POKHARA UNIVERSITY

Level: Bachelor | Semester: Fall | Year : 2018
Programme: BE | Full Marks: 100
Course: Programming in C | Pass Marks: 45
Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. a) What is computer software? Explain different types of software used in today's life. 7
   b) Write algorithm and draw flowchart to generate Fibonacci sequence of eight terms. 8
2. a) What are different data types available in C? Explain their type's qualifier, conversion character, range of value and storage size in memory occupied by each type. 7
   b) Differentiate between break and continue statements with a suitable example program. 8
3. a) What do you mean by function? Differentiate between function call by value and call by reference with suitable program. 7
   b) Write a menu driven program to work following cases, take appropriate input wherever required. 8
      i. Reverse a number
      ii. Find sum of individual digit
      iii. Check for prime
      iv. Exit
4. a) What is dynamic memory allocation? Explain different functions used in dynamic memory allocation. 7
   b) Describe string. Explain any three string handling function with examples. 8
5. a) Why array is import in programming? How can you initialize different types of arrays? Explain 2-dimensional array in C. 7
   b) What is a function prototype? Find the sum of first n natural number using recursive function. 8

OR

What are pre-processor directives? Differentiate between macro and function with describing necessary example.

6. a) Differentiate between local and global variable. Write a program to illustrate the use of static variable. 7
   b) Write a program to create structure for the following data for cricket game. (Country name, Player name, playing type (e.g. bating, balling or both) , Number of matches played by player and salary). Save the information in a file named "cricket.txt" and display the information of those players who had played more than 10 matches. 8
7. Write short notes on: **(Any two)** 2×5
   a) Program testing and debugging
   b) Operator Precedence and Associativity
   c) Software Development Life Cycle