**Digital Electronic System**

**Exercise Numbering System**

1. Convert binary number to decimal:
   1. 100
   2. 1001
   3. 11111
   4. 10101
   5. 10111
2. Convert decimal number binary to:
   1. 12
   2. 21
   3. 45
   4. 76
   5. 100
3. Convert binary number to octal:
   1. 101
   2. 1011
   3. 110100
   4. 111001
   5. 111101
4. Convert octal number to binary:
   1. 26
   2. 17
   3. 53
   4. 124
   5. 116
5. Convert binary number to hexadecimal:
   1. 10011
   2. 111001
   3. 11000011
   4. 101010101
   5. 1101111001
6. Convert hexadecimal number to binary:
   1. 12
   2. 23
   3. AC3
   4. 5B8
   5. DAE

**Exercise Coded System**

1. Convert decimal number to BCD:
2. 35
3. 98
4. 170
5. Convert BCD number to decimal:
6. 1000 0110
7. 0011 0101 0001
8. Add the following BCD:
9. 0011 + 0100
10. 0010 0011 + 0001 0101
11. 1000 0110 + 0001 0011
12. 0100 0101 0000 + 0100 0001 0111
13. 0100 0100 + 0000 1011 + 0000 1110 + 0001 0010
14. Solve the following subtraction of BCD:
15. 0000 1000 - 0000 0011
16. 1000 1000 - 1110 0010
17. By using ASCII code table attached, show the correct word that represents the output below:

**100 0001 100 1110 101 0011 110 1100 110 1001 110 1110 010 0000 011 0001 011 1001 011 0110 011 0011**