Code No: 153AG **R18**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech II Year I Semester Examinations, March - 2022
COMPUTER ORGANIZATION AND ARCHITECTURE
(Common to CSE, CSBS, CSIT, CSE(SE), CSE(CS), CSE(AIML), CSE(DS), CSE(N))

Time: 3 Hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1.a)	Explain in detail computer design and computer architecture.	
b)	Explain in detail life cycle of instruction.	[9+6]
2.	Explain the following. a) Register transfer. b) Input-Output and interrupt.	[7+8]
3.	Explain in detail various types of addressing modes with examples.	[15]
4.a)	Explain in detail about data transfer instructions.	
b)	Discuss the various types of instruction formats.	[7+8]
5.a)	Explain floating point representation of decimal numbers.	
b)	Explain the decimal addition operation with a neat diagram.	[7+8]
6.a)	Explain the subtraction operation with signed 2's complement data.	
b)	Explain in brief fixed point data representation.	[6+9]
7.a)	Explain the working process of DMA.	
b)	Compare cache and main memory.	[9+6]
8.a)	Explain in brief inter-processor communication.	
b)	Discuss the characteristics of multi-processors.	[8+7]

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