

**Model question paper**

**II PUC**

**Subject: COMPUTER SCIENCE (41)**

**Time: 3 Hrs 15 Mins**

**Max Marks: 70**

**Total No. Of Questions: 49**

**PART – A**

**I. Answer any TEN questions. Each question carries one mark. 1 x 10 = 10**

- 1) What is a microprocessor?
- 2) Give the other name of Boolean Algebra.
- 3) Define truth valued variable.
- 4) What is a logic gate?
- 5) Give an example for primitive data structure.
- 6) Define object-oriented programming.
- 7) What is the use of scope resolution operator (::)?
- 8) What is the use of member function in a class?
- 9) Which symbol is used for a destructor function?
- 10) Give the syntax for a pointer declaration.
- 11) Define a tuple in database.
- 12) What is a primary key?
- 13) Define simplex communication mode.
- 14) What is free software?
- 15) What is the use of HTML?

**PART - B**

**II. Answer any FIVE questions. Each question carries two marks. 2 x 5 = 10**

- 16) Expand the terms SDRAM and DDRAM.
- 17) Prove that  $X + XY = X$ .
- 18) Give the logic symbol and working of AND gate.
- 19) What is the need for function overloading?
- 20) Give any two advantages of parameterised constructor.
- 21) Give any two differences between static and dynamic memory allocation.
- 22) Differentiate between text file and binary file.
- 23) Define data and information.
- 24) What is web browser? Give an example.
- 25) Give the general structure of HTML program.

## PART - C

### III. Answer any FIVE questions. Each question carries THREE marks. 3 x 5 = 15

- 26) What is cache memory? Explain its types.
- 27) Write truth table and standard symbol for NOR gate.
- 28) What is an array? Mention any two types of arrays.
- 29) Give any three advantages of inheritance.
- 30) Explain different operations performed on pointer.
- 31) Mention and explain any three modes of opening a file in C++.
- 32) Explain any three data types used in SQL.
- 33) What is LAN? Explain.
- 34) Mention any three services or technologies of e-commerce.
- 35) What is web hosting? Mention any two web hosting methods.

### IV. Answer any SEVEN questions. Each question carries FIVE marks. 5 x 7 = 35

- 36) Reduce  $F(A,B,C,D)=\sum(0,2,4,6,8,9,10,11,12,14)$  Using K – map.
- 37) Briefly explain different operations performed on linear data structure.
- 38) What is stack data structure? Write algorithms for PUSH and POP operations.
- 39) Explain memory representation of two-dimensional array using row-major ordering.
- 40) Write any five applications of object-oriented programming.
- 41) Explain class definition with syntax and example.
- 42) Briefly explain characteristics of friend function.
- 43) Write the rules for constructor function.
- 44) What is inheritance? Explain hierarchical and hybrid inheritance.
- 45) Differentiate between manual and electronic data processing.
- 46) Mention any five advantages of DBMS.
- 47) Explain any five arithmetic operators used in SQL.
- 48) Mention DML commands in SQL. Explain any two commands.
- 49) Explain any five network devices.

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