B.Tech II Year II Semester (R09) Supplementary Examinations May/June 2016
COMPUTER ORGANIZATION
(Electrical & Electronics Engineering)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   (a)   Explain various performance measures used to represent computer performance.
    (b)   Give the single precision representation for 42.75 and 16.125.

2   Write notes on Skip and Subroutine call instructions. Illustrate with an example.

3   Describe how mapping from instruction code to microinstruction is done. Also explain about subroutines.

4   (a)   Give the register configuration for floating point arithmetic operation.
    (b)   Explain the decimal multiplication algorithm with a suitable example.

5   (a)   Discuss the concepts of system space and user space.
    (b)   Draw a flow chart and explain the look-through system of cache organization

6   (a)   What is the need for controlling device requests? What are the mechanisms used to control device request?
    (b)   What are exceptions? Explain different types of exceptions.

7   (a)   Explain the 2-way instruction pipelining and 3-way instruction pipelining
    (b)   Write notes on RISC pipeline.

8   Explain the closely coupled systems without and with private cache.

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