ANNUAL EXAMINATION 2020

Centre No. 135   *Centre Name-* *Disha College, Raipur (C.G.)*

Class-B.Sc.-I   **Subject-**Computer Science

Paper No- I   **Paper Name-** Computer Fundamental

Time- 3 hrs.   **M.M.-**50

Note – *Attempt all units. Each question carries equal marks.*

Question 1 (Unit I)
(a) Draw and explain the schematic diagram of microcomputer.
(b) What do you understand by Computer Network?

OR
(c) Explain various measurement units for measuring processing speed of a microprocessor.
(d) Explain the various features of Supercomputer and Desktop computer.

Question 2 (Unit II)
(a) What is the purpose of providing registers in a CPU? Describe various registers which are usually provided in a microprocessor?
(b) What do you mean by fetch cycle? Draw and explain the timing diagram for opcode fetch cycle for Intel 8085.

OR
(c) What do you understand by Instruction and Data flow?
(d) What do you mean by Interrupt and exceptions?

Question 3 (Unit III)
(a) What is memory hierarchy? Explain the features of primary memory.
(b) What is the function of a cache memory? Explain the terms cache hit and cache miss.

OR
(c) What are SCSI and EIDE adapters? Discuss their applications.
(d) What are PCMCIA cards and slots? Discuss their applications.

Question 4 (Unit IV)
(a) Discuss the construction of mechanical, capacitive and Hall Effect key-switches.
(b) Discuss asynchronous scheme which are used for data transfer with suitable examples.

OR
(a) What are programmable and nonprogrammable ports?
(b) What is DMA controller? Describe Intel 8237.

Question 5 (Unit V)
(a) What are utility programs? Distinguish among Interpreter, Compiler and Assembler.
(b) What is the difference between a programming language and an application package?

OR
(c) What are common and special symbols for flow charts? Discuss the application of flow chart.
(d) What are the differences between subroutines and macros?

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