

QNA

Section-A

Q) fill in the blanks.

1) The base of binary number system is 2.

2) The base of decimal system is 10.

3) Octal number system consists of 8 digits.

4) In binary addition,  $1+1$  equals to 10.

5) Binary number system is understood by the computer system.

6) Hexadecimal uses 16 symbols to represent numbers.

7) In binary subtraction,  $1-1$  equals 0.

13) State true or false.

1) ~~True~~ false, 2) True, 3) F, 4) True, 5) False

6) false

### Section-B

1) Arjabbat introduced the concept of 0 (zero)

2) A digital computer converts the decimal format into its binary equivalent.

3) A computer understands only binary code.

4) In binary multiplication,  $1 \times 1$  equals to 1.

5) To convert decimal number into binary number, divide the number by 2.



6) Answer the following questions.

1) A number system is a set of values used to represent different quantities.

\* Decimal number system

\* Octal Number system

\* Binary number system.

\* Hexadecimal number system.

② What are

② Ans Steps to convert a decimal to binary number :-

\* Step-1 (Divide the given decimal number with the base 2.)

\* Step-2 (Write down the remainder, divide the quotient again by 2.)

\* Step-3 (Repeat step 2 till the quotient is zero.)

③ Ans Rules ~~the rules~~ to multiply two ~~binary~~ binary numbers are:

\*  $1 \times 1 = 1$ ,  $0 \times 1 = 0$ ,  $1 \times 0 = 0$ ,  ~~$0 \times 0 = 0$~~

\*  $0 \times 0 = 0$

④ Ans The octal number system consists of 8 digits 0 to 7 with the base 8.

This system came, when the native Americans used their space between fingers rather than using their fingers.

5) A) This system consists of 16 digits. 0-9. ~~and~~ Its base is 16. Hex = 6 and decimal = 10.

Hw

## O.D.M Connect homework

① what is number system, what are the different number system used?

Ans A number system is a set of values which are used to represent quantities.

\* Decimal number system

\* Octal number system

\* Binary number system

\* Hexadecimal number system

② What are the rules to convert a decimal number ~~system~~ into a binary number?

Ans Converting decimal to binary number →

\* (Step-1): Divide the given decimal number with the base 2.

\* (Step-2): Write down the remainder, divide the quotient again by 2.

\* (Step-3): Repeat step 2 till the quotient is zero.

③ Briefly explain the Octal number system?

Ans The Octal number system consists of 8-digits (0-7) with the base 8.

This system came, when the native Americans used their space between fingers rather than using their fingers.

④ What do you understand by Hexadecimal number system?

Ans This system consists of 16-digits 0-9. It's base is 16. Hex = 6 and decimal = 10.