	InSem Examination-IISummer2024	
	Exam Seat No.:	
	Academic Year:2023-2024	Semester:IV
	Name of Programme:B.Tech (IT)	Pattern:2022
	Name of Course:Computer Organization and Architecture	Course Code:INT222013
	Max. Marks:30	Duration:1

Instructions: Candidates should read carefully the instructions printed on the Question Paper
and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 02 page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

Question No. 1 Attempt following Question

a)	Compare Von Neumann Architecture with Harvard Architecture. Hightlighe the key difference.	(5)	CO1

OR

b)	With suitable diagram, explain Basic functional units of a computer	(5)	CO1
c)	Explain Functions of various Buses in Computer	(5)	CO1

OR

d)	List and Explain Control and Status Registers	(5)	CO1
e)	With suitable diagram, explain Arithmetic and logic Unit	(5)	CO1

OR

f)	Explain the sequence of events occurs in Fetch Cycle	(5)	CO1

Question No. 2 Attempt following Question

a)	Explain Two and Three Address Instructions with Example	(5)	CO2

OR

b)	What do Addressing Modes refer to in computer architecture? Explain any two distinct Addressing Modes?	(5)	CO2

| c) | Describe the concept of pipelining strategy in computer architecture, providing a proper example. | (5) | CO2 |

OR

| d) | Elaborate on the purpose of interrupts and outline the mechanism by which interrupts are handled within a processor. | (5) | CO2 |

| e) | Differentiate between Interrupts and Exceptions | (5) | CO2 |

OR

| f) | Explain the ASSUME, DB, END,ENDS and ENP directives in Assembly Language Programming with proper example. | (5) | CO2 |

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX