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SARDAR PATEL UNIVERSITY

F.Y.B.C.A (1st Semester) (CBCS) (REGULAR) Examination

US01CBCA53: Fundamentals of Computer Organization

DATE: 13th December 2022, Tuesday

TIME: 10:00 A.M to 01:00 P.M **Total Marks: 70**

Q:1 Multiple choice questions. **[10]**

1. Which generation of computer developed using Vacuum Tube?
   A. First generation B. Second generation
   C. Third generation D. Forth generation

2. The ALU and CU jointly known as :
   A. RAM B. ROM C. CPU D. None

3. The number of digits in octal system is _____.
   A. 8 B. 7 C. 10 D. 2

4. Storage representation of 18 using 1's complement method is_____.
   A. 00010010 B. 11101101 C. 11011100 D. 11111111

5. The mapping of characters onto integer is called a _____.
   A. Byte Code B. Character Code C. ASCII Code D. None of these

6. Multiprocessor is referred as
   A. SISD B. SIMD C. MISD D. MIMD

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

8. The Full form of RAM is
   A. Read only memory B. Read and write memory
   C. Random access memory D. Really a memory

9. Which printer gives the best result of printing?
   A. Dot-matrix printer B. Laser printer
   C. inkjet printer D. none of these

10. _____ addressing is also known as implicit addressing.
    A. Direct B. Stack C. Register D. None of these

[P.T.O]

Q:2 **Answer the following questions. (Any ten)** **[20]**

1. Perform the Conversions Decimal to Binary for 1828.
2. Explain third generation of computer.
3. Differentiate – Hardware and Software.
4. Define Excess notation with example.
5. Define: Odd Parity, Even Parity
6. Define Data Path. List Types of Instructions in CPU Organization.
7. List stages of pipelining.
8. Explain Cache memory.
9. Differentiate between – RAM and ROM.
10. What is the function of Scanner?
11. Write a difference between Line printer and inkjet printer.
12. List types of input devices. Also write down use of each device.

Q:3 A. Explain binary number system with example. **[05]**

B. Explain applications of computer. **[05]**

OR

A. Explain decimal number system with example. **[05]**

B. Explain First and second generation of computer. **[05]**

Q:4 A. Explain ASCII CODE. **[05]**

B. List methods for Representation of Integers. Explain any one in detail. **[05]**

OR

A. Explain UNICODE. **[05]**

B. Explain Hamming code method. **[05]**

Q:5 A. Explain multiprocessor. **[04]**

B. Explain different types of registers used for various operations. **[06]**

OR

A. Write a short note on Secondary Memory. **[04]**

B. Explain array processor with diagram. **[06]**

Q:6 A. Explain Keyboard with all kind of keys. **[05]**

B. List type of printers and explain any one type of printer in detail. **[05]**

OR

A. Explain types of monitor in detail. **[05]**

B. Write a note on Mouse. **[05]**

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