## VCD/26/12/2 FYBSCIT SEMI PROG.PRIN.WITH C 21/2 HRS

- N. B.: (1) All questions are compulsory.
  - (2) Numbers to the right indicate marks

#### 1. Attempt any three of the following:

15 M

- a. Write an algorithm for finding largest value among three values.
- b. What do you mean by flowchart? Explain different symbols used in flowchart.
- c. What are compiler, linker and preprocessor? Explain any two preprocessor.
- d. Explain following terms in short:
  - A. identifiers B. keywords
- C. Variable
- D. Constant E. data types.

- e. Write a note on typecasting.
- f. Write pseudo code to find the sum of natural numbers.

### 2. Attempt any three of the following:

15 M

- a. Explain Arithmetic and relational operator with proper example.
- b. What do you mean by unary operator and binary operator? Explain with proper example.
- c. Give the difference between while and do..while.
- d. When "goto" statements are used? What is the use of "labels".
- e. Write a program to print day name of the week using Switch case statement.
- f. Write a C program to check number entered is positive or negative.

### 3. Attempt any three of the following:

15 M

- a. How we define function and call function in C? Explain with proper example.
- b. Compare inbuilt function with user defined function.
- c. What do you mean by call by reference in c functions?
- d. Write a C program to print area of square using function.
- e. Write a program to swap two numbers using function in C.
- f. Explain stdErr and Exit error handling functions in C.

#### 4. Attempt any three of the following:

15 M

- a. Why pointers are used in C program? Give reasons.
- b. Write a C program in C to add two numbers using pointers.
- c. Discuss character pointer in detail.
- d. Write a C program to explain the concept of Multidimensional array.
- e. Write a note on dynamic memory allocation.
- f. Write a C program to show the basic declaration of pointer.

Page 1 of 2

# 5. Attempt <u>any three</u> of the following:

15 M

- a. Write a note on arrays of structure.
- b. How we define union? Explain with proper example.
- c. What are the different ways to access the file. Write a code to open a file and to access that file.
- d. Write a program to print the structure using:
- Title
- Author
- Subject
- · Book ID

Print details of two books.

e. Write a code to copy content of one file to another file.

f. Discuss the concept of pointers to structure.

Page 2 of 2