

Code No: IT 2224

III B.Tech I Semester(R05) Supplementary Examinations, November 2010  
COMPUTER ORGANIZATION  
(Information Technology)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. Describe various instructions of IAS computer with their symbolic representation. [16]
2. (a) Find the output binary number after performing the following arithmetic operations  
i.  $111.01 + 10.111$   
ii.  $11.01 + 110.11$   
iii.  $110.11 - 111.01$   
(b) Explain about the longhand division of binary integers. [6+10]
3. (a) Explain various control and status registers.  
(b) Compare register organizations of 8086 with MC68000 processors [8+8]
4. (a) Differentiate between interrupts and exceptions.  
(b) What do you mean by interrupt vector table?  
(c) Write about Pentium exception and interrupt vector table. [5+5+6]
5. (a) Explain the cache execution of a read operation with a neat diagram  
(b) Explain look-aside system organization for caches. [8+8]
6. (a) Explain about the magnetic disk principles along with its advantages.  
(b) Discuss the format of a disk address word.  
(c) Discuss about disk operations. [6+5+5]
7. (a) Discuss about microinstruction execution.  
(b) Differentiate between packed and unpacked microinstruction  
(c) Differentiate between hard and soft micro programming [6+5+5]
8. (a) Differentiate between high-level and low-level parallelism  
(b) Discuss about Flynn's classification of parallel processor systems.  
(c) Explain different MIMD interconnection topologies. [5+6+5]

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