

II PUC - Model question paper – 1
FOR REDUCED SYLLABUS– 2020-21

Subject: Computer Science

Subject Code: 41

Time : 3.15 Hrs.

Max marks: 70

Total no. of questions: 37

PART - A

I. Answer the following questions

1 x 10 = 10

Each question carries one mark.

1. Expand CMOS.
2. Which basic gate is also called as inverter.
3. What is an array?
4. Give an example for primitive data structure.
5. What is function overloading?
6. Define Base class.
7. Name any one characteristics of public visibility mode.
8. How to declare a pointer?
9. What is a Database?
10. What is a tuple in Database?

PART - B

II. Answer any FIVE of the following questions

2 x 5 = 10

Each question carries TWO marks

11. What is cache memory? Mention any one type of cache memory.
12. State and prove Involution law using truth table.
13. Define a) Data Member b) Member Function.
14. What is destructor? Write the symbol used with destructor.
15. Mention any two advantages of Inheritance.
16. Give any two differences between static and dynamic memory allocation.
17. Differentiate between get() and getline() used with data files.
18. Write any two features of Data Base Management System.

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PART – C

III. Answer any FIVE of the following questions

3 x 5 = 15

Each question carries Three marks

19. State and Prove De-Morgan's first theorem.
20. Explain the different operations performed on primitive data structure.
21. Write an algorithm for PUSH operation in stack data structure.
22. Mention any three applications of OOP.
23. Explain the features of parameterized constructors.
24. Write any three advantages of pointer.
25. Explain any three modes to open a file in C++.
26. Write any three Differences between Manual and Electronic Data Processing.

PART - D

IV. Answer any SEVEN of the following

7 x 5 = 35

Each question carries TWO marks

27. Explain any five components of mother board.
28. Given the Boolean function
 $F(W,X,Y,Z)=\sum(1,2,3,5,7,9,11,13,15)$, Reduce it by using K- Map.
29. Realize logical NOT, AND and OR gates using NOR gate.
30. Write an algorithm to search an element in an array using Binary Search.
31. What is a Queue? Explain different types of Queues.
32. Mention and explain any five features of OOP.
33. Explain Class definition with syntax and example.
34. Explain inline function with programming example.
35. Write the rules for writing a constructor function.
36. What inheritance? Explain single level and multi-level inheritance.
37. Write and explain Data Processing Cycle.

II PUC - Model question paper – 2
FOR REDUCED SYLLABUS– 2020-21

Subject: Computer Science

Subject Code: 41

Time : 3.15 Hrs.

Max marks: 70

Total no. of questions: 37

PART – A

I Answer the following questions

1 x 10 =10

Each question carries ONE mark

1. Expand USB.
2. Write a standard symbol for OR gate.
3. Give an example for non-primitive data structure.
4. Define stack data structure.
5. What is inline function?
6. What is visibility mode in inheritance?
7. Mention any one type of inheritance?
8. Which is the address of operator in pointers.
9. What is information?
10. Define primary key.

PART – B

II Answer any FIVE questions.

2 x 5 =10

Each question carries TWO marks

11. Mention the types of UPS.
12. Define the terms minterm and maxterm.
13. Name any two access specifiers.
14. Write the syntax and example for default constructor.
15. Define base class and derived class.
16. Name the operators used to allocate and de-allocate memory space dynamically.
17. What is input stream and output stream
18. Briefly explain logical one tier architecture.

PART – C

III Answer any five questions.

3 x 5 =15

Each question carries THREE marks

19. State and prove commutative law using truth table.
20. Write any three advantages of arrays.
21. Write an algorithm for pop operation in stack data structure.
22. Define
 - a. Data abstraction.
 - b. Data encapsulation.
 - c. Polymorphism.
23. Mention different types of constructors.
24. Briefly explain static memory allocation.
25. Explain in any three file opening modes in C++.
26. Explain network data model.

PART – D

IV Answer any SEVEN questions.

5 x 7 = 35

Each question carries FIVE marks

27. What is cache memory? Explain any two types.
28. Given the Boolean function $F(a,b,c,d)=\sum(0,2,5,7,8,10,13,15)$ Reduce it by using K- Map..
29. Realize NOT, AND and OR gates using NAND gate.
30. Write an algorithm for inserting an element into the array.
31. Briefly explain the operations performed on Queues.
32. Write any five applications of object-oriented programming.
33. Briefly explain inside class definition with syntax and example.
34. Explain function overloading with suitable programming example.
35. What is destructor? Write the rules for destructor function.
36. Write any five advantages of inheritance.
37. Give the difference between manual and electronic data processing.
