DDCO MOD 2 QUESTION BANK

1. Design a code convertor which converts BCD to Excess 3 code.
2. Design a half adder, full adder, half subtractor and full subtractor.
3. Describe the steps that are involved in design of combinational circuits.
4. Explain 4 bit binary adder with carry propagation with logic diagram and analysis. (page 137)
5. Explain the concept of Binary addition with carry look ahead generator. Define carry propagate and carry generate. (page 139)
6. Explain Four-bit adder–subtractor (with overflow detection). (page 142)
7. Define Decoder. Explain 3 -to 8 line decoder with logic diagram. (Page 151)
8. Define 2 to 4 line decoder with logic diagram. (page 152)
9. Design 4 \* 16 decoder constructed with two 3 \* 8 decoders. (page 153)
10. Design a full adder with decoder. (page 154)
11. Design Octal to binary encoder. (page 155)
12. Design 4 input priority encoder. (page 156)
13. Describe the following with logic diagram , function table, block diagram and expressions:
    1. Two-to-one-line multiplexer (page 158)
    2. Four-to-one-line multiplexer (Page 159)
    3. Quadruple two-to-one-line multiplexer (160)
14. Implementation of the Boolean function using Mux:

*F* (*A*, *B*, *C*, *D*) = \_(1, 3, 4, 11, 12, 13, 14, 15)

1. *Discuss Mux with three state gates.*