

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION DECEMBER 2023
(First Semester)

Branch - **NETWORKING AND MOBILE APPLICATION**

PROBLEM SOLVING TECHNIQUES USING C

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 1 | A way of representing an algorithm is called as a) Pseudocode b) Compiler c) Interpreter d) None of the above | K1 | CO1 |
| | 2 | Name the system program that converts the high-level language to machine level language a) Assembler b) Compiler c) Interpreter d) None of the above | K2 | CO1 |
| 2 | 3 | What is the size of the int data type on a 32-bit machine a) 2 bytes b) 4 bytes c) 8 d) 16 bytes | K1 | CO2 |
| | 4 | Variables that are declared inside a function are called as a) Local Variable b) Global Variable c) Static Variable d) None of the above | K2 | CO2 |
| 3 | 5 | How many operands a ternary operator requires? a) 4 b) 5 c) 3 d) 2 | K1 | CO3 |
| | 6 | Name the function which adds spaces to the end of a string to fill the string to a predefined length. a) converge() b) strlen() c) length() d) pad() | K2 | CO3 |
| 4 | 7 | Name the operator that returns the memory address of its operand. a) * b) + c) & d) None of the above | K1 | CO4 |
| | 8 | Which of the following is not a standard C library function for mathematical operations? a) pow b) rand c) sqrt d) abs | K2 | CO4 |
| 5 | 9 | The concept of defining a new name for an existing type is referred to a) typedef b) structure c) union d) None of the above | K1 | CO5 |
| | 10 | When a structure is passed as an argument to a function, the entire structure is passed using _____ a) call-by-value b) call-by-reference c) Both d) None of the above | K2 | CO5 |

Cont ...

SECTION - B (35 Marks)Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 × 7 = 35)

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 11.a. | Write an algorithm to find the largest of three numbers. | K2 | CO1 |
| | (OR) | | | |
| | 11.b. | Draw a flowchart to compare two numbers. | | |
| 2 | 12.a. | Explain the concept of constant. | K4 | CO2 |
| | (OR) | | | |
| | 12.b. | Compare compiler and interpreter. | | |
| 3 | 13.a. | Explain if and if-else statement with example. | K3 | CO3 |
| | (OR) | | | |
| | 13.b. | How do you pass single dimensional array to a function? Explain. | | |
| 4 | 14.a. | Explain the concept of multiple indirection. | K3 | CO4 |
| | (OR) | | | |
| | 14.b. | Explain the concept of command line argument with a small example. | | |
| 5 | 15.a. | How do you pass structure to a function? | K4 | CO5 |
| | (OR) | | | |
| | 15.b. | List out any 10 commonly used C File system functions. | | |

SECTION -C (30 Marks)Answer **ANY THREE** questions**ALL** questions carry **EQUAL** Marks

(3 × 10 = 30)

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|---|---------|-----|
| 1 | 16 | Discuss the classification of programming languages. | K4 | CO1 |
| 2 | 17 | Explain the four main classes of operators. | K4 | CO2 |
| 3 | 18 | Illustrate the concept of single dimensional array and multidimensional array with example. | K4 | CO3 |
| 4 | 19 | Write a program to implement stack using pointer. | K4 | CO4 |
| 5 | 20 | Explain the concept of enumeration in detail. | K4 | CO5 |

Z-Z-Z

END