

DD-2852 (SE)

B.C.A. (Part-I), EXAMINATION, 2020

Paper Second
(Computer Fundamentals)

Time : Three Hours

Maximum Marks : 80

Minimum Pass Marks : 27

Note: Attempt any two parts from each question. All question carry equal marks.

1. (a) Draw a suitable block diagram of a computer and explain each component in brief.
(b) Explain AND, OR and XOR logic gated with logic diagram and truth table.
(c) Do as directed:-
 - i). Subtract $(100011)_2$ from $(110010)_2$
 - ii). $(11001)_2 = (?)_2$
 - iii). $(1AC)_{16} = (?)_{10}$
 - iv). $(952)_{10} = (?)_8$
 - v). $(4706)_8 = (?)_{10}$
2. (a) What is input device of computer? Explain OMR, Character reader and MICR in brief.
(b) What are the types of output devices? Differentiate between impact and non-impact.
(c) Write short notes on:-
 - i). Touch Screen
 - ii). Flat Scree Technologies
 - iii). Voice Input devices
 - iv). Smart Cards
3. (a) What is Microprocessor? Explain working of CU, ALU, Registers and Buses of a CPU.
(b) What is main memory? Explain various types of ROM memory.
(c) What do you mean by secondary memory? Explain hard disk and Optical disk in detail.

4. (a) What do you mean by Software of a computer? Explain various functions provided by the operating system.
- (b) What is Computer Language? Explain Assembler, Interpreter and Compiler in detail.
- (c) Differentiate between:-
- i). System Software & Application Software
 - ii). Program and Package.
5. (a) What do you mean by DOS? Explain any four Internal and External command of DOS?
- (b) What is operating System? Explain various functions provided by the operating system.
- (c) Write short notes on:-
- i). Adding and removing software in control panel.
 - ii). Overview of Linux.
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