

G-312

**B. C. A. (Second Semester) Examination**  
**June 2015**

(Course 2012-13/2010-11)

(For Regular / ATKT / Ex-Students)

**ADVANCED PROGRAMMING in 'C' WITH UNIX/  
 LINUX**

*Time Allowed : Three hours**Maximum Marks : 50*

*Note : Attempt all the five questions. One question from each unit is compulsory. All questions carry equal marks.*

**Unit-I**

1. Compare and describe the features of ANSI 'C' with Turbo 'C'. What do you understand by Array of Pointers? Explain with the help of examples.

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Or

1. Discuss the advantages of using C with LINUX. How memory is allocated dynamically in C program? Explain.

**Unit-II**

2. Write a program in C language to create a file of student using structure, fopen (), getc (), putc (), fclose () and other appropriate features. A student record may comprise : name, class, roll number, age and percentage.

Or

What is the difference between text and binary file? Explain. Describe the function of fread (), fwrite (), fgets () fputs () and fseek () with the help of examples.

**Unit-III**

3. What do you understand by conditional compilation directives? Explain. Explain #if, #ifdef and #line with the help of examples.

Or

What is meant by syntax and runtime error? Write any C program which shows the use of macro, # define and an instance of syntax and runtime error each. You can choose any objective for this C program.

**Unit-IV**

4. Describe the commonly used graphics functions in C.  
Explain outtext ( ) and outtext xy ( ).

**Or**

Write a C program to draw a rectangle using Graphics functions.

**Unit-V**

5. Write notes on any **two** of the following :
- (i) ROM BIOS routines
  - (ii) Registers for passing arguments to BIOS ROUTINE
  - (iii) Working with DOS routines
  - (iv) Working with mouse and keyboard in reference to graphic features