B. Tech. 7th Semester (CSE) F. Scheme Examination,

December–2017

ADVANCE COMPUTER ARCHITECTURE

Paper–CSE-401-F

Time allowed : 3 hours]   [Maximum marks : 100

Note : Attempt *five* questions selecting **one** question from each unit. **Question No. 1 is compulsory.**

1. Explain the following :   20

    (i)   Instructions

    (ii) Cache References per Instruction

    (iii) Buffer Size

    (iv) Vector Processor

Unit–I

2. (i)   Explain in detail about Instruction Set Architecture.
                                                                 10

    (ii) Describe the following :

          (i)   Branch Instructions

          (ii) Complex Instructions.   10

3. (i)   Give a brief description about Basic Instruction
          Timing.   10

    (ii) What do you mean by Time, Area and Instruction
          Set ? Explain.   10

Unit–II

4. Explain the following :
   (i) Write Assembly Cache
   (ii) Strategies for line replacement at MISS Time.
                               20

5. Describe the following :
   (i) Virtual to Real Translation
   (ii) Two Level Caches.   20

Unit–III

6. Explain in detail about Queueing Models.   20

7. Describe the following :
   (i) Waiting Time
   (ii) DRAM
   (iii) Rau's Model.   20

Unit–IV

8. (i) Define Concurrent Processor. Explain its classification.
   (ii) Describe in brief about vector memory.   20

9. Give a complete description about Shared Memory Multiprocessors.   20