FYBSC IT/SEM I/REG/Programming with C

Time: 1 hr.   Marks:30

Note: 1. All questions are compulsory.
               2. Draw neat diagrams wherever necessary.
               3. Figures to the right indicate full marks.

Q.1   Answer the following.   [15]

(a) What is a flowchart and why is it used? List and explain the basic symbols used in flowcharts.   08
(b) Define the algorithm for calculating the factorial of a non-negative integer. Draw the flowchart for   07
    the same,

OR

(a) List the basic data types in C and provide a brief description of each.   08
(b) What are the steps involved in writing and executing a C program?   07

Q.2   Answer the following.   [15]

(a) What is the purpose of the if-else and switch statement in C programming? Explain with suitable   08
    example.
(b) What is the purpose of a while and for loop in C programming? Explain with an example.   07

OR

(a) Explain any four string functions used in C,   08
(b) What is a union in C? Provide a suitable programming example.   07

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