

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY) Examination  
BSCIT Semester - I DEC 23 ( Reg ) DEC - 2023  
CS-01: PROBLEM SOLVING METHODOLOGIES AND PROGRAMMING IN C

Faculty Code : 003

Subject Code : 23SI-BSIT-MA-01-01001

Time : 2 Hours]

[Total Marks : 50

- Q.1 (A) 1) What is Keywords? 3  
2) What is Identifiers?  
3) What is Type casting? ✓
- Q.1 (B) Write Difference between traditional and modern c ✓ 2
- Q.1 (C) Explain Dry-run and its Use in detail. 5
- OR
- Q.1 (A) 1) What is Constants? 3  
2) What is C character set?  
3) What is Data types?
- Q.1 (B) What is PRE-PROCESSORS IN C? Explain it. 2
- Q.1 (C) What is Operators? Explain Operators in details with suitable example. 5
- Q.2 (A) 1) What is Break? 3  
2) What is Continue?  
3) What is Goto Statements?
- Q.2 (B) Explain Nesting of loops in detail. 2
- Q.2 (C) Write a C Program which print the sum of any Number which is given by user. 5
- OR
- Q.2 (A) 1) What is Conditional ternary operator? 3  
2) The C code 'for(;;)' represents an infinite loop. It can be terminated by \_\_\_\_.  
3) Which loop is faster in C Language, for, while or Do While.?
- Q.2 (B) Explain Switch statement in detail. 2
- Q.2 (C) What is Loop? Explain types of loop with example. 5
- Q.3 (A) 1) What is malloc? 3  
2) What is realloc?  
3) What is calloc?
- Q.3 (B) Explain Function call by reference & call by value 2
- Q.3 (C) Explain Types of library functions in detail. 2
- OR 5

Q.3 (A)	1) What is strcpy()? 2) What is printf()? 3) What is toupper()?	3
Q.3 (B)	Explain Recursion with example.	2
Q.3 (C)	Explain Types of user defined functions in detail.	5
Q.4 (A)	1) Which keyword is used to make the array size optional in C language during array declaration? 2) Which keyword is used to declare a Character Array in C? 3) Array index start at _____	3
Q.4 (B)	Explain Use of Arrays in Programming.	2
Q.4 (C)	Explain types of Array with suitable example. OR	5
Q.4 (A)	1) What is Pointer? 2) What is Pointer To Structure? 3) What is Pointer to Pointer?	3
Q.4 (B)	Explain Dangling Pointer Problem with example	2
Q.4 (C)	Explain Arrays and Matrices with suitable example.	5
Q.5 (A)	1) What is structure? 2) What is Nested structures? 3) What is Enumerated Type?	3
Q.5 (B)	Write a Difference between Structure & Union	2
Q.5 (C)	Explain Memory allocation functions in detail with suitable Example. OR	5
Q.5 (A)	1) What is union? 2) What is User defined function with structures? 3) What is Array with structures?	3
Q.5 (B)	What is Initializations and declarations in structure? Explain with example	2
Q.5 (C)	Write a C Program illustrate the use of Pointers with structures	5

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