Off-Campus Centre of Nitte (Deemed to be University)

1 Sem B.Tech. (CBCS) Mid Semester Examinations - I, September 2022

CS1001-1 – PROBLEM SOLVING THROUGH PROGRAMMING

Duration: 1 Hour

Max. Marks: 20

*Note: Answer any **One** full question from **each Unit.***

			Marks	BT*	CO*	PO*
		Unit – I				
1.	a)	Describe the various steps involved in program development with a neat diagram. Fig - 2M Exp - 3M	5	L*2	1	1
	b)	Define the following terms i. Algorithm ii. Flowchart 2 + 1/2 and write an algorithm and flowchart for computing Sum and Average of Three numbers. Algo - 2M Flow - 2M	5	L3	1	1
2.	a)	Explain classification of Computers. Analog-1 Digital - 4	5	L2	1	1
	b)	Define C token. List and explain any 4 rules for forming Identifiers with relevant examples. Def - 1 Rules (4) - 4	5	L2	1	1
		Unit – II				
3.	a)	Define Type Conversion in C. Explain its types with suitable examples. Def - 1/2 Exp - 4 List - 1/2	5	L2	2	1
	b)	Solve the following expressions i) a/b <= c-d+a%10-b = = d >=e !=b 2 1/2 where a=100,b=20,c=10,d=5,e=1 ii) - - a*(5+b)/12- c++ *b+15%4 2 1/2 where a=3,b=4, c=5	5	L3	2	1
4.	a)	Explain the following unformatted input and output function with syntax, code snippets and the output. i) gets( ) – 2 1/2 ii) putchar( ) – 2 1/2	5	L2	2	1
	b)	Write a C program to find the Volume of Cylinder. Formula: $V=\pi r^2 h$	5	L3	2	1

BT* Bloom's Taxonomy, L* Level; CO* Course Outcome; PO* Program Outcome