S.NO. 440 BATCH: 2003-2016 Reg. No. 5

END OF SEMESTER EXAMINATIONS, NOVEMBER -2017
COMPUTER SYSTEM ARCHITECTURE
SUBJECT CODE: 11UACA05

MAJOR: B.C.A **SEMESTER : II**
TIME : 3 HOURS **MAX. MARKS: 75**

SECTION – A (5 X 2 = 10)

Answer all the Questions:

1. Write any two examples for a three-address instructions.
2. What are the acronyms for SISD and MIMD.
3. Define an algorithm.
4. What are called the peripherals?
5. Differentiate between the virtual address and physical address.

SECTION – B (5 X 4 = 20)

Answer all the Questions:

6. a) Briefly discuss about the Memory Stack.
   (OR)
   b) Enumerate the Characteristics of a RISC.
7. a) Explain three major difficulties that cause the instruction pipeline.
   (OR)
   b) Write short notes on "Array processors".
8. a) Draw the hardware implementation of multiplication algorithm.
   (OR)
   b) Briefly discuss the 2-bit by 2-bit array multiplier.
9. a) Narrate the modes of Transfer.
   (OR)
   b) Discuss briefly on the "Serial communication".
10. a) Summarize the Associative mapping.
    (OR)
    b) Enumerate the characteristics of Multiprocessor System.

SECTION – C (3 X 15 = 45)

Answer any THREE Questions:

11. Exemplify the data transfer and manipulation instructions.
12. Explain the pipeline organization with examples.
13. Describe the hardwired control for signed- magnitude addition and subtraction with flowchart.
14. Discuss on the Asynchronous Data Transfer.
15. Elucidate the cache memory organization.

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