

Roll No.

--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(IT) (2015 & Onwards) (CSE Engg.) (2015 to 2017) (Sem.-1)

ADVANCED COMPUTER ARCHITECTURE

Subject Code : MTCS-102

M.Code : 72630

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
 2. Each question carries TWENTY marks.
-
1.
 - a) Explain the role and importance of Instruction set architecture.
 - b) Write a short note on hardwired and micro-coded processors.
 2.
 - a) Differentiate between multi core and pipelining.
 - b) What is a hazard? How will you classify it?
 3.
 - a) List the advantage of cache in computer architecture. Discuss write through and write back cache techniques.
 - b) How would you analyze the memory performance in computer architecture?
 4.
 - a) Discuss the Memory disambiguation technique.
 - b) Explain the basics of branch prediction in advanced processor.
 5.
 - a) Discuss the functioning of SIMD processors.
 - b) What is the basic concept of VLIW approach?
 6. Explain the types of multithreading in resource sharing in computing system.
 7. Define :
 - a) Translation and Virtualization
 - b) FSM processors
 8.
 - a) What is the role of Memory Synchronization in modern processor architectures?
 - b) Discuss the models of memory consistency.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

