

Exam.	New Back (2066 & Later Batch)		
Level	BE	Full Marks	80
Programme	ALL (Except B. Arch)	Pass Marks	32
Year / Part	I / I	Time	3 hrs.

Subject: - Computer Programming (CT401)

- ✓ 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. a) What do you mean by Programming Language? Explain about the evolution of programming languages. [1+3]
- b) What are the advantages of a Flowchart design? Write down the guidelines to be followed to draw a flowchart. [2+2]
2. a) What is the purpose of the semicolon that appears at the end of most assignment statement in C? Explain the program compilation, linking and loading process with example. [2+4]
- b) Discuss the types of errors in programming. How do you debug a C-program? [2+4]
3. a) Explain relational and logical operators. [4]
- b) Write a C program to display following pattern without using formatted input/output statements. [4]


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4. a) Why do we need control statements? Compare switch and if-else-if ladder with example. [4]
- b) Write a C program to display all characters between a given ranges. [6]
5. a) What are the advantages of using functions? Differentiate between Library functions and User-defined functions with suitable example. [5]
- b) Write a program to check whether a given number is Armstrong number or not using recursive function. [5]
6. a) Write a C program to read two strings in main and compare them using userdefined function. Display appropriate message from main. [4]
- b) What are overflow and underflow errors in context of array? Write a program to add corresponding elements of two arrays. The results should form a new array. [2+4]
7. a) Why should we prefer structure over array? Explain nested structure with example. [2+4]
- b) Write a program to read name and roll number of 48 students from user and store them in file. If the file already contains data, your program should add new data at the end of the file. [6]
8. a) What is the structure of FORTRAN program? [5]
- b) Write a FORTRAN program to read n numbers and display largest number among them. [5]