

HIGHER SECONDARY FIRST YEAR

Unit – I Fundamentals of Computers :: Chapter – II Number Systems – One Marks

1. The term data comes from the word **datum**, which means a raw fact.
2. The data is a fact about **people, places or some objects**.
3. Computer only handles data in the form of **'0'(Zero) and '1' (One)**.
4. '0' or '1' are called **Binary Digits(BIT)**.
5. **Binary Digit(BIT)** is the basic unit of data in computers.
6. **Bit** is the basic unit of data in computers.
7. A collection of 4 bits is called **nibble**.
8. A collection of 8 bits is called **Byte**.
9. A byte is considered as the basic unit of **measuring the memory size** in the computer.
10. The number of bits processed by a Computer's CPU refers to **Word length**.
11. A word length can have **8 bits, 16 bits, 32 bits and 64 bits**. Present day Computers use **32 bits or 64 bits**.
12. 1 KiloByte represents **1024 bytes** that is 2^{10} .
13. 1 MegaByte represents **1024 KiloByte** that is 2^{20} .
14. 1 GigaByte represents **1024 MegaByte** that is 2^{30} .
15. 1 TeraByte represents **1024 GigaByte** that is 2^{40} .
16. 1 PetaByte represents **1024 TeraByte** that is 2^{50} .
17. 1 ExaByte represents **1024 PetaByte** that is 2^{60} .
18. 1 ZettaByte represents **1024 ExaByte** that is 2^{70} .
19. 1 YottaByte represents **1024 ZettaByte** that is 2^{80} .
20. The most commonly used coding scheme is **the American Standard Code for Information Interchange (ASCII)**.
21. The range of ASCII values for **lower case alphabets** is from **97 to 122** and
22. The range of ASCII values for **the upper case alphabets** is **65 to 90**.
23. Number systems are **Decimal, Binary, Octal, Hexadecimal** number system.
24. Each number system is uniquely identified by its **base value or radix**.
25. Decimal Number System consists of **0,1,2,3,4,5,6,7,8,9(base 10)**.
26. There are only two digits in the Binary system **0 and 1** (base 2).
27. The left most bit in the binary number is called as the **Most Significant Bit (MSB)** and it has the largest positional weight.
28. The right most bit is the **Least Significant Bit (LSB)** and has the smallest positional weight.
29. Octal number system digits are **0,1,2,3,4,5,6 and 7** (base 8).
30. A hexadecimal number is represented using base 16 (0 to 9, A to F).
31. To convert Decimal to Binary "**Repeated Division by 2**" method can be used.
32. To convert Decimal to Octal "**Repeated Division by 8**" method can be used.
33. To convert Decimal to Hexadecimal "**Repeated division by 16**" method can be used.
34. ISCII system is formulated by the department of **Electronics in India in the year 1986-88** and recognized by **Bureau of Indian Standards (BIS)**. Now this coding system is integrated with **Unicode**.
35. Unicode was generated to handle all the coding system of **Universal languages**.
36. Unicode is 16 bit code and can handle **65536** characters.
37. Unicode scheme is denoted by **hexadecimal numbers**.