

SECOND PUC PREPARATORY EXAMINATION - 2020

Time : 3 Hrs. 15 Mins.

COMPUTER SCIENCE (41)

Max Marks : 70

No. of Pages : 01

Total No. of Ques. : 37

PART - A**NOTE : 1. Answer all questions.****2. Each question carries ONE mark.****10x1=10**

- 1) What is UPS ?
- 2) Write the standard symbol for AND gate.
- 3) Define Sorting.
- 4) What is the significance of scope resolution operator (::) ?
- 5) How to declare a pointer ?
- 6) What is primary key ?
- 7) What is chatting ?
- 8) Mention any one antivirus software.
- 9) Expand IPR.
- 10) What is web scripting ?

PART - B**NOTE : 1. Answer any five questions.****2. Each question carries TWO marks.****5x2=10**

- 11) Show that $X + X'Y = X + Y$
- 12) State and prove complimentary laws.
- 13) Define a) Data encapsulation b) Polymorphism.
- 14) Write any two features of parameterized constructor.
- 15) Differentiate between get() and getline().
- 16) Give the applications of database.
- 17) Mention different data types in SQL.
- 18) What is networking ? Explain LAN.

PART - C**NOTE : 1. Answer any Five questions.****2. Each question carries THREE marks.****5x3=15**

- 19) Explain the characteristics of motherboard ?
- 20) Realize AND, OR and NOT gate using NOR gate.
- 21) Write an algorithm for PUSH () operation ?
- 22) How dynamic memory allocation is different from static memory allocation ?
- 23) Explain any three member functions belong to ofstream.
- 24) Explain ISAM with example.
- 25) Define E-commerce. Mention the technologies and services used in E-commerce.
- 26) Explain any three text formatting tags in HTML.

PART - D**Note : 1. Answer any SEVEN questions.****2. Each question carries FIVE marks.****7x5=35**

- 27) Simplify the following Boolean equation using K-Map
 $F(A, B, C, D) = \Sigma(5, 6, 7, 10, 14, 15)$
- 28) Write an algorithm to search an element in an array using binary search.
- 29) Write an algorithm to insert an element in to an array.
- 30) Explain advantages of OOPs.
- 31) What is a class ? Explain member function outside the class definition with syntax and programming example.
- 32) Explain inline function with syntax and example.
- 33) Write the rules for writing a constructor function.
- 34) Mention the types of inheritance. Explain any two.
- 35) Explain data processing cycle.
- 36) Expand SQL. Give the syntax and example for INSERT and DELETE commands in SQL.
- 37) What is topology ? Explain different types.