Code No: **R41195**   **R10**   **Set No. 1**

IV B.Tech I Semester Supplementary Examinations, February/March - 2018
ADVANCED COMPUTER ARCHITECTURE
(Electronics and Computer Engineering)

Time: 3 hours   **Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1 a) Write briefly about the evolution of a computer Architecture.   [8]
   b) Discuss in detail about reporting and summarizing performance of computer.   [7]

2 a) Explain the role of Compiler.   [8]
   b) List and explain different instruction formats.   [7]

3 a) Explain in detail the limitations of ILP.   [8]
   b) Explain how the prediction and Speculation support will be provided in IA64.   [7]

4 a) Discuss briefly about the static branch prediction scheme.   [8]
   b) Discuss hardware versus software solutions.   [7]

5 a) Explain the operation of associative cache memories.   [8]
   b) Define virtual memory? What are the advantages and disadvantages' in using
       virtual memory?   [7]

6 a) List and explain different interconnection structures used in multiprocessors.   [8]
   b) What are distributed shared memory architecture? Explain.   [7]

7 a) What are the different storage systems? Give their specifications.   [8]
   b) Discuss the Designing of I/O system in detail.   [7]

8 a) Explain interconnecting network media.   [8]
   b) Write short notes on Clusters.   [7]