

Code: 9A04404

B. Tech II Year II Semester (R09) Supplementary Examinations, November/December 2012

PULSE & DIGITAL CIRCUITS

(Common to EIE, E.Con.E, ECE,ECC and MCT)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain how a low pass RC circuit acts as an integrator.
(b) Explain RC double differentiator circuit.
- 2 (a) What is synchronized clamping and explain?
(b) Design a diode clamper circuit to clamp the positive peaks of the input signal at zero level. The frequency of the input signal is 500 Hz.
- 3 Sketch neatly the wave forms of currents & voltages for a transistor switch with capacitance loading circuit.
- 4 Explain about various switching conditions of Schmitt trigger.
- 5 (a) What are sweep circuits?
(b) Explain how you generate a saw tooth waveform with a neat circuit diagram.
- 6 (a) Why sampling gates are called selection circuits?
(b) What are the advantages of unidirectional sampling gates?
- 7 (a) How astable multi can be synchronized? Illustrate with neat waveforms.
(b) Explain how monostable multi is used as frequency divider.
- 8 (a) What is the difference between floating and grounded inputs?
(b) Design and explain the concept of discrete type of gates.

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