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SARDAR PATEL UNIVERSITY
M.Sc. IT (Integrated) Examination, 1st Semester (NC)
Date: 24th April,2015
Session: Morning　　Time : 10:30 A.M. to 01:30 P.M.

Course Code: PS01CIIT02

Course Title : Computer Organization

Total Marks: 70

Q1.　Multiple Choice Questions　　　　　　　　　　　　　　　　**[10]**

1.　Which one of the following is not an input unit?
- a.　Keyboard
- c.　Mouse
- b.　Scanner
- d.　printer

2.　In the octal number system base is _____
- a.　2
- c.　4
- b.　8
- d.　16

3.　ALU stands for _____.
- a.　Arithmetric Logic Unit
- c.　Arithmetic Logic Unit
- b.　Arithmetic Logo Unit
- d.　Arithmetrics Logic Unit

4.　An invert gate is also called a _____ gate.
- a.　NOR
- c.　NOT
- b.　XNOR
- d.　NAND

5.　The _____ gate has two more input signals. All inputs must be same to get a low output.
- a.　XOR
- c.　NOT
- b.　XNOR
- d.　NAND

6.　ASCII equivalent of A is _____.
- a.　65
- c.　48
- b.　32
- d.　97

7.　Pipeline is referred as _____.
- a.　MIMD
- c.　SISD
- b.　SIMD
- d.　MISD

8.　The world's first array processor was _____
- a.　8085
- c.　8086
- b.　ILLIAC VI
- d.　ILLIAC IV

9.　Which one is the non-impact printer?
- a.　Daisy wheel
- c.　Drum
- b.　Chain
- d.　Laser

10.　A method for specifying an operand in memory by giving its full address, such a mode is called _____.
- a.　Direct addressing
- c.　Indirect Addressing
- b.　Index addressing
- d.　None of these

Q2. Answer the following short questions (Attempt any TEN) [20]

1. List out the limitations of Primary Storage.
2. What are the five basic operations performed by any Computer System?
3. Write the functions of Input Unit.
4. Write down Identity law.
5. Define character code and write down the standards of character code.
6. Write down Distributive and Complement law.
7. List the steps of Instruction Execution cycle.
8. What are IR and PC registers?
9. Write the difference between primary and secondary memory.
10. What is sequential access device?
11. What is register addressing?
12. Define stack addressing.

Q3. a. What is Number System? Explain any two number systems. [05]

b. Explain the conversion of Binary to Decimal and Octal to Decimal with suitable example. [05]

OR

Q3. a. Draw a block diagram of Basic Organization of a Computer System and explain the functions of the various units. [05]

b. Explain evolution of computers. [05]

Q4.a. Explain the rules of Boolean algebra. [06]

b. Explain Hamming's code. [04]

OR

Q4.a. Explain with symbol and truth table (for two inputs and three inputs) the following gates: 1. NOT   2. AND   3. XOR [06]

b. Write the truth table for : A'B+B'C, ABC +A'B'C'. [04]

Q5.a. Explain in detail pipelining. [05]

b. Explain in detail the Von Neumann machine. [05]

OR

Q5.a. Explain in detail Array computers. [05]

b. Explain the storage organization of magnetic disks. [05]

Q6. Explain any three addressing methods in detail. [10]

OR

Q6. Explain Keyboard , Mouse and Scanner input devices in detail. [10]

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