(13) Seat No.:_____ No. of Printed Pages : 2

SARDAR PATEL UNIVERSITY

B.Sc. (CA & IT) (INTEGRATED) (Regular) AND M.Sc. IT (INTEGRATED) (NC)

(SEM – I) EXAMINATION – 2016

PS01CIIT02 : Computer Organization

Date:22/10/2016, Saturday **Time:10:00 am to 01:00 Pm** **Total Marks : 70**

Q.1 Multiple choice questions: [10]

1. Secondary storage of a computer is also known as _____.
   A. Hard Disk B. Auxiliary storage
   C. Main Memory D. None of above

2. In Hexadecimal Number system, F stands for _____
   A. 14 B. 15
   C. 16 D. None of above

3. Which one of the following is not an input unit?
   A. Scanner B. Keyboard
   C. Printer D. None of above

4. The OR gate has two or more input signals. If any input is _____, the output is high.
   A. high B. low
   C. both A and B D. none

5. Extra bit added to a string of bits to detect errors is known as_____
   A. Additional bit B. Correction bit
   C. Parity bit D. updation bit

6. The_____gate has two more input signals. All inputs must be same to get a low output.
   A. NOR B. XNOR
   C. NAND D. XOR

7. Pipeline is referred as
   A. SISD B. SIMD
   C. MISD D. MIMD

8. Which memory is permanent type memory?
   A. ROM B. RAM
   C. EPROM D. EEPROM

9. If there is a mechanical contact between the print head and paper then this kind of printer is known as
   A. Impact printer B. Non-impact printer
   C. Scanner D. None of these

10. A method for specifying an operand in register, such a mode is called _____.
    A. Immediate addressing B. Direct addressing
    C. Register addressing D. none of these.

(P.T.O.)

Q.2 Attempt any ten out of twelve. [20]

1. What is secondary storage?
2. Define the terms 'Hardware' and 'Software'.
3. $(28)_{10} = (?)_8$
4. Simplify the expression $A + A'.B = A + B$
5. Define: Even Parity Bit and Odd Parity Bit.
6. Write down Distributive and commutative law.
7. Give the Full Form of EEPROM and SSDD
8. Draw the diagram of stages of Pipeline
9. What is vector processor?
10. Define register addressing.
11. What is Immediate addressing?
12. Define Sequential Access device.

Q.3(a) Explain the binary addition and subtraction with suitable examples. [06]

(b) 1. $(252)_{10} = (?)_2$ 2. $(234)_8 = (?)_{16}$ [04]

OR

(a) Draw a block diagram of Basic Organization of a Computer System and explain the functions of the various units. [06]

(b) 1. $(F3A)_{16} = (?)_{10}$ 2. $(10101011)_2 = (?)_{10}$ [04]

Q.4(a) Explain AND, OR and XNOR Gate. [06]

(b) Explain UNICODE with example. [04]

OR

Q.4(a) Explain OR, NOT and NAND. [06]

(b) Explain Hamming's code. [04]

Q.5 Explain the concept of pipelining and multiprocessors in detail [10]

OR

Q.5 Explain RAM, ROM, Cache memory, Registers, Flash Memory. [10]

Q.6(a) Explain Input devices. [05]

(b) Explain Index and stack addressing. [05]

OR

(a) Explain output devices. [05]

(b) Explain direct and indirect addressing [05]

— X —