24487

B. Tech 7th Semester (CSE)
Examination – May, 2018

ADVANCED COMPUTER ARCHITECTURE

Paper : CSE-401-F

Time : Three Hours]   *[Maximum Marks : 100*

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

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

1. Explain the following :   20

    (i) Microprogramming

    (ii) Cache Environment

    (iii) RAM

    (iv) Vector Memory

UNIT – I

2. Explain the following : 20

    (i)   Load-store Architecture

    (ii) Register Memory Architecture

    (iii) Register plus Memory Architecture

    (iv) Memory Space

3. (i)   What do you mean by virtual to Real Mapping ? Explain. 10

    (ii) Give a complete description about processor Evaluation Matrix. 10

UNIT – II

4. Describe the following : 20

    (i)   Harvard's Architecture

    (ii) On chip Caches

    (iii) Split Cache

5. Explain the following : 20

    (i)   Overlapping the T-cycle in V-R Translation

    (ii) Cache Environment

UNIT – III

6. Describe the models of Simple Processor Memory Interaction. 20

7. Explain the following : 20

    (i) Processor with cache

    (ii) The Physical Memory

UNIT – IV

8. (i) What do you mean by multiple Issue Processor ? Explain. 10

    (ii) Define vector processor. Explain the basic vector processor Architecture. 10

9. What do you mean by memory coherence in shared memory Multiprocessor. Explain. 20