

I B. Tech I Semester Supplementary Examinations, December - 2021**COMPUTER PROGRAMMING****(Com. to CE, ME,CSE, PCE, IT,Chem. E, Aero E, AME, Min E, PE, Metal E, Textile Engg)**

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answer **ALL** the question in **Part-A**3. Answer any **THREE** Questions from **Part-B****PART -A**

1. a) List the functions of a compiler. [3M]
- b) Write the purpose of the *break* keyword. [3M]
- c) List the features of modular programming. [4M]
- d) What is the significance of pointer to pointer? [4M]
- e) Define a self-referential structure. [4M]
- f) Which function is used to force data transfer from the buffer to file? [4M]

PART -B

2. a) Draw the flow chart for computing the factorial of a given number. [8M]
- b) Explain various types of operators in C with examples. [8M]
3. a) Write a C program to add two matrices. [8M]
- b) Explain the purpose of the *Switch Case* with an example. [8M]
4. a) Discuss the significance of various storage classes in detail. [8M]
- b) Write a C program to print Fibonacci Series using recursion. [8M]
5. a) Explain the implementation of multidimensional arrays. [8M]
- b) Write a C program to send the address of a variable 'n' as a parameter to a function that computes the sum of first n numbers. [8M]
6. a) Write a C program to store the details of 50 student records. Each student record consists of the name, marks of 6 subjects, and mobile number and computes the aggregate marks for each student. [8M]
- b) Discuss the differences between structures and unions with an example. [8M]
7. a) Write a C program to read names and marks of n number of students and store them in a file. If the file previously exists, add the information to the file. [8M]
- b) Write a C program to write all the members of an array of structures to a file using `fwrite()`. Read the array from the file and display it on the screen. [8M]