

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(Third Semester)

Branch – ELECTRONICS

COMPUTER PROGRAMMING IN 'C' LANGUAGE

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- Who is the father of C language?
 - Steve jobs
 - Dennis Ritchie
 - James Gosling
 - Rasmus Lerdorf
- All keywords in C are in _____
 - LowerCase letters
 - UpperCase letters
 - CamelCase letters
 - Both a & b
- What is #include <stdio.h>?
 - Preprocessor directive
 - Inclusion directive
 - File inclusion directive
 - Processor directive
- Which is the only function all C programs must contain?
 - start()
 - printf()
 - main()
 - getch()
- What is the function used to allocate memory to an array at run time with zero initial value to each?
 - calloc()
 - malloc()
 - palloc()
 - kalloc()
- For which of the following, "PI++", code will fail?
 - #define PI 3.14
 - char *PI ="A";
 - float PI = 3.14;
 - PI = "B"
- The default parameter passing mechanism is _____
 - Call by reference
 - Call by value
 - Call by value result
 - None
- Choose the best answer. Prior to using a pointer variable.
 - It should be declared
 - It should be initialized
 - It should be both declared and initialized
 - None of these
- Choose a correct statement about C structure elements?
 - Structure elements are stored on random free memory locations
 - Structure elements are stored in register memory locations
 - Structure elements are stored in memory locations
 - Structure elements are stored in contiguous memory locations
- If there is any error while opening a file, fopen will return?
 - Nothing
 - NULL
 - Depends on compiler
 - EOF

Cont...

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a. Describe the Structure of C program.
(OR)
b. Explain the various Data types are used in C program.
- 12 a. Prepare and write a C program to check whether the given number is ODD or EVEN.
(OR)
b. Narrate about the IF ELSE statement with example.
- 13 a. Compare between While() and Do-while loops with example.
(OR)
b. Produce: How do you access the values within an array in C?
- 14 a. Explain Pointer declaration in C with example.
(OR)
b. Sketch a C program to find the factorial of a given number using function.
- 15 a. Discuss the Structures within Structures with an example.
(OR)
b. Analyze the content of read/write files.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a. Enumerate: how do you use different Constants in C.
(OR)
b. Discuss about the I/O statements with example.
- 17 a. Justify about the various types of Operators with example.
(OR)
b. State the rules for Switch Statement.
- 18 a. Identify: how do you declare and initialize two dimensional array in C?
(OR)
b. Examine the increment and decrement operators in C.
- 19 a. Discover and write a program to read in an array of integers and print its elements in reverse order using pointer.
(OR)
b. Categorize and explain the function with variables in C.
- 20 a. Highlight in detail about File Input/Output in C.
(OR)
b. Elucidate about the Array with Structures.

Z-Z-Z

END