## ECAT Computer Science Chapter 4 Computer Arithmetic & Number System

| Sr | Questions | Answers Choice |
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| 1 | Base 8 is often used in computing because. | A. there are 8 bit in a byte<br>B. calculations become easier by using base 8<br>C. electronic circuits can be made econmically<br>D. it can represent long strings of binary 1's an 0's in a more compact form |
| 2 | $97_{10}$(decimal) in octal number system is equivalent to. | A. $136_8$<br>B. $140_8$<br>C. $139_8$<br>D. $141_8$ |
| 3 | The hexadecimal number system is widely used in analyzing and programming in. | A. analog computers<br>B. binary computers<br>C. decimal computers<br>D. micro computers |
| 4 | The number ABC in Hexadecimal system is equivalent to which number in decimal system. | A. A x 100 + B x 10 + C x 1<br>B. 10 x 100 + 11 x 10 + 12<br>C. 10 x 16 + 11 x 16 + 12<br>D. 10 x 256 + 11 x 16 + 12 |
| 5 | The binary number 101000101011 is equal to the hexadecimal number | A. A2D<br>B. C2D<br>C. A2B<br>D. B2C |
| 6 | The number 10000 would appear just immediately after. | A. FFFF (hex)<br>B. 1111 (binary)<br>C. 7777 (octal)<br>D. all of the above |
| 7 | The number A9D in Hexadecimal system is equivalent to which number in decimal system. | A. 2727<br>B. 2648<br>C. 3717<br>D. 2717 |
| 8 | Binary number 10101101 is equivalent in decimal form to. | A. 170<br>B. 171<br>C. 173<br>D. 174 |
| 9 | $AB_{16}$+ $CD_{16}$= _____ | A. $101111010_2$<br>B. $101111000_2$<br>C. $101111110_2$<br>D. $101101000_2$ |
| 10 | Octal number system uses the digit 0 to 7. The equivalent of Octal 126 in decimal system is. | A. 80<br>B. 82<br>C. 86<br>D. 84 |
| 11 | Four-digit binary number 1011 is represented in the decimal system by. | A. 7<br>B. 9<br>C. 11<br>D. 13 |
| 12 | The main advantage of hexadecimal number is the case of conversion from hexadecimal to. | A. ASCII code<br>B. binary<br>C. octal<br>D. decimal |
| 13 | The digits used for hexadecimal number system are. | A. A through Z<br>B. 1 through 16<br>C. 0 through 15<br>D. 0 through 9 and A through F |
| 14 | $126_8$+ $425_8$= _____ | A. $111101011_2$<br>B. $101101001_2$<br>C. $101101011_2$<br>D. $101100011_2$ |

| 15 | Data items are generally classified into which type of codes | A. Numeric<br>B. Alphanumeric<br>C. Character<br>D. All of the above |
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| 16 | A letter, number, or a special character is represented by a. | A. bit<br>B. kilobyte<br>C. byte<br>D. megabyte |
| 17 | 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<br>B. 4 bit code<br>C. 5 bit code<br>D. 7 bit code |
| 18 | The reason why computers have been designed to use binary numbers is. | A. computer circuits have to handle 2 binary digits rather than 10<br>B. electronic components, by their very nature, operate in a binary mode<br>C. everything that can be done with a base of 10 can also be done in binary<br>D. all of the above |
| 19 | Data is represented on a computer by means of a two-state on/off system called | A. the octal system<br>B. the binary system<br>C. a word<br>D. ROM |
| 20 | What is the octal equivalent of the binary system :10111101.? | A. $675_8$<br>B. $275_8$<br>C. $572_8$<br>D. $573_8$ |