No. of Printed Pages: 03	Roll No
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W-604

B. Tech. EXAMINATION, Dec. 2017

(Sixth Semester)

(Weekend) (Re-appear Only)

(CSE)

CSE-W-306

ADVANCED COMPUTER ARCHITECTURE

Time: 3 Hours [Maximum Marks: 100

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.

Note: Attempt any *Five* questions. All questions carry equal marks.

1. (a) Explain with the help of diagram the instruction execution timings.10

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P.T.O.

 2. What are the different phases of a processor's life-cycle? Write and briefly explain some of the state of-the art processors of today. 20 3. (a) Explain the difference between cold and warm cache. 5 (b) Discuss the Rau's model for processor memory interaction. 10 7. How the issue of memory coherence is deal in multiprocessor systems? Discuss any two snoopy protocols. 20 8. Briefly discuss the following with example: and disadvantages. 15 (i) Effect of branching on parallel processing 10 4. (a) What are the advantages of splitting cache 		modes? Why are they needed?	10	disadvantages of write through and copy back schemes for cache. 10
some systems? Discuss any two snoopy protocols. (b) Explain the working principle of write assembly cache. Mention its advantages and disadvantages. 15 (a) What are the advantages of splitting cache into I-cache and D-cache? (b) Explain any three line replacement strategies at miss time. 10 10 11 12 13 14. (a) How the concept of colored pages is used in physically addressed caches? Explain its pros and cons. 10 (b) What is associative memory? Derive match logic for one word of associative	life-c	cycle? Write and briefly explain some	of	(b) Discuss the Rau's model for processor
and disadvantages. 15 (i) Effect of branching on paralle processing 16 (ii) Static Networks. 16 (iii) Static Networks. 17 (iv) Effect of branching on paralle processing 16 (iv) Static Networks. 17 (iv) Effect of branching on paralle processing 16 (iv) Static Networks. 17 (iv) Effect of branching on paralle processing (iv) Static Networks. 18 (iv) Static Networks. 19 (iv) Effect of branching on paralle processing (iv) Static Networks. 10 (iv) S	()	warm cache.	5	in multiprocessor systems? Discuss any two
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6. (a) What are

the advantages

and

(b) What are different types of addressing