



SD-3809

B. Sc. (I.T.) (Sem. II) Examination
April / May - 2011
Programming in C

Time : 3 Hours]

[Total Marks :70

Instruction :

(1)

नीचे दृशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book. Name of the Examination : <input type="text" value="B. SC. (I.T.) (SEM. 2)"/> Name of the Subject : <input type="text" value="PROGRAMMING IN C"/> Subject Code No. : <input type="text" value="3"/> <input type="text" value="8"/> <input type="text" value="0"/> <input type="text" value="9"/> Section No. (1, 2,.....) : <input type="text" value="Nil"/>	Seat No. : <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: fit-content; margin: 10px auto;"> Student's Signature </div>
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1 Answer the following : (any three) 18

- (i) Write advantages of switch...case. Can you replace any it...else block(s) with switch...case construct ? Justify.
- (ii) What is a function ? Explain concept of recursive function calls. Write a c program that calculates factorial of a number using recursive function call.
- (iii) Write a note on C program execution process.
- (iv) List and explain unformatted console input and output functions in C with examples, What are its disadvantages ?

2 Answer the following : (any three) 18

- (i) How to get direct access to memory locations of variables in C program ? Explain in detail for variables and arrays.
- (ii) What is an array ? State characteristics of C arrays. Explain 1D, 2D and 3D arrays with short example codes.
- (iii) State and explain storage classes available in C with suitable examples.
- (iv) What is a string ? Are string and char arrays same ? Justify. What is difference between "a" and 'a' ?

3 Answer the following : (any **three**) **18**

- (i) Write a C program for file copy that takes file names on command line and perform copy operation.
- (ii) Develop a program for the pattern given below using function.

If n=3 then output = 1

2 3

4 5 6

- (iii) Write a menu driven program in C that works as a simple arithmetic calculator.
- (iv) Develop a C program that take input of records of 10 employees. Employee detail may include empcode, name, designation and city. Sort these records into dictionary order of employee name and display them on screen.

4 Answer the following : (any **four**) **16**

- (i) Explain C functions: atof, exit, strcmp, sqrt.
- (ii) Explain structure in C in detail. How is it different from arrays ? Explain pointer to structure.
- (iii) Explain : void, NULL, EOF, ASCII
- (iv) Explain escape sequences in C with example.
- (v) What is an infinite loop ? How can you make infinite loop in C using for, while and do..while loops constructs ? Show with examples.
