DEPARTMENT OF HUMANITIES & APPLILED SCIENCES

I Year I/II SEMESTER

1FY3-06/2FY3-06: PROGRAMMING FOR PROBLEM SOLVING

Note: Each Assignment of 10 marks All questions carry equal marks

UNIT-01/ASSIGNMENT-01

Q.No.	Question	СО	BLT
1	What is stored based Architecture, Explain with Diagram?	1	1
2	What is an algorithms?	1	1
3	Write Difference between SRAM and DRAM?	1	6
4	Write an algorithm of reverse of a number?	1	6
5	Write Difference between Compiler and Interpreter?	1	6

UNIT-02/ASSIGNMENT-02

Q.No.	Question	СО	BLT
1	Explain Structure of C program Sections?	2	1
2	Explain Types of Variables?	2	1
3	What is Bitwise Operator explain left and right shift operator in detail?	2	1
4	Explain type Casting?	2	1
5	Explain inbuilt functions of stdio.h header file?	2	1

*BLT: BLT shows the **Bloom's taxonomy** levels



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UNIT-03/ASSIGNMENT-03

Q.No.	Question	СО	BLT
1	Write a C program to check whether a given number (N) is a perfect number or not. [Perfect Number – A perfect number is a positive integer number which is equals to the sum of its proper positive divisors. For example 6 is a perfect number because its proper divisors are 1, 2, 3 and it's sum is equals to 6.]	3	6
2	Write a C program to display the sum of series $1 + 1/2 + 1/3 + \dots + 1/n$.	3	6
3	Write a program in C to count the total number of duplicate elements in an array.	3	6
4	Write a program in C to check whether a number is a prime number or not using the function.	3	6
5	Write a program in C to check whether a number is a prime number or not using the function.	3	6

UNIT-04/ASSIGNMENT-04

Q.No.	Question	СО	BLT
1	Explain difference between Structure and Union data types?	4	1
2	Write a program in C to sort an array using a pointer.	4	6
3	Explain File handling. Write a program to write data in to binary file?	4	1
4	What are modes in file handling explain all different modes in detail?	4	1
5	Explain Arithmetic operations of pointer?	4	1

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UNIT-05/ASSIGNMENT-05

Q.No.	Question	СО	BLT
1	What is ASCII code?	5	1
2	Covert followings Numbers (a) (AF24) ₁₆ – (?) ₈ (B) (267.123) ₁₀ - (?) ₁₆ (C) (01110.1001) ₂ – (?) ₁₆	5	3
3	Find r's complement of following numbers? (a) (10101) ₂ (b) (AF23) ₁₆ (c) (76742) ₈ (d) (2569742) ₁₀	5	3
4	Calculate Binary Addition and Subtraction? (a) (1110111)2 + (1010011)2 (b) (011101)2 + (110001)2 (c)(111101) ₂ - (111001) ₂ (d) (1110001) ₂ - (11100) ₂	5	3

*BLT: BLT shows the **Bloom's taxonomy** levels