

Time Allotted : 3 Hours
Full Marks : 70

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## GROUP - A <br> ( Multiple Choice Type Questions )

1. Choose the correct alternatives for the following :

$$
10 \times 1=10
$$

i) ALU performs
a) only arithmetic operations
b) only logical operations
c) string data
d) both arithmetic and logical operations.
ii) Floppy Disk is a storage media of type
a) Direct access
b) Sequential access
c) Both direct and sequential access
d) none of these.
a) main memory
b) part of ALU
c) secondary memory
d) memory data register.
iv) Which of the following is not a hardware ?
a) Compiler
b) Chip
c) $\quad \mathrm{CPU} \mathrm{d}$ )
Memory unit.
v) The unit which stores all data, instructions and results temporarily during execution is called
a) main memory
b) control unit
c) ALU
d) $\mathrm{I} / \mathrm{O}$.
vi) An assembler in computer refers to a/an
a) person
b) hardware
c) language
d) programme
e) electronic circuit.
vii) Which of the following is not a magnetic memory?
a) Floppy disk
b) Magnetic tape
c) Flip-flop
d) Core.
viii) The 2 's compliment of 00110 is
a) 11010
b) 10101
c) 11001
d) none of these.
ix) The base in Hexadecimal number is
a) 4
b) 6
c) 12
d) 16 .
x) Negative number in computer uses
a) sign bit conversion

b) 2's compliment method
c) 1's compliment method
d) all of these.

## GROUP - B

(Short Answer Type Questions )
Answer any three of the following. $3 \times 5=15$
2. a) What is LAN ? What are the advantagess of LAN ?
b) What is WAN ? What is MAN ?
3. a) Convert decimal to octal equivalent :
$(831)_{10}=(?)_{8}$
b) Convert binary to decimal equivalent :
c) What is the relation between a bit and a byte ?
4. What is software ? How many types of software are there ?
5. Write the features of Machine Language and Assembly Language.
6. What is Cache Memory ?

> GROUP - C
( Long Answer Type Guestions )
Answer any three of the following. $3 \times 15=45$
7. a) Draw the block diagram of a computer system and explain the functions of each of the constituent blocks.
b) What are Viruses ? Give examples.
8. a) What are CPU registers ? How many types of registers are there?
b) List the various computer generations along with the key characteristics of computers of each generations. 9
9. a) Differentiate between soft copy and hard copy output. 5
b) Three numbers denoted by the variables $A, B, C$ are supplied as input data. Draw a flowchart for the logic to identify and print the largest one.
c) What is Multimedia?
10. a) Draw the block diagram of 'Basic Computer
Organization'.
b) Distinguish between primary storage an secondary storage. 5
c) Write the functions of the input unit. 4
11. a) What is Operating system ? List the functions of Operating system.8
b) Explain any two network topologies. 7

