

Digital Computer Fundamentals

2009 June

Science Information Technology

FYBSc-IT

Semester 1

University Exam

University of Mumbai

[shaalaa.com](http://shaalaa.com)

Apr HP 13

Con. 81-09.

FYBSc-IT

SEM-I

Digital Computer Fundamentals  
(3 Hours)

11<sup>th</sup> June 2009

AA-5397

[ Total Marks : 100

- N.B. : (1) Question No. 1 is compulsory.  
(2) Attempt any **four** questions from remaining.  
(3) Draw **neat** diagrams wherever **necessary**.

- |  |    |
|--|----|
| 1. (a) Explain instruction pipelining.   | 10 |
| (b) Explain PCI bus structure.   | 10 |
| 2. (a) Write an ALP to subtract two 8 bit numbers stored at memory location 6000 H and 6001 H. | 10 |
| (b) Explain various method of catch mapping.   | 10 |
| 3. (a) Explain any five instructions of arithmetic group.                                      | 10 |
| (b) Explain RAID with its various level.   | 10 |
| 4. (a) Explain different addressing modes with example.  | 10 |
| (b) Explain DMA with block diagram.  | 10 |
| 5. (a) Compare the programmed, DMA and interrupt in a transfers mode for input and output.     | 10 |
| (b) Explain in detail the terms :-<br>(i) Multiprocessors.<br>(ii) Multiprogramming.           | 10 |
| 6. (a) Explain stack memory.   | 10 |
| (b) Write a note on interrupted.   | 10 |

Visit [www.shaalaa.com](http://www.shaalaa.com) for more question papers.