Faculty of Engineering
Mid Sem I Examination Sep- 2022
CS3CO34 Computer System Architecture

Programme: B.Tech.   Branch/Specialisation: CSE

Duration: 2 Hrs.   **Maximum Marks: 40**

Q.1 i.   To reduce the memory access time we generally make use of _____   1
           a) SDRAM's   b) Heaps
           c) Cache's   d) Higher capacity RAM's

     ii.   Speedometer is an example of _____ computer   1
           a) Digital   b) Analog
           c) Hybrid   d) all of these

     iii. Batch processing was mainly used in this generation?   1
           a) First   b) Second
           c) Fourth   d) Third

     iv.   The main virtue for using single Bus structure is _____   1
           a) Cost effective connectivity and speed
           b) Fast data transfers
           c) Cost effective connectivity and ease of attaching peripheral devices
           d) None of the mentioned

     v   Computers use addressing mode techniques for   1
           _____ .
           a) giving programming versatility to the user by providing facilities as
           pointers to memory counters for loop control
           b) to reduce no. of bits in the field of instruction
           c) specifying rules for modifying or interpreting address field of the
           instruction
           d) All the above

     vi   _____ register keeps track of the instructions stored in program 1
           stored in memory.
           a) AR (Address Register)   b) XR (Index Register)
           c) PC (Program Counter)   d) AC (Accumulator)

vii   During instruction execution, an instruction is read into an ———— 1
        ———— in the processor
        a) Memory buffer register (MBR)   b) Instruction register (IR)
        c) Address register (AD)   d) index register (IR)

viii.   The disadvantage of the immediate addressing is that the size of the   1
        number is restricted to the size of the
        a) Operand field   b) address field
        c) Modes   d) registers

ix   The operation is specified by a binary code, known as the   1
        a) operation code or opcode   b) source operand reference
        c) result operand reference   d) None of them

x   The time period of third generation computer is............   1
        a)1959-1965   b)1946-1959   c)1965-1971   d)1969-1975

Q.2 i.   What do you mean by microoperations. Name the microoperations are   2
           used in computer system.
     ii.   Write about the functional units of a computer.   3
     iii. Explain Bus structure with its types.   5   4
OR   iv.   List out the applications of Logic microoperations.   5

Q.3 i.   Write Short Note on : 1)Instruction Cycle   2)Instruction Code   4
     ii.   Explain types of computer instruction.   6   5.5
OR   iii. Describe addressing modes   6
           Attempt Any Two
Q.4 i.   Write the differences between Computer organisation and Computer   5
           Architecture.
     ii.   Illustrate Processor registers in computer organisation.   5

     iii. What do you mean by Assembly languages.Explain two pass assembler   5   4
           working.

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