

4th Sem * Assignment no-1 & Digital Electronic

Q1) What are the advantages of Digital system over analog systems?

Q2) What is the difference between weighted and non weighted codes? Give examples.

Q3)

3.1) Convert $(11011.101)_2$ to Decimal

3.2) Convert $(101101.10101)_2$ to Decimal

3.3) Convert $(1100.1011)_2$ to Decimal

3.4) Convert $(1001.0101)_2$ to Decimal

3.5) Convert $(0.10101)_2$ to Decimal

Q4)

4.1) Convert $(6327.4051)_8$ to Decimal

4.2) Convert $(4057.06)_8$ to Decimal

Q5)

5.1) Convert $(5C7)_{16}$ to Decimal

5.2) Convert $(A0F9.0EB)_{16}$ to Decimal

5.3) Convert $(3A.2F)_{16}$ to Decimal

Q6) Convert the following decimal numbers to Binary.

6.1) Convert $(13)_{10}$ to Binary

6.2) Convert $(0.65625)_{10}$ to Binary

6.3) Convert $(25.5)_{10}$ to Binary

6.4) $(10.625)_{10} = (?)_2$

6.5) $(0.6875)_{10} = (?)_2$

6.6) $(163.875)_{10} = (?)_2$

$$6.7) (53)_{10} = (?)_2$$

$$6.8) (0.75)_{10} = (?)_2$$

$$6.9) (105.15)_{10} = (?)_2$$

Q.7) Convert the following numbers from Decimal to octal

$$7.1) (378.93)_{10} = (?)_8$$

$$7.2) (5497)_{10} = (?)_8$$

$$7.3) (247)_{10} = (?)_8$$

$$7.4) (0.6875)_{10} = (?)_8$$

$$7.5) (3287.5100098) = (?)_8$$

Q.8) Decimal to Hexadecimal

$$8.1) (95.5)_{10} = (?)_{16}$$

$$8.2) (675.625)_{10} = (?)_{16}$$

$$8.3) (2598.675)_{10} = (?)_{16}$$

$$8.4) (49056)_{10} = (?)_{16}$$

Q.9) Binary to octal conversion

$$9.1) [1001110]_2 = (?)_8$$

$$9.2) [0.10100110]_2 = (?)_8$$

$$9.3) [1100110001.00010111001]_2 = (?)_8$$

$$9.4) [101101110.1100100011]_2 = (?)_8$$

$$9.5) [11110001.10011001101]_2 = (?)_8$$

9.6)

9.7)

Q.10 Binary to Hexadecimal Conversion

10.1) $[10100110101111]_2 = (?)_{16}$

10.2) $[0.00011110101101]_2 = (?)_{16}$

10.3) $[11001110001.000101111001]_2 = (?)_{16}$

10.4) $[1011011110.11001010011]_2 = (?)_{16}$

10.5) $[111110001.10011001101]_2 = (?)_{16}$

Q.11) Octal to Hexadecimal conversion

11.1) $[756.603]_8 = (?)_{16}$

11.2) $[247.36]_8 = (?)_{16}$

Q.12) Octal to Binary conversion

12.1) $[756.603]_8 = (?)_2$

12.2) $[247.36]_8 = (?)_2$

Q.13) Hexadecimal to octal conversion

13.1) $(A72E)_{16} = (?)_8$

13.2) $(0.BF85)_{16} = (?)_8$

13.3) $(B9F.AE)_{16} = (?)_8$

Q.14) Hexadecimal to Binary conversion

14.1) $(A72E)_{16} = (?)_2$

14.2) $(0.BF85)_{16} = (?)_2$

14.3) $(B9F.AE)_{16} = (?)_2$