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Roll No. ....

**H-8**

**B. Tech. EXAMINATION, Dec. 2017**

(Eighth Semester)

(B. Scheme) (Re-appear Only)

(CSE)

CSE-462-B

HIGH PERFORMANCE COMPUTING

*Time : 3 Hours]*

*[Maximum Marks : 75*

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Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

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**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

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**P.T.O.**

### **Unit I**

1. What is Parallelism ? Also explain Flynn's classification of computer architecture. **15**
2. Explain the system interconnect architecture. Differentiate static interconnection network and dynamic interconnection network. **15**

### **Unit II**

3. Explain the following : **15**
  - (a) CISC
  - (b) VLIW
  - (c) Symbolic Processor.
4. How does Virtual memory work ? Explain different mapping and management techniques. **15**

### **Unit III**

5. Explain the following : **15**
  - (a) Cache performance issues
  - (b) Interleaved memory organization.

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6. What is the principle of Pipelining ? Explain Arithmetic pipeline design. **15**

### **Unit IV**

7. What is Vector Processing Principle ? Also explain multivector multiprocessors. **15**
8. Explain the following : **15**
  - (a) Cache Coherence
  - (b) Data Flow Architecture.

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