

ECAT Computer Science Chapter 4 Computer Arithmetic & Number System

Sr	Questions	Answers Choice
1	Alphanumeric characters are expressed in terms of binary codes. In ASCII (American standard Code for Information Interchange) each character is represented as a	A. 8 bit code B. 4 bit code C. 5 bit code D. 7 bit code
2	The reason why computers have been designed to use binary numbers is.	A. computer circuits have to handle 2 binary digits rather than 10 B. electronic components, by their very nature, operate in a binary mode C. everything that can be done with a base of 10 can also be done in binary D. all of the above
3	97_{10} (decimal) in octal number system is equivalent to.	A. 136_8 B. 140_8 C. 139_8 D. 141_8
4	125_8 (octal) in decimal equivalent is equal to.	A. 83_{10} B. 84_{10} C. 85_{10} D. 86_{10}
5	Data is represented on a computer by means of a two-state on/off system called	A. the octal system B. the binary system C. a word D. ROM
6	Number 375_{10} is equivalent in binary system to.	A. 101110101 B. 100110101 C. 101110111 D. 101110011
7	The number 10000 would appear just immediately after.	A. FFFF (hex) B. 1111 (binary) C. 7777 (octal) D. all of the above
8	$126_8 + 425_8 =$ _____	A. 111101011_2 B. 101101001_2 C. 101101011_2 D. 101100011_2
9	What is the octal equivalent of the binary system :10111101.?	A. 675_8 B. 275_8 C. 572_8 D. 573_8
10	Data items are generally classified into which type of codes	A. Numeric B. Alphanumeric C. Character D. All of the above
11	The number ABC in Hexadecimal system is equivalent to which number in decimal system.	A. $A \times 100 + B \times 10 + C \times 1$ B. $10 \times 100 + 11 \times 10 + 12$ C. $10 \times 16 + 11 \times 16 + 12$ D. $10 \times 256 + 11 \times 16 + 12$
12	$AB_{16} + CD_{16} =$ _____	A. 101111010_2 B. 101111000_2 C. 101111110_2 D. 101101000_2
13	The hexadecimal number system is widely used in analyzing and programming in.	A. analog computers B. binary computers C. decimal computers D. micro computers
14	Base 8 is often used in computing because.	A. there are 8 bit in a byte B. calculations become easier by using base 8 C. electronic circuits can be made economically D. it can represent long strings of

binary 1's an U's in a more compact form

15	The binary number 10011101 is equal to the hexadecimal number.	A. 9E B. 9F C. 9D D. FF
16	Four-digit binary number 1011 is represented in the decimal system by.	A. 7 B. 9 C. 11 D. 13
17	The binary number 101000101011 is equal to the hexadecimal number	A. A2D B. C2D C. A2B D. B2C
18	The number A9D in Hexadecimal system is equivalent to which number in binary system.	A. 101010111101 B. 101010011101 C. 101110011101 D. 101010011111
19	The digits used for hexadecimal number system are.	A. A through Z B. 1 through 16 C. 0 through 15 D. 0 through 9 and A through F
20	Binary number 10101101 is equivalent in decimal form to.	A. 170 B. 171 C. 173 D. 174