Chapter- 1

NUMBER SYSTEM

Level-1 1 Mark

Fill in the Blanks

1.The base of Binary number system is----------
2. The base of Hexadecimal number system is----------
3.Octal Number system consists of---------- numbers.
4.In Binary addition, 1+1 equals to----------
5.----------number system is understood by the computer system.

2. State True or False.

a) You cannot perform arithmetical operations on binary numbers.

b) The decimal number system consists of 10 digits l.e., 0 to 9.

c) The method to perform division of two binary numbers is not the same as that of dec

d) 1 multiplied by 0 equals to 0.

e) Charles Babbage introduced the concept of 0 (Zero).

f) The numbers used in Octal number system are 1 to 7.

3. Multiple Choice
a. ----------introduced the concept of o (Zero).
a. Ada Lovelace
b.Aryabhat
c. Bill Gates
b.---------- converts the decimal format into its binary equivalent

a. Digital Computer

b.Cell Phone

c. Abacus
c, A computer understands only----------code.
a. English
b. French

c. Binary
d. In Binary multiplication, 1x1 equals to----------
a.0
b.1
c. 2
e. To convert Decimal number into Binary number, divide the number by---------.

a.2
b.8
c. 10

Level-2 2 Marks

1.What is Number System, What are the different number system used?

2.What are the rules to convert a Decimal number into a Binary number?

3. Write the rules to multiply two Binary numbers.?

4. Briefly explain the Octal number system.?

5.What do you understand by Hexadecimal Number System?

6. Convert the following Decimal numbers into Binary numbers.

a. 68

b. 987

A. Convert the following Decimal no to binary and vice versa?

1. $(145)_{10}$ =(----------)2

2. $(23)_{10}$ =(----------)2

3.$(65)_{10}$ =(----------)2

4.$(129)_{10}$ =(----------)2

5.$(36)_{10}$ =(----------)2

6. $(11011)_2$=(------)$_{10}$

7. $(11110)_2$=(-------)$_{10}$

8.$(10001)_2$=(-------)$_{10}$

9. $(101010110)_2$=(----------)$_{10}$

10. $(111000)_2$=(-------)$_{10}$

B. Convert the following binary numbers to octal form.

1. 10110100_2

2. 110001_2

C. Convert the following binary numbers to hex form.

Q.1) 1010001100

2. 100111011111

D.Convert the following decimal numbers to hex form.

$(345)_{10}$=(------)$_{16}$

D. Do the following binary arithmetic?

1. 10101+00111
2. 1001101+1000101101
3. 1101+1001
4. 10011-01010
5. 11001001-01100110
6. 111-001
7. 101X011
8. 1011X101
9. 101010X 1011
10. 1111/11
11. 111001/101