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Total No. of Questions : 09

B.Tech.(CSE / IT) (Sem.-3rd) (2011 Batch)

COMPUTER ARCHITECTURE

Subject Code : BTCS 301

Paper ID : [A1123]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

SECTION-A

- 1. Write briefly :**
- a) Write typical realization of bus architecture.
 - b) What is parallel processing system?
 - c) What do you mean by I/O processors?
 - d) What are interrupts?
 - e) What do you mean by floating point arithmetic?
 - f) What is difference between SPMD and MIMD machine?
 - g) Difference between program interrupt and subroutine call.
 - h) What do you mean by control memory?
 - i) Give difference between register and memory.
 - j) What are characteristics of I/O channels?

SECTION-B

- 2) Explain what different type of memories are available and differentiate between them according to their application.
- 3) How addressing sequence is done in micro programmed control unit? Explain with the help of a diagram.
- 4) What are various types of parallel processing systems? Explain with the help of example.
- 5) With the help of example explain difference between memories mapped I/O and isolated I/O?
- 6) What is difference between hardwired implementation and a micro programmed implementation of a control unit?

SECTION-C

- 7) Explain the detailed working of DMA controller with the help of diagram.
- 8) Write short note on the following :
 - a) Direct mapping and associate mapping
 - b) RISC and CISC.
- 9) What are various types of interrupts? How does processor determine which device issued the interrupt?