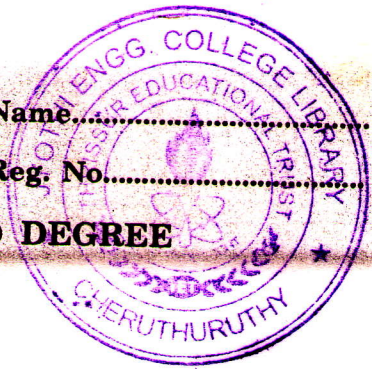


C 32099

Name

Reg. No.

SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, JUNE 2007



- I. (a) Explain in detail the inductance and capacitance effects in high-speed digital circuits.
(b) Define self inductance. Explain its significance.
(c) Explain the characteristics of an ideal transmission line.
(d) What are near and far end cross-talks. Explain. What are the methods to overcome them?
(e) Explain about cross-talk in terminators.
(f) Enumerate the properties of Vias. Explain any *two* in detail.
(g) What is clock skew? Explain.
(h) Explain the principles of clock oscillators with neat sketches.
- (8 × 5 = 40 marks)
- II. (a) Describe in detail the high speed properties of logic gates.
- Or
- (b) Describe in detail the loading effects of probes.
- III. (a) Describe in detail the advantages and applications of transmission lines in High speed digital circuits.
- Or
- (b) Describe in detail the effect of cross-talk in High Speed Digital circuits.
- IV. (a) Describe in detail Mechanical properties of vias.
- Or
- (b) Explain the principle of AC biasing for end terminations.
- V. (a) Explain the distribution of stable reference voltage to a high speed digital circuits.
- Or
- (b) Describe in detail the methods to reduce clock skew.
- (4 × 15 = 60 marks)

to error in human
to error is less