

SEAT No. _____

[123]

SARDAR PATEL UNIVERSITY
External Examination (CBCS)
M. Sc. - Information Technology (Integrated)
1st - Semester (CBCS)

PS01CIIT03: Problem Solving Methodology and Programming in 'C'
11th April, Tuesday - 2017

Time : 02:00 pm to 5:00 pm

Total Marks :70

Q-1 Select an appropriate option. 10

1. _____ is a step by step approach to solve any problem.
(a) Process (b) Programming Language (c) Algorithm (d) Compiler
2. What is the standard decision symbol for a flowchart?
(a) Circle (b) Lozenge (c) Diamond (d) Square
3. C language is _____.
(a) High level language (b) Machine language
(c) Assembly language (d) Low level language
4. The range of int data type is _____ bytes.
(a) 2 (b) 4 (c) 8 (d) 16
5. The value can be changed during program execution is known as _____.
(a) Variable (b) Constant (c) Operator (d) None of these
6. _____ statement skips the remaining statement of the loop and control transfer to the condition.
(a) break (b) continue (c) if (d) switch
7. _____ loop execute at least once.
(a) while loop (b) do...while (c) if (d) for
8. For declaring two- dimensional array _____ subscript is used.
(a) One (b) Two (c) Three (d) All of these
9. A group of character is known as _____.
(a) String (b) Array (c) Function (d) All of above
10. _____ function is use to writing the string.
(a) scanf() (b) printf() (c) strrev() (d) strlen()

Q-2 Answer the following questions. (Attempt any TEN) 20

1. What is an Editor? Give three examples of well known editors.
2. List symbols used in flowchart.
3. What is Translator? List all translators.

4. Explain ternary operator with example.
5. Differentiate between pre-increment and post-increment operator.
6. Write rules of variable name.
7. Explain break and continue statement in C.
8. Differentiate between exit and entry controlled loop.
9. What do you know about structure programming?
10. Explain gets() function with syntax and example.
11. What is user – define function? Explain.
12. Write the advantage of function.

Q-3

- (a) What is an algorithm? Write advantages and disadvantages of an algorithm. 5
- (b) Explain in detail High Level Language and Assembly Language. 5

OR

Q-3

- (a) What is Flowchart? Explain rules to draw flowchart. 5
- (b) Write difference between Interpreter and Compiler. 5

Q-4

- (a) Explain basic structure of C program. 5
- (b) Explain if..else & nested if statement with syntax and example. 5

OR

Q-4

- (a) What is operator? Explain different operators available in C with example. 5
- (b) Explain basic data types used in C language. 5

- Q-5 What is an array? Explain the declaration and initialization of 1D and 2D array in C with example. 10

OR

- Q-5 Explain the following functions. 10
- (i) islower() (ii) isalpha() (iii) isdigit() (iv) sqrt() (v) abs()

Q-6

- (a) Explain function definition with syntax and example 5
 - (b) Explain the following library function with syntax and example: 5
- (i) strcmp (ii) strrev

OR

Q-6

- (a) Explain the function category with argument and return value with example. 5
- (b) Explain command line argument with example. 5

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