

(94)

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Sardar Patel University  
External Examination

B. Sc. 3<sup>rd</sup> Semester (Computer Science)

US03CCSC01 : Fundamentals of Computer Programming using 'C'

Saturday, 16<sup>th</sup> November - 2013

Time : 02:30 pm to 05:30 pm

Total Marks : 70

**Q.1 Select the correct answer for the following.**

**[10]**

1. \_\_\_\_\_ is a step by step approach to solve any problem.  
(a) Process (b) Programming Language (c) Algorithm (d) Compiler
2. The translator program used in assembly language is called \_\_\_\_\_.  
(a) Compiler (b) Interpreter (c) Assembler (d) Translator
3. \_\_\_\_\_ is easily relocatable language.  
(a) Machine Language (b) Assembly Language  
(c) High Level Language (d) None of above
4. The range of int data type is \_\_\_\_\_ bytes.  
(a) 2 (b) 4 (c) 8 (d) 16
5. Which of the following section is compulsory in C program?  
(a) Main() (b) Definition (c) Documentation (d) None of these
6. When we declare string \_\_\_\_\_ data type is use.  
(a) int (b) char (c) float (d) All of above
7. \_\_\_\_\_ statement terminates the execution of loop.  
(a) continue (b) break (c) switch (d) none of these
8. In Array subscript can begin with number \_\_\_\_\_.  
(a) Zero (b) One (c) Three (d) None of these
9. strcpy () function works like \_\_\_\_\_ operator.  
(a) assignment (b) logical (c) bit wise (d) relational
10. Reading single character form the keyboard \_\_\_\_\_ function is use.  
(a) putchar() (b) getchar() (c) getc() (d) putc()

**Q.2 Answer in short. (Attempt any TEN)**

**[20]**

1. What is an Editor? Write characteristics of an Editors.
2. Differentiate between compiler and interpreter.
3. List Characteristics of an algorithm.
4. Explain simple if statement with example.
5. Draw the basic structure of C program.
6. Explain printf() statement with example.
7. Explain break and continue statement in C.

8. Write difference between exit and entry controlled loop.
9. Explain do-while statement with example.
10. What is library function? List library functions used in C.
11. What is function? Write the syntax of function declaration.
12. Explain the pow() and isalpha() function.

**Q.3** [a] What is Flowchart? Explain Rules to draw flowchart. Also explain symbols used to draw flowchart. **[05]**

[b] Explain High Level Language and Assembly Language in brief. **[05]**

**OR**

**Q.3** [a] Explain any two translator in detail. **[05]**

[b] What is an algorithm? Write advantages and disadvantages of an algorithm. **[05]**

**Q.4** [a] What is operator? Explain relational and logical operators with example. **[05]**

[b] Explain switch statement with syntax and example. **[05]**

**OR**

**Q.4** [a] What is Variable? How to declare and initialization different types of variable with example. **[05]**

[b] Explain ternary operators and unary operators with example. **[05]**

**Q.5** [a] Explain while and for loop with syntax and example. **[05]**

[b] Explain initialization of 1D array with syntax and example. **[05]**

**OR**

**Q.5** [a] What is string? Write the syntax of declaring string in C. Explain strcmp() and strlen() function with example. **[05]**

[b] How multidimensional array used in C? Explain initialization of 2D array with syntax and example. **[05]**

**Q.6** Write advantages of function. Explain categories of function by giving suitable example. **[10]**

**OR**

**Q.6** Explain following function with example. **[10]**  
strcat(), strlen(), isdigit(), islower() and abs().

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