## BANGALORE INSTITUTE OF TECHNOLOGY K R ROAD, V V PURA, BENGALURU-04 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING I Internals - 2024-25 (Odd)

**BATCH:** 2023

COURSE (CODE): SEM: 3<sup>rd</sup>

**DATE & TIME:** 07/10/2024 ,3:30PM to 4:30PM **MAX MARKS:** 30

USN:

## Note: Answer any one full question from each PART

Q. No.	PART A (Module – I, III)	15M	CO's	PO's	Blooms Levels
1.a)	Question number 1, form part A.	5	1	1,2,3	3
1.b)	This is question from part A.	6	1	1,2,3	3
1.c)	With neat diagram explain basic operational concepts of computer.	4	3	1,2	2
	OR				
2.a)	What is Database?	5	1	1,2,3	3
2.b)	Explain the following with respect to performance.  i) Processor Clock ii) Basic Performance Equation	5	3	1,2,3	2
2.c)	This is Testing, Question?	5	2	1,2,3, 5	3
	PART B (Module –I, III)	10M			
3.a)	Define Bus? Discuss about Bus Architecture with neat diagram.	5	1	3	3
3.b)	Implement the Boolean function with OR and INVERTER gates only.F(M,N,O)= (M+N). (M'+N').(N'+O)	5	1	3	3
3.c)	List all Postulates available in Boolean algebra?	5	1	1,2,3	3
	OR				
4.a)	Explain OR gate.	5	1	1,2	3
<b>4.b</b> )	Write the VHDL program for Full Substractor.	5	1	1,2,5	3
4.c)	Explain the overall SPEC rating for the computer in program suit.	5	3	1	2