

Subject : Computer Application

Time : 1 hour

Test No : 2 NUMBER SYSTEM

Mark : 40

I. CHOOSE THE BEST ANSWER

10 X 1= 10

1. A word can have a length of _____.
A) 2,5,10 bits B) 15,25,50 bits C) 16,32,64 bits D) 12,24,48 bits
2. How many standard number system are there to use? A) 2 B) 4 C) 8 D) 16
3. NAND is called as _____ Gate.
a. Fundamental Gate b. Derived Gate c. Logical Gate d. Electronic Gate
4. The right most bit in the binary number is called as _____.
a. LSB b. SLB c. MSB d. LMB
5. The most commonly used numbering system is the _____ system.
a. Binary b. Decimal c. Octal d. Hexadecima
6. A) How many bytes does 1 Kilo Byte - (1) 1002
B) For 11012 what is the Hexadecimal equivalent - (2) 0110
C) What is the 1's complement of 00100110? - (3) D
D) 1's complement of 10012 - (4) 1024
E) $102 + 102 =$ - (5)
11011001
a. 12345 b.43521 c. 42351 d.53142
7. A) $(1101)_2 \rightarrow (?)_{10}$ - (1) 10010110
B) $(46)_{10} \rightarrow (?)_2$ - (2) 1100010.0111010101110
C) $(150)_{10} \rightarrow (?)_2$ - (3) 13
D) $(20 + 25)_{10} \rightarrow (?)_2$ - (4) 101110
E) $(98.46)_{10} \rightarrow (?)_2$ - (5) 00101101
a. 12345 b.31425 c. 34152 d.34521
8. A) Add $11010102+1011012$ - (1) 1110 1001
B) Subtract $11010112 - 1110102$ - (2) 0001 1001
C) $(22)_{10}$, 1's complement - (3) (0110001)2
D) 20's binary value - (4) 10010111
E) 25's binary value - (5) 0001 0100
a. 43512 b.43152 c. 12345 d.45132

9. A) $(45)_{10}$ - (1) 0100101010001100
 B) $20+25$ - (2) 88
 C) $4A8C \rightarrow (?)_2$ - (3) 00101101
 D) $(128)_8 \rightarrow (?)_{10}$ - (4) 37AE16.
 E) $11011110101110 \rightarrow (?)_{16}$ - (5) 00101101

a. 12345 b.53124 c. 53214 d.51324

10. The decimal value of 1010.012 is _____.

A) 10.5 B) 10.25 C) 10.05 D) 10.025

II ANSWER ANY 10 OF THE FOLLOWING (Q.No 17 & 28 is compulsory) 10 x 2 = 20

16. What is Data?
17. What is Nibble?
18. What is Word Length?
19. What is called Byte?
20. How the Memory is represented in the Computer?
21. What are the different Number systems?
22. What is Decimal Number System?
23. What is Hexa - Decimal Number System?
24. What are the Methods to Convert Decimal Number to Binary?
25. Write the steps to convert the fractional Binary to Decimal?

III Answer the following questions

2 X 5 = 10

26. What is number system? Describe different number system in detail.
27. Explain the following terms i) BCD ii) EBCDIC iii) ASCII iv) ISCI v) Unicode
28. a) Binary addition: Rules for Binary Addition: Add: $(1011)_2 + (1001)_2$
 b) Convert Octal number $(6213)_8$ to Binary number?
 C) Convert $(1265)_8$ to equivalent Decimal number
 d) Convert the given Binary number $(11.011)_2$ into its decimal Equivalen
 e) Convert Binary number $(1101)_2$ into Decimal Number