AE-822

M.Sc. (Previous)
Term End Examination, 2016-17

COMPUTER SCIENCE

Advanced Computer Architecture

Time : Three Hours]　　　[*Maximum Marks* : 100
　　　　　　　　　　　　　[*Minimum Pass Marks* : 36

Note : Answer any **five** questions. All questions carry equal marks.

1. Explain the following :

   (*a*) Instruction set

   (*b*) Data parallelism

   (*c*) Switch-based interconnection network

2. Define Addressing mode. What is the need of addressing mode ? Explain types of addressing mode with suitable example.

3. Define Pipelining. What are the types of pipeline ? How is pipelining implemented ?

(2)

4. Explain the architecture of VLIW processor. What are the differences among pipeline, superscalar and VLIW processor ?

5. Explain the following :

   (*a*) Thread-level parallelism

   (*b*) Bus-based symmetric multiprocessor

   (*c*) Symmetric shared memory

6. What is Message passing ? Explain routing in message passing networks.

7. What is Grid computing ? How grid computing is different from cluster computing ?

8. What is Distributed computing ? Explain in detail.

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