

# **Suggestion by Munir Vai**

- 1.BCD to access 3/4 code converter design**
- 2.Decoder/Encoder design**
- 3.Multiplexer design(you will be given a function)**
- 4.ROM design (using function)**
- 5.PLA(u have to design using given function) & difference between PLA & PAL**
- 6.State diagram/state equation(definition)**
- 7.State reduction(given a state table/diagram u have to reduce states)**
- 8.Flip flops:jk,T,SR,D(logic diagram,characteristic table,characteristic equation,block diagram)**
- 9.Counter design(example: 2,6,7,5,1,0 for this count sequence u have to design a synchronous counter)**
- 10.Register,shift register(definition)**
- 11.sequential logic Implementation(using given function)**
- 12.shift register**
- 13.BCD/Binary ripple counter(u have already read this in second semester using jk)**

**14.2 bit up counter(jk flip flop),2 bit up down counter(t flip flop)**

**15.RAM design(4\*2 or this type of small circuit )**

**16.What is Verilog HDL ? why is it used? Structure of VHDL**

**17.Port connection rules**

**18.program using Verilog(for given circuit)**