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THE LNM INSTITUTE OF INFORMATION TECHNOLOGY COMPUTER ORGANIZATION & ARCHITECTURE (2017-18, I)

QUIZ

Max. Marks 10

Time: 15 mins.

Q1. Which of the following statements are true for Moore's law?

Moore's law predicts that power dissipation will double every 18 months.

Moore's law predicts that the number of transistors per chip will double every 18 months.

- Moore's law predicts that the speed of VLSI circuits will double every 18 months.
- None of the above.

Q2. Which of the following generates the necessary signals required to execute an instruction in a computer?

- Arithmetic and Logic Unit
- Memory Unit
- Control Unit
 - Input/Output Unit

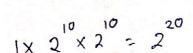
Q3. An instruction ADD R1. A is stored at memory location 4004H. R1 is a processor register and A is a memory location with address 400CH. Each instruction is 32-bit long. What will be the values of PC, IR and MAR during execution of the instruction?

4004H; ADD R1. A; 400CH

- 4008H: ADD: 400CH
- 4008H; ADD RI, A: 400CH
- None of the above

Q4. Consider a 1 MB (Megabyte) byte addressable memory system, with word size of 32 bits. The number of bits in MAR and MDR will be:

- 23.32
- 20, 8
 - 23.32
 - 20, 32





Q9. The maximum unsigned binary number that can be represented in 12 bits is
$$2^{12}$$

Q10 In two's complement representation -6 can be represented by 1010 in four bits. The representation of -6 in 8-bit will be 11111010