Code: 9A04404

B.Tech II Year II Semester (R09) Supplementary Examinations December/January 2014/2015
PULSE & DIGITAL CIRCUITS
(Common to ECE, EIE, E.Con.E, ECC & MCT)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1   (a)   Explain the response of a high pass circuit, if an exponential input is applied.
    (b)   Write short note on piping process.

2   (a)   What is meant by clipping in wave shaping?
    (b)   Classify different types of clipper circuits. Give their circuits and explain their operation
          with the aid of transfer characteristics.

3   te   W   short notes on:
    (a)   Diode switching times.
     b) (Switching characteristics of transistors.
    (c)   FET as a switch.

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)   Explain the operation of series and shunt FET sampling gates.
    (b)   What are the advantages of FET sampling gates over transistor sampling gates?

7   How synchronization and frequency division are related? What are the methods used for
          synchronization of monoshot circuit?

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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