

COMPUTER SCIENCE-9TH

NOTE: There are three sections of this paper .carefully read the instructions for each section and attempt accordingly. Attempt all questions of section-A and return it to the superintendent within given time even if you have not attempted any question. Select the correct choice and write only A,B,C or D, whichever is appropriate, in the answer box. No marks will be awarded for cutting/erasing/overwriting.

Tim: 15 Minutes

SECTION-A

Max, Marks: 11

1. The UNIVAC is an example of.....generation of computers.
(a) First (b) second (c) third (d) fourth
2. ENIAC was the first electronic computer which was completed in.....
(a) 1890 (b) 1918 (c) 1900 (d) 1946
3. The second generation computer used.....
(a) vacuum tubes (b) IC (c) transistors (d) VLSI
4. Difference engine was developed by.....in 1822.
(a) Charles Babbage (b) John Napier (c) Pascal (d) Herman Hollerith
5. Cache memory is used because of speed disparity between main memory and.....
(a) main board (b) CPU (c) input device (d) output device
6. The BCD code of 45 is
(a) $(01000100)_2$ (b) $(11000111)_2$ (c) $(11111000)_2$ (d) $(00000111)_2$
7. One byte is a combination of.....bits.
(a) 4 (b) 8 (c) 16 (d) 32
8. The capacity of 3.5 inch floppy dist is.....
(a) 2MB (b) 100KB (c) 1.44MB (d) 760MB
9. Hexadecimal number system is a number system of base.....
(a) 2 (b) 8 (c) 10 (d) 16
10. The decimal number 24 is equal toin octal number system.
(a) 03 (b) 30 (c) 06 (d) 60
11. 2's complement of $(11010)_2$ is.....
(a) $(00110)_2$ (b) $(00111)_2$ (c) $(00101)_2$ (d) $(11111)_2$

SECTION-B

Time: 1 Hrs 45 Min

Max. Marks: 38

1. Attempt any seven of the following. All carry equal marks.
 - i. Write down any four disadvantages of first generation of computers.
 - ii. Write down any four advantages of a computer system.
 - iii. Explain the difference between compiler and interpreter.
 - iv. Explain the central processing unit (CPU) of a computer system.
 - v. Convert $(1339)_{10}$ into octal number system.
 - vi. Convert $(15.6)_8$ into decimal number system.
 - vii. What is hexadecimal number system.
 - viii. Find the product of $(1101)_2$ and $(1000)_2$.
 - ix. Simplify the Boolean expression $x'yz' + xyz' + xy'z + xyz$ using the laws of Boolean algebra.

SECTION-C

Max. Marks: 16

Note: Attempt any two of the following questions. All questions carry equal marks.

2. Define a computer system. Explain the classification of digital computers.
3. i. What are printers? Explain non-impact printers.
ii. Convert $(1101.0110)_2$ into equivalent hexadecimal number.
4. i. What is a computer virus. Explain micro virus and boot sector virus.
ii. Solve by using 2's complement $(1011.11)_2 - (101.001)_2$