

September 2011

Bachelor of Computer Application (BCA) Examination  
II Semester**Problem Solving & Programming with C Language-II**

Time : 3 Hours ]

[ Max. Marks : 50

**Note -** Attempt all five questions. Symbols have their usual meanings.  
All questions carry equal marks.

1. (a) Explain the scope rule of functions with suitable examples.  
(b) Write user defined function (without using standard library functions) for the following:  
(i) XStrlen (ii) XStrcopy.

**OR**

- (a) Differentiate macros and functions with examples.  
(b) Write a recursive function to calculate a Fibonacci Series.  
2. (a) Explain various memory allocation functions with examples.  
(b) Write a program to arrange the names of students in an ascending order.

**OR**

- (a) What is the purpose of using unions ? How to initialize a union member ?  
(b) Explain with example :  
(i) Array of Pointer (ii) Array of Pointer to String.  
3. (a) Illustrate the difference between formatted and unformatted input-output functions with examples.  
(b) Write a program in C to store ten roll numbers and ten names in a text file.

**OR**

- (a) Explain the use of following functions .  
(i) fopen (ii) fread (iii) fseek.  
(b) Write a program in C to read number of characters in a text file.  
4. (a) Explain various video display modes.  
(b) How to set colors in various graphics mode ?

**OR**

- (a) Explain various components of VDU.  
(b) How to write VDU memory in text mode ?  
5. (a) Explain the steps for designing animations.  
(b) Write a program to fill a circle into a solid color.

**OR**

- (a) Explain various system metrics with examples.  
(b) Explain various graphics programming modes with examples.

\* \* \*