

B. Tech (First Year) 2nd Sem Examination 2020-21
GURU GHASIDAS VISHWAVIDYALAYA
Computer Science & Engineering
COMPUTER PROGRAMMING

Time Allowed: Two Hours

Date: 23/09/2021

Maximum Marks: 70

Note: Attempt any fourteen questions. Each question carry 5 marks.

1. What is compiler? Explain in detail.
2. What is Algorithm and Flowchart? Make a flowchart and algorithm to calculate sum of N natural number.
3. Solve $(68)_{10} + (AFC)_{16} + (34)_6 = (?)_2$
4. What is loops in C language? Explain different types of loops in detail.
5. Write down difference between primary and secondary memory.
6. What is operating system? Explain different function of operating system.
7. What is an Array? Explain different types of array with proper example.
8. Write a C program to check given number N is palindrome number or not.
9. What is Binary search? Write a C program to search a number using binary search.
10. What is bubble sort? Write a C program to sort given number using bubble sort.
11. Write a C program to find all roots of a quadratic equation ($ax^2 + bx + c = 0$).
12. What is function? Explain call by value and call by reference in detail.
13. Write a C program to find total vowel letter in given string using your own function name that definition available in your own header file.
14. Explain *break* and *continue* statements with example.
15. What is recursion? Write a C program to calculate factorial of N using recursion.
16. What is structure? Write a C program to store and print the Roll_No, Stu_Name, Branch of 70 students using structure.
17. Write a program in C to store 10 elements in an array and print the elements using pointer.
18. What is pointer? Write a C program to find total length of “GGV Bilaspur” using pointer excluding space.
19. What is *switch case* statement? Explain with example.