

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]