Code No: **R31041**   **R10**   Set No. 1

III B.Tech I Semester Supplementary Examinations, November - 2015
COMPUTER ARCHITECTURE & ORGANIZATION
(Common to ECE, EIE)

Time: 3 hours   Max. Marks: 75

Answer any FIVE Questions
All Questions carry equal marks
*****

1	a)	What are the basic operational concepts of a computer? Explain with a diagram.	[8]
	b)	Discuss in detail about floating point representation and also explain floating point arithmetic operations.	[7]
2	a)	What is the need of addressing modes? Explain different types of addressing modes.	[8]
	b)	Define pipelining? Explain the structure of pipelining with an example.	[7]
3	a)	Explain briefly about the micro programmed control organization.	[7]
	b)	Briefly discuss about the design of the control unit	[8]
4	a)	Explain Booth's multiplication algorithm with the help of flow chart.	[8]
	b)	With an example explain how BCD addition is performed.	[7]
5	a)	Draw and explain Associative cache organization.	[8]
	b)	Write short note on memory hierarchy.	[7]
6	a)	Draw and explain the block diagram of DMA controller.	[8]
	b)	Give a brief note on peripheral devices.	[7]
7	a)	Explain the process of parallel processing.	[8]
	b)	List and explain the use of multiprocessors.	[7]
8	a)	What is meant by interconnection structure? Discuss various types of interconnection structures.	[8]
	b)	Give short note on inter processor communication.	[7]

-000-