SVKM'S NMIMS

MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING/ SCHOOL OF TECHNOLOGY MANAGEMENT & ENGINEERING

Program: MBA Tech (Computer) Year: II Semester : III

Academic Year: 2018-2019

Subject: Computer Organization & Architecture Marks: 70

Time: 2.00 pm to 5.00 pm

Date : 23 January 2019

Durations: 3 (hrs)

No. of Pages: 1

Re-examination (2017-18/ 2018-19)

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

1) Question No. **1** is compulsory
2) Out of remaining questions, attempt any **Four** questions.
3) **In all Five questions to be attempted.**
4) All questions carry equal marks.
5) **Answer to each new question to be started on a fresh page.**
6) **Figures in brackets on the right hand side indicate full marks.**
7) **Assume suitable data if necessary.**

Q.1.	a) Explain four phases of Pipeline for instruction execution with advantages. b) Explain the working of DMA controller with block diagram. c) What is bus arbitrator? Explain any two techniques.	4M 5M 5M
Q.2 a	Explain Flynn's classification of parallel processing system.	7M
Q.2 b	Explain with flowchart an execution of instruction with interrupts.	7M
Q.3 a	List and explain any two page replacement algorithm with suitable example.	7M
Q.3 b	Explain Associative & Set Associative Mapping with suitable diagrams.	7M
Q.4 a	Describe the functional view of the computer system.	7M
Q.4 b	Give brief explanation of Bus Interconnection with suitable diagram.	7M
Q.5 a	Differentiate between RISC & CISC with example.	7M
Q.5 b	Explain hardwired control unit with block diagram.	7M
Q.6 a	Explain any two I/O Modules with example.	7M
Q.6 b	Compare SRAM & DRAM in detail with the help of single bit storage cell.	7M
Q.7 a	Multiply following numbers with Booth's Algorithm and specify all the steps. 1) (6)*(7) 2) (-6)*(7)	7M
Q.7 b	Explain Fixed point & Floating point Arithmetic with suitable example.	7M