

**VINAYAKA MISSIONS RESEARCH FOUNDATION, SALEM**

(Deemed to be University)

**B.SC(COMPUTER SCIENCE) DEGREE EXAMINATION – November 2018****First Semester****DSC – I PROBLEM SOLVING USING COMPUTER**

Time: Three hours

Maximum: 70 marks

**PART – A**

(10 x 2 = 20)

**(Answer ALL Questions)**

1. List out the types of computer
2. List out different GATES available
3. Different major task with subtask
4. Any four tools for drawing flow chart.
5. Write a short note on Python identification
6. List out any four comparisons
7. Write the syntax of while loop.
8. Write the purpose of 'continue'
9. Define list
10. List few numbers

**PART – B**

(4 x 5 = 20)

**(Answer ALL Questions)**

11. a) Write a brief notes on applications of computer.

**(OR)**

- b) Explain in detail about number system.

12. a) Representation of an algorithm

**(OR)**

- b) Discuss problem solving

13. a) Discuss about comparison operators

**(OR)**

- b) Discuss in short about Python reserved words

14. a) Write a program to display Fibonacci sequence

**(OR)**

- b) Discuss in short about tuples

**PART – C**

(3 x 10 = 30)

**(Answer any THREE Questions)**

15. Explain in detail about output devices
16. Explain any ten flow chart symbols
17. Explain in detail about reserved python identification and keyword
18. Write a python program to explain i) for loop ii) while statement.
19. Explain in detail about Lists

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**VINAYAKA MISSIONS RESEARCH FOUNDATION, SALEM**

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**B.SC(CS) / BCA DEGREE EXAMINATION – November 2018****Third Semester****PROGRAMMING IN C**

Time: Three hours

Maximum: 70 marks

(10 x 2 = 20)

**PART – A****(Answer ALL Questions)**

1. What is meant by header file in C?
2. What is data type?
3. Write the syntax of if statement
4. What do you mean by entry-controlled loop? Give example
5. How to initialize a single dimensional array?
6. Define user defined functions
7. How to initialize a structure?
8. How to access address of a variable?
9. What is the significance of EOF?
10. Write the syntax of command line argument

**PART – B**

(4 x 5 = 20)

**(Answer ALL Questions)**

11. a) Explain the importance of C Language  
(OR)  
b) Explain the arithmetic and relational operators in C
12. a) Explain the do..while statement with suitable example  
(OR)  
b) Write a program to find the smallest number among three numbers.
13. a) Write a C Program for matrix addition using an array  
(OR)  
b) What are the benefits of an array? Briefly explain
14. a) Explain Union with a simple program  
(OR)  
b) What are the ways of accessing a file? Explain

**PART – C**

(3 x 10 = 30)

**(Answer any THREE Questions)**

15. Explain the formatted input and output operators in C.
16. Write a program to explain else..if ladder
17. Write a C Program to illustrate the four string handling functions
18. Compare structure, union and pointers
19. Write a program to illustrate error handling in file operations









































**VINAYAKA MISSIONS RESEARCH FOUNDATION, SALEM**

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**B.SC(COMPUTER SCIENCE) DEGREE EXAMINATION – November 2018****Second Semester****FUNDAMENTALS OF DATA STRUCTURE**

Time: Three hours

Maximum: 70 marks

**PART – A**

(10 x 2 = 20)

**(Answer ALL Questions)**

1. What is the need of data structure?
2. Write down the uses of asymptotic notations.
3. Write the use of DELETE(S)
4. What is postfix? Give an example
5. What is a polynomial expression?
6. Define the term free node
7. What is level of the tree?
8. List out the traversals of a binary tree
9. List out the traversals of graph.
10. What is sink?

**PART – B**

(4 x 5 = 20)

**(Answer ALL Questions)**

11. a) Explain the sparse matrix with an example

**(OR)**

- b) Draw a linked representation of an array and explain.

12. a) Explain the following (i) Push (ii) Pop (iii) overflow (iv) Underflow (v) top

**(OR)**

- b) Explain the priority of operators with an example

13. a) Discuss about the applications of doubly linked list

**(OR)**

- b) Explain the operations performed on linked list

14. a) Write an algorithm of in-order traversal of binary tree and explain

**(OR)**

- b) Write a kruskal's algorithm

**PART – C**

(3 x 10 = 30)

**(Answer any THREE Questions)**

15. How you analysis an algorithm? Explain in detail
16. Explain infix to postfix conversion of an expression using stack with an example and also write the algorithm.
17. Design the algorithm for polynomial addition using linked list.
18. Explain the following sorting algorithm with an example : Quick sort
19. Write a kruskals algorithm and explain with an example

S.No.1219

Sub.Code:71617302

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM  
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**B.SC(COMPUTER SCIENCE) DEGREE EXAMINATION – November 2018**

**Third Semester**

**DSC VI - DATABASE MANAGEMENT SYSTEMS**

Time : Three Hours

Maximum: 70 marks

**SECTION - A**

**Answer All questions (10 x 2 = 20)**

- 1 Write any 3 Application of DBMS.
- 2 Write down the Characteristics of Data.
- 3 What do you mean by total participation?
- 4 Draw an ER diagram to represent ternary relationship.
- 5 List out the various operations of SQL.
- 6 Write a relational algebra notation for project operation.
- 7 Give an example for pseudotransitivity.
- 8 Write down the merits of normalization.
- 9 Draw a diagram to represent the states of at transaction.
- 10 Define savepoints.

**SECTION - B**

**Answer the following**

**(4 X 5 = 20)**

11.a Explain DDL statements with examples.

OR

.b Define Data Abstraction and discuss the various levels of Abstraction with a neat Diagram

12.a Explain the components of ER diagram.

OR

.b Describe the extended ER model with examples

13.a Describe the various features of SQL.

OR

.b Describe the types of SQL commands.

14.a Explain the first normal form with examples.

OR

.b Give an example for transferring amount from one account to other and explain it.

**SECTION -C**

III. Answer ANY **THREE** of the following questions:

(3 x 10 = 30)

15 Draw an Architecture of Database system and explain it

- 16 Explain the following
- i. Aggregation
  - ii. Specialization
  - iii. Attribute Inheritance
  - iv. Generalization

17 Describe the different types of Integrity Constraints with examples.

18 Describe the decomposition and its types with examples.

19 Discuss various lock based schemes of transaction.

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