiate between database schema and database instance.
4. What is meant by natural join?
5. What is an Armstrong's axiom?
6. What is meant by functional dependency? Give an example.
7. What does magnetic disk mean?
8. What does RAID stand for?
9. What is meant by distributed database?
10. Define XML.

Part-B

Marks: 5 x 5 = 25

(Answer ALL questions)

11. a) Explain briefly about the Database design.
(or)
b) Describe about the Relational model.
12. a) Discuss in detail about Aggregate Functions.
(or)
b) Explain briefly about the Triggers.
13. a) Describe about the Functional Dependencies.
(or)
b) Write short notes on Multi valued dependency with example.
14. a) Explain in detail about the ACID property.
(or)
b) Write short notes on ordered indices with example.
15. a) Describe about the Heterogeneous database.
(or)
b) Explain about the types in SQL.

Part - C**Marks: 3 x 10 = 30****(Answer Any Three questions)**

16. Discuss about the Network model.
17. Explain about the Relational algebra.
18. Discuss in detail about the normalization with example.
19. Describe about the Indexing and Hashing.
20. Explain in detail about the Concurrency control.

Register Number:

C-4052

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER-2021

(FOR AFFILIATED COLLEGES)

(COMPUTER SCIENCE)

(FIRST SEMESTER)

21PCSEC12 - ENTERPRISE JAVA PROGRAMMING

Time : 3 Hours

Maximum : 75 Marks

SECTION – A

(10 × 2 = 20)

Answer ALL questions

1. Define an Applet.
2. What are the different types of controls in AWT?
3. Define a Socket.
4. Differentiate TCP and UDP.
5. What is meant by a Java Collection Framework?
6. State the advantages of Java Design Patterns.
7. What is a Servlet?
8. What do you mean by cookies?
9. State the different types of selectors in jQuery.
10. What do you mean by AJAX?

SECTION – B

(5 × 5 = 25)

Answer ALL questions

11. a) Explain the Life cycle of an Applet.
(OR)
b) Distinguish an Applet and a Java Application.
12. a) Explain the Components of JDBC.
(OR)
b) Explain the advantages and disadvantages of Java Sockets?
13. a) Explain the collection hierarchy in Java.
(OR)
b) Distinguish server-side and client-side Programming
14. a) Distinguish Servlet and JSP

(OR)

b) Explain the advantages and disadvantages of Servlets.

15. a) Explain session management.

(OR)

b) Write short notes on cookies and its uses.

SECTION – C

(3 × 10 = 30)

Answer any THREE questions

16 Explain the steps involved in developing Applet programs with example.

17. Describe Java Networking.

18. Explain with description the methods of collection interface.

19 Distinguish Applets with Servlets.

20. Describe the Servlet Architecture.

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Register Number:

C-4053

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER-2021

(FOR AFFILIATED COLLEGES)

(COMPUTER SCIENCE)

(FIRST SEMESTER)

21PCSEC13- PROGRAMMING USING C#.NET

Time : 3 Hours

Maximum : 75 Marks

SECTION – A

(10 × 2 = 20)

Answer ALL questions

1. What is C#?
2. State the types of comment in C#.
3. How to make a combo box read only?
4. How to detect keys pressed in C#?
5. What is meant by multicast delegate?
6. What do you mean by an event?
7. What is meant by unstarted state?
8. What do you mean by Thread Safety Singleton?
9. What is connection string?
10. What is ADO.net?

SECTION – B

(5 × 5 = 25)

Answer ALL questions

11. a) Differentiate public, static, and void?
(OR)
b) Explain sealed classes in C#.
12. a) Write short notes on passing data between forms.
(OR)
b) Explain about the enumerated button types message box.
13. a) Write down the need of delegates.
(OR)
b) Discuss about Anonymous Methods.
14. a) Describe the reasons for not runnable state.
(OR)
b) Explain the advantages and disadvantages of singleton design pattern.
15. a) Write a short note on Detail Connection pools.

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(OR)

- b) Discuss the purpose of Data Adapter.

SECTION – C

(3 × 10 = 30)

*Answer any **THREE** questions*

- 16 Explain the difference between Array and Array list with example.
17. Describe how to print a Document in C#?
18. Discuss about Event Handler in C#.
- 19 Explain interfaces support System. Reflection name space.
20. Describe the fundamentals of database connectivity in C#.

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Register Number:

C-4054

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER-2021

(FOR AFFILIATED COLLEGES)

(COMPUTER SCIENCE)

(FIRST SEMESTER)

21PCSEE14 -1. COMPUTER ORGANIZATION

Time : 3 Hours

Maximum : 75 Marks

SECTION – A

(10 × 2 = 20)

Answer ALL questions

1. Define MBR.
2. What are the symbols in program sequencing and control?
3. What are the rules for assembly language?
4. What is meant by program loop?
5. Define micro programmed control.
6. What is control word?
7. What are the three types of CPU organizations?
8. Define zero-address instruction.
9. What is meant by SIMD?
10. What is an Arithmetic pipeline?

SECTION – B

(5 × 5 = 25)

Answer ALL questions

11. a) Explain about the computer instructions.
(OR)
b) Write short notes on instruction cycle.
12. a) Describe about the first pass assembler.
(OR)
b) Explain about the subroutines.
13. a) Describe about the control memory.
(OR)
b) Write short notes on Address Sequencing.
14. a) Describe about the Register indirect mode.
(OR)
b) Explain about the Logical and Bit Manipulation Instructions.
15. a) Explain about the parallel processing.
(OR)

b) Write short notes on Instruction Pipeline.

SECTION – C

(3 × 10 = 30)

Answer any THREE questions

- 16 Describe about the Input-Output and Interrupts.
17. Explain about the Logic and Shift operations.
18. Discuss the Micro program example.
- 19 Explain the Stack organization.
20. Describe about the Flynn's classification.

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Register Number:

C-3060

Name of the Candidate:

M.A. DEGREE EXAMINATION, DECEMBER-2021

(FOR AFFILIATED COLLEGES)

(ENGLISH)

(FIRST SEMESTER)

21PENGO16-3 PUBLIC SPEAKING AND CREATIVE WRITING

Time : 3 Hours

Maximum : 75 Marks

SECTION – A

(10 × 2 = 20)

Answer ALL questions

1. Mention some of sources for finding novel Ideas.
2. What is lateral Thinking?
3. How will you analyse a poem?
4. State some of the literary devices .
5. What is non –fictional writing ?
6. What is 'Topic sentence 'in a paragraph ?
7. Give the definition for Short story.
8. State some of the basic elements of a short story.
9. What is screenplay ?
10. What are the literary techniques that are adopted in a screen play ?

SECTION – B

(5 × 5 = 25)

Answer ALL questions

- 11.(a). Write a short note on “Proof reading” .

(Or)

- (b) Write a paragraph on “Lateral Thinking”.

- 12.(a) Make a list of Literary Devices.

(Or)

- (b) How will you analyse a poetry.

- 13.(a).How will you write an Introduction ?

(Or)

- (b).Bring out the features of a paragraph.

14. (a) Write a short note on the Basic Elements of writing.

(Or)

- (b).Write a paragraph on Pre-Writing.

- 15.(a).Write a short note on Literary Techniques.

(Or)

(b). Write a paragraph on Evaluation Pattern.

SECTION – C

(3 × 10 = 30)

Answer any THREE questions

16. Bring out the importance of Writing as a Skill.
17. Enumerate the challenges in writing a Poem.
18. Explain the four types of Non-Fictional Writings.
19. What are the steps for writing a short story?
20. What are the five elements of a screenplay?

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M.Sc (CS)

Register Number:

C-9101

Name of the Candidate:

M Sc.DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

(NEW REGULATION 2022 ONWARDS)

COMPUTER SCIENCE

FIRST YEAR - FIRST SEMESTER

22PCSCC11 DESIGN AND ANALYSIS OF ALGORITHMS

Time : 3 Hours

Maximum : 75 Marks

10 x 2 = 20 Marks

PART - A

Answer All Questions

1. Define Space Complexity
2. What is Binary Tree?
3. List out some example of divide and conquer methods.
4. What is the use of Quick sort?
5. Give some application of Binary trees.
6. What is Spanning tree?
7. Define Multistage graph.
8. What is String editing?
9. Define Back tracking.
10. What do you mean Hamiltonian cycles?

PART - B

5 x 5 = 25 Marks

Answer All Questions

11. a) Write short notes on Time complexity with an example.

[OR]

- b) Explain in detail about Union and find operation in sets with Example.

12. a) Write down the Merge sort algorithm and explain it with Example.

[OR]

- b) Discuss in detail about Strassen's matrix multiplication algorithm with example.

13. a) Illustrate in detail about Tree vertex splitting algorithm with example.

[OR]

- b) Describe about the Single Source Shortest path.

14. a) Write short notes on post order traversal in graph with example.

[OR]

- b) Discuss in detail about the Optimal Binary search tree with example.

15. a) Explain in detail about the sum of subsets with example.

[OR]

- b) Write short notes on Cost search algorithm with example.

PART – C

Marks: 3 x 10 = 30

(Answer Any Three Questions)

16. Discuss in detail about insertion and deletion from Binary search tree with example
17. Describe in detail about finding the maximum and minimum with example.
18. Explain in detail about Kruskal algorithm of Minimum cost spanning tree with example..
19. Narrate the concept of Techniques for graph with example.
20. Summarize in detail about the back tracking solution to the 0/1 knapsack problem.
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Register Number:

C-9103

Name of the Candidate:

M.Sc DEGREE EXAMINATION, DECEMBER - 2022

(FOR AFFILIATED COLLEGES)

(NEW REGULATION 2022 ONWARDS)

COMPUTER SCIENCE

FIRST YEAR - I SEMESTER

22PINTC12/22PCSCC13 ADVANCED DATABASE MANAGEMENT SYSTEM

(Common with M.Sc. IT)

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20 Marks

Answer All Questions

1. Write the general format of tuple relational calculus.
2. What is meant by determinant and dependent of FD?
3. Why the BCNF is stronger than 3NF?
4. What is the purpose of view in SQL?
5. What is meant by pipelining evaluation?
6. What is the major difference between hash-join and merge join?
7. What is the lock point of transaction?
8. What is meant by optimistic concurrency control?
9. What is the purpose of DTD?
10. What are the two recovery procedure?

PART - B

5 x 5 = 25 Marks

Answer All Questions

11. a) Explain the inference rules of functional dependency.
(OR)
b) Write short note on domain relational calculus.
12. a) Explain the non-loss decomposition with an example.
(OR)
b) Explain the basic constraints in SQL.
13. a) Explain the distinction between serial schedule and serializable schedule.
(OR)
b) Explain the concept of hash join.

13. a) What are the stages involved in an Applet Life Cycle? Write a program for the same.

[OR]

- b) Write an applet program using Graphics class methods.
14. a) Explain the life cycle of a Servlet with a program

[OR]

- b) What is difference between GenericServlet and HttpServlet?
15. a) Explain Swing features and any five swing components.

[OR]

- b) What are the JDBC API components?

PART - C

3 x 10 = 30 Marks

(Answer Any Three Questions)

16. List down the various types of operators used in Java with a program
17. Explain in detail the various Built-In Exceptions with a program.
18. Give your views about Layout managers and explain with suitable programs any two Layouts.
19. What are the steps involved in JDBC/ODBC connectivity with a program.
20. Give a Brief note on RMI.
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Register Number:

C-9102

Name of the Candidate:

M.Sc.DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

(NEW REGULATION 2022 ONWARDS)

COMPUTER SCIENCE

FIRST YEAR - I SEMESTER

22PINTC13/22PCSCC12 -ADVANCED JAVA PROGRAMMING

(Common with M.Sc. IT)

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20 Marks

Answer All Questions

1. What are the rules for declaring a variable?
2. Why Java is platform independent?
3. What is multithreading in Java?
4. Define Class.
5. What is the purpose of Finalize method?
6. Write the syntax for Label.
7. What is JDBC Driver?
8. List the various AWT controls.
9. Expand the following : (a) RMI (b) JDBC
10. What is a Socket?

PART - B

5 x 5 = 25 Marks

Answer All Questions

11. a) Explain the basic concepts of Object Oriented Programming.

[OR]

- b) Write a Java program to check whether the person is eligible for voting using control statement.
12. a) Write a program to illustrate user defined error handling mechanism

[OR]

- b) With a suitable program brief about Array List and Linked List.

13. a) What are the stages involved in an Applet Life Cycle? Write a program for the same.

[OR]

- b) Write an applet program using Graphics class methods.
14. a) Explain the life cycle of a Servlet with a program

[OR]

- b) What is difference between GenericServlet and HttpServlet?
15. a) Explain Swing features and any five swing components.

[OR]

- b) What are the JDBC API components?

PART - C

3 x 10 = 30 Marks

(Answer Any Three Questions)

16. List down the various types of operators used in Java with a program
17. Explain in detail the various Built-In Exceptions with a program.
18. Give your views about Layout managers and explain with suitable programs any two Layouts.
19. What are the steps involved in JDBC/ODBC connectivity with a program.
20. Give a Brief note on RMI.
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Register Number:

C-9106

Name of the Candidate:

M.Sc.DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

(NEW REGULATION 2022 ONWARDS)

COMPUTER SCIENCE

FIRST YEAR - I SEMESTER

22PCSCE16-3 THEORY OF COMPUTATION

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20 Marks

Answer All Questions

1. What do you mean by induction method for proving theorems?
2. What are the two types of finite automata?
3. State closure property.
4. When will you say two languages are equivalent?
5. Define Parse Tree.
6. What do you mean by context free grammar?
7. What do you mean by Recursively Enumerable?
8. Give the normal form of CFG.
9. State recursion.
10. Define an undecidable problem

PART - B

5 x 5 = 25 Marks

Answer All Questions

11. a) Explain induction to normal proof.

[OR]

- b) Discuss about Non-Deterministic Finite Automata.

12. a) How to minimize automata?

[OR]

- b) Give the conversion between regular expression and finite automata.

13. a) Write down the Ambiguity in grammars and languages.

[OR]

- b) Explain the equivalence of Push down automata.

14. a) State and prove pumping lemma for CFL.

[OR]

- b) Write a short note on Turing machine.

15. a) Discuss Post's Correspondence Problem.

[OR]

- b) Explain about an undecidable problem about Turing machine.

PART - C

3 x 10 = 30 Marks

(Answer Any Three Questions)

16. How to convert NDFA from DFA?
 17. Write down the properties of regular languages.
 18. Explain Deterministic Push down Automata.
 19. Discuss the programming techniques for turing machine.
 20. Explain the classes P and NP.
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Register Number:

C-9107

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER -2022

(FOR AFFILIATED COLLEGES)

(NEW REGULATION 2022 ONWARDS)

COMPUTER SCIENCE

FIRST YEAR - I SEMESTER

22PINTO17-1/22PCSCO17-1 - FUNDAMENTALS OF COMPUTER APPLICATION

(Common with M.Sc. IT)

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20 Marks

Answer All Questions

1. What is Computer?
2. What is Information?
3. Give any FOUR examples of operating systems.
4. What is GUI?
5. What is MS-Word?
6. List any TWO formatting options used in Text.
7. What is Excel?
8. Define cell in the worksheet.
9. Name any FOUR types of presentation software.
10. Give any FOUR features of presentation software.

PART - B

5 x 5 = 25 Marks

Answer All Questions

11. a) Explain the various parts of a Desktop computer.

[OR]

- b) List and explain the applications of IECT.

12. a) Explain the rules for naming files in DOS.

[OR]

- b) Explain briefly the Desktop and its elements.

13. a) Explain any FIVE features of processing.

[OR]

- b) List and explain any TWO editing commands in MS-Word.

14. a) Explain the data types that can entered in Excel.

[OR]

- b) Explain the steps of printing a spreadsheet.

15. a) Explain the basics of Presentation software.

[OR]

- b) Explain the steps to create a slideshow in PowerPoint.

PART - C

Marks: 3 x 10 = 30

(Answer Any Three Questions)

- 16 List and explain any FIVE input devices used in computer.
17 List and explain any TEN DOS commands with examples.
18 Explain the steps to create a new document in MS-Word.
19 Explain the various elements of an Excel Window in detail.
20 Describe the presentation and preparation of slides in PowerPoint.
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Register Number:

C-4061

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

COMPUTER SCIENCE

FIRST YEAR - II SEMESTER

21PCSEC21 - ADVANCED ENTERPRISE JAVA PROGRAMMING

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20

Answer All Questions

1. List out any 5 convertDateTime Tag Attributes.
2. List out all the standard validator classes and the tags that allow you to use the validators from the page.
3. What is Struts Tiles?
4. List out the elements of the Tiles Definition configuration file.
5. Define Entity Bean.
6. What is a message-driven bean?
7. List out the three basic inheritance mapping strategies.
8. Mention the purpose of Order by clause with an example.
9. Define Bean Scoping.
10. What is Dependency Injection?

PART - B

5 x 5 = 25

Answer All Questions

11. a) Define JSP and explain the life cycle of JSP.
[OR]
b) Write short notes on Standard Validators.
12. a) Write down the six basic steps in using Struts.
[OR]
b) Write short notes on FormBeans in Struts.
13. a) Discuss on Session Bean.
[OR]
b) Illustrate Online Enterprise Bean Features.
14. a) Describe Component Mapping.
[OR]
b) Write short notes on Named SQL Queries.

15. a) Write short notes on Inversion of Control.

[OR]

- b) Discuss on Resource Integration.

PART - C

3 x 10 = 30

(Answer Any Three Questions)

16. Illustrate Java Beans components.
17. Explain Struts Tiles.
18. Describe Container-Managed Transactions.
19. Discuss on Association Mapping.
20. Explain AOP with Spring Framework.
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Register Number:

C-4063

Name of the Candidate:

**M.Sc. DEGREE EXAMINATION, DECEMBER 2022
(FOR AFFILIATED COLLEGES)**

COMPUTER SCIENCE

FIRST YEAR - II SEMESTER

21PCSEC23 - WEB APPLICATION USING C#.NET

Time : 3 Hours

Maximum : 75 Marks

Part - A

10 x 2 = 20 Marks

Answer All Questions

1. Define bin Directory.
2. Which tag is used for HTMLAnchor?
3. List out some control prefixes.
4. Write any two Validator Control?
5. What is mean by Encapsulation?
6. Define objects.
7. List out some Attributes for Design-Time Support.
8. Define User Controls.
9. Mention the types of SQL statements.
10. How will you Accessing the table from the Database?

PART - B

5 x 5 = 25

Answer All Questions

11. a) Mention some ASP.NET File Types. Explain
[OR]
b) Discuss about Improving Currency Converter.
12. a) Explain the Basic Web Control Class.
[OR]
b) Write a short note on Validation with an example.
13. a) Elucidate on Component Jargon.
[OR]
b) Write down the steps for Creating a simple component.
14. a) Describe the concept of Integrated User Controls with an example.
[OR]
b) Discuss about Consuming a Custom Control.

15. a) What are the steps to be followed for Selecting Multiple Tables? Explain.

[OR]

- b) Discuss about XML Validation.

PART - C

3 x 10 = 30

(Answer Any Three Questions)

16. Explain in detail about simple page applet with an example.
 17. Describe the concept of Rich Controls with an example.
 18. Explain the Simple Database Components with an example.
 19. Describe the concept of Deriving Custom Controls.
 20. Discuss about Updating Data with an example.
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Register Number:

C-4071

Name of the Candidate:

M Sc. DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

COMPUTER SCIENCE

SECOND YEAR - III SEMESTER

21PCSEC31 DISTRIBUTED OPERATING SYSTEM

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20

Answer All Questions

1. What are Operating System Services?
2. Explain Simple Batch System?
3. What are Pages and Frames?
4. What is Demand Paging?
5. What are necessary conditions for Deadlocks?
6. What is Access control?
7. Define Master-Slave Multiprocessors
8. Define Remote Procedure Call
9. Define Attackers.
10. Define Weak Passwords

PART - B

5 x 5 = 25

Answer All Questions

11. a) Differentiate between Process and Threads
[OR]
b) Define Thread and explain advantages of threads?
12. a) What is Virtual Memory? Mention its advantages
[OR]
b) Write short notes on Swapping
13. a) Explain about necessary conditions of Deadlock
[OR]
b) Write the Resource Allocation Algorithm for Dead lock?
14. a) Explain Disk structure in detail.
[OR]
b) Explain different Disk Scheduling Algorithms with example.

15. a) Explain Public-Key Cryptography

[OR]

- b) Write short note on Authentication

PART - C

3 x 10 = 30

(Answer Any Three Questions)

16. Explain the various Scheduling Algorithm with example.
17. Discuss the various page Replacement Algorithm with example.
18. What is Deadlock? Explain Deadlock Prevention in detail.
19. Write short note on i) Virtualization ii) Distributed systems.
20. Discuss about the various protation mechanism with example.
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Register Number:

C-4072

Name of the Candidate:

M Sc. DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

COMPUTER SCIENCE

SECOND YEAR - III SEMESTER

21PCSEC32 XML AND WEB SERVICES

Time : 3 Hours

Maximum : 75 Marks

10 x 2 = 20

PART - A

Answer All Questions

1. Define EDI
2. What is the use of XSL
3. Write the syntax for enum in JSON .
4. What is the use of Compare in JSON?
5. Give some examples of B2C.
6. Write down the problems with Business Modelling.
7. Write down the basic SOAP syntax.
8. Define SOAP fault element.
9. What is Supply Chain?
10. Define E-Commerce.

PART - B

Answer All Questions

5 x 5 = 25

11. a) Write short notes on DTD with example.
[OR]
b) Explain in detail about XML DOM with example.
12. a) List out the various Generic keywords and explain it with example.
[OR]
b) Discuss in detail about defining properties for JSON schema with example.
13. a) Illustrate in detail about conversation among web services.
[OR]
b) Describe about the Process Architectural view .
14. a) Write short notes on Soap Bindings.
[OR]
b) Explain briefly about the structure of UDDI.
15. a) Explain about the Rosettanet with neat diagram.
[OR]
b) Write short notes on Role of XML in Web Content management.

PART - C

3 x 10 = 30

(Answer Any Three Questions)

16. Discuss in detail about Presentation technologies in XML.
 17. Discuss in detail about Regular expression with example.
 18. Explain in detail about the Web Service Architectural stack with neat diagram.
 19. Narrate the concept of sending SOAP messages
 20. List out the different types of B2B interactions and explain about it. With example
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① Business Law
21 VCAC 32

② Research Methodology
21 PENC 32

Register Number:

C-4073

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

COMPUTER SCIENCE

SECOND YEAR - III SEMESTER

21PCSEC33 PROGRAMMING USING PYTHON

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20

Answer All Questions

1. Write the uses of Indentation in Python.
2. Define: Tuple.
3. What are the types of loops in Python?
4. State and prove Function with return value in python.
5. Define: reload () function.
6. Give a note on import statement.
7. Jot down the uses of class in Python.
8. Comment on User-defined Function.
9. What is Regular Expression?
10. Define: Django Architecture.

PART - B

5 x 5 = 25

Answer All Questions

11. a) Explain the various forms of Data types.
[OR]
b) Briefly explain Data type Conversion in Python.
12. a) Write about Function Arguments in Python.
[OR]
b) Give short notes on the following: i) For Loop ii) While Loop
13. a) How do you open and close a file in Python?
[OR]
b) Explain in detail about File Modes in Python.
14. a) Illustrate the concept of Raising Exception in Python.
[OR]
b) Explicate the concept of Destructors in Python.
15. a) Write down the importance of Django Architecture.
[OR]
b) Explain the Patterns of RE.

PART - C

3 x 10 = 30

(Answer Any Three Questions)

16. How do you run Python program?
 17. Describe in detail about Decision Making-Looping.
 18. Discuss about File concept in Python.
 19. Illustrate Exceptions in Python with an example.
 20. Give a notes on the following:
 - i) Findall () method
 - ii) Compile () method.
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Register Number:

C-4075

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

COMPUTER SCIENCE

SECOND YEAR - III SEMESTER

21PCSEE35-2 INTERNET OF THINGS

Time : 3 Hours

Maximum : 75 Marks

10 x 2 = 20

PART - A

Answer All Questions

1. Define: IOT.
2. Expand WSN. How is it related to IOT?
3. Write the various forms of Sensors.
4. What are message protocols used in IOT?
5. Give a short note on IPV6.
6. List out the various applications of DA in IOT.
7. Write about Smart Retail in IOT.
8. Write a note on Smart Driver Assistance System.
9. Comment on Linux based software.
10. Mention the principle of Arduino.

PART - B

5 x 5 = 25

Answer All Questions

11. a) Explain the characteristics of IOT.
[OR]
b) Briefly note on Application areas of IOT.
12. a) Discuss on controlling sensors through Web pages.
[OR]
b) Give a brief notes on :i) MQTT ii) Li-Fi
13. a) Explain about Security aspects of Cloud Computing.
[OR]
b) Briefly note on Adafruit cloud.
14. a) Explain about Smart Warehousing Monitoring System.
[OR]
b) Write any one applications of detection IOT Sensor.

15. a) Explain in detail about Architecture of Arduino.

[OR]

- b) State the configuration of Raspberry Pi.

PART - C

3 x 10 = 30

(Answer Any Three Questions)

16. Summarize the various enabling Technologies and challenges of IOT.
17. Explain the salient features of protocols for IOT.
18. Explicate the various trends of applications of IOT.
19. Describe the following applications of IOT : i) Drone Fly ii) Smart Retail
20. Describe the Architecture of Arduino with neat diagram.

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Register Number:

C-4077

Name of the Candidate:

M.Sc. DEGREE EXAMINATION, DECEMBER 2022

(FOR AFFILIATED COLLEGES)

COMPUTER SCIENCE

SECOND YEAR - III SEMESTER

21PCSE036-1 PROGRAMMING USING C

Time : 3 Hours

Maximum : 75 Marks

PART - A

10 x 2 = 20

Answer All Questions

1. What is meant by Type Casting
2. Write an Arithmetic operator .
3. Define Function.
4. Label Character Array.
5. Delimit Array of pointers.
6. Circumscribe about Pointers to functions.
7. Write a method on union.
8. Define Global variable.
9. Write syntax for closing a file?
10. Write syntax for Multiple line command?

PART - B

5 x 5 = 25

Answer All Questions

11. a) Give details on If .. Else statement with an example.

[OR]

- b) Carve a note on Enumerated Data Types in C

12. a) Carve a note on Call by reference

[OR]

- b) Engrave the different string Array in C

13. a) Make clear on accessing a variable through its Pointers

[OR]

- b) Portray on Pointers expression.

14. a) Difference between Structure & Pointers

[OR]

- b) Give explanation on Union.

15. a) Enlighten about Input operation with an example

[OR]

- b) Inscribe various command line Argument.

PART - C

3 x 10 = 30

(Answer Any Three Questions)

16. Carve various Operators used in c.
17. Note down on
- a) Array of functions.
 - b) Passing strings to functions.
18. Write a short notes on
- a) Pointer & character strings.
 - b) Functions returning Pointer.
19. Explain in brief about Referencing structure elements & Passing structures to functions.
20. Discuss on Closing & Opening files Operation.

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