Code: 9A05406

R09

III B. Tech I Semester (R09) Supplementary Examinations, May 2012
COMPUTER ORGANIZATION
(Electronics & Communication Engineering)

Time: 3 hours   Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   (a)   Explain the different performance measures used to represent a computer system's performance.
    (b)   Describe the double-precision representation in IEEE 754 standard.

2   (a)   What is addressing mode? Explain the different addressing mode techniques used by the computer.
    (b)   Explain the evaluation of arithmetic expressions using reverse polish notation.

3   (a)   What are the major design considerations in microinstruction sequencing?
    (b)   Discuss how microinstructions are arranged in control memory and how they are interpreted.

4   (a)   Why should the sign of the remainder after a division be the same as the sign of the dividend?
    (b)   Design an array multiplier that multiplies two 4 bit numbers by using AND gates and binary adders.

5   (a)   Give a short note on RAID.
    (b)   Explain about virtual memories.

6   Explain about Peripheral devices and components in detail.

7   (a)   Write in detail about RISC pipeline vector processing.
    (b)   Discuss about Instruction pipeline process.

8   (a)   Explain the Interprocessor communication.
    (b)   Write in detail about Interprocessor arbitration.

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