

Feb & March Batches

For MAR PD

- 1. What are the inputs and outputs of Synthesis?
- 2. What is synthesis? Explain synthesis flow?
- 3. What is the difference between Logical synthesis and physical synthesis?
- 4. Explain goals of Synthesis?
- 5. What is the information present in .lib file?

For March & Feb DV

- 1. Serial Adder
- 2. Counters
 - a) 4-bit Synchronous Counters
 - b) 4-bit Asynchronous Counters
 - c) 8-bit Single Up Counter
 - d) 8-bit Up Counter with Load
 - e) 8-bit Up-Down Counter
 - f) Random LFSR
 - g) LFSR <mark>Up/Dow</mark>n
 - h) Gray Counter
 - i) One-hot Counter
 - j) Divide by 2 Counter

March PD & CL - CF

- 1. Explain short channel device. What are the short channel effects?
- 2. What is channel length modulation and velocity saturation how does it impact short channel devices?

March CL - CL

- 1. Draw the AND gate(tranststor level) Schematic, Stick digram & generate Netlist.
- 2. What is meant by p-cell & advantages?

