

TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2076 Chaitra

Exam.	Regular		
Level	BE	Full Marks	80
Programme	All except BAS & BAR	Pass Marks	32
Year / Part	I / I	Time	3 hrs.

Subject: - Computer Programming (CT 401)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt **All** questions.
- ✓ The figures in the margin indicate **Full Marks**.
- ✓ Assume suitable data if necessary.



1. What are different types of computer software? What do you mean by high level and low level programming languages? A long with the block diagram explain the steps involved during compilation of a source code. [2+2+4]
2. Explain different types of error that usually appears during the programming. Define preprocessing directive and explain its type with example. Write the algorithm and draw the flowchart to find the reverse of given number. [2+2+4]
3. Why are formatted output important in C language? Write a program to print all the roots (Even imaginary roots) of quadratic equation. [3+5]
4. Explain the importance of a switch case statement. Compare switch-case with if-else ladder. Write a program to find sum of numbers from 1 to 100 which are exactly divisible by 5 and not by 3. [2+2+4]
5. How is function declared? Why is function prototype necessary? Write recursive function segment that returns the sum of numbers from 1 to n given by the user. [2+1+5]
6. How can you pass one dimensional array to function and what does name of an array in function call represents? Write a program to find the largest and smallest element of an array using a single function and display the result in calling function. [3+5]
7. Explain how a structure can be defined and structure variables can be declared in C. Write a program that reads name, roll numbers, program and marks obtained in five subjects by students until the user enters 'e' and display the student detail and total marks obtained by each student. [3+5]
8. What is pointer? Discuss its relationship with an array. Write a function program that behaves strcpy() function using pointer as arguement. [1+2+5]
9. Explain different modes in opening file. Write a program to read a string, write it into a file and display the content of a file into a screen. [4+4]
10. Explain different data types available in FORTRAN. Write a program in FORTRAN to check whether a number given by user is palindrome or not. [2+6]
