

Roll No

CS/IT - 304

B.E. III Semester

Examination, December 2016

Electronics Devices and Circuits

Time : Three Hours

Maximum Marks : 70

Note: Attempt any five questions. All questions carry equal marks.

1. a) Explain construction, features and applications of Zener diode. 7
b) Explain the applications of p-n diode in our life. 7
2. a) Differentiate negative and positive feedback. 7
b) Differentiate class A, class B and class C amplifiers. 7
3. a) Draw and explain RC phase shift oscillator. 7
b) Draw and explain monostable multivibrator. 7
4. a) Draw and differentiate clipper and clamper circuit. 7
b) What is operational amplifier? Write its characteristics. 7
5. a) Draw inverting and non-inverting amplifier and write equation for gain. 7
b) Draw and explain integrator circuit using Op-Amp. 7
6. a) Define slew rate and CMRR. 7
b) Explain the concept of Boot strapping and Darlington pair. 7

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7. a) Explain how a Zener diode can be used as a voltage regulator. 7
b) Write a short note on UPS. 7
8. Write short notes on any two : 14
a) SMPS
b) 555 timer
c) Log amplifier
d) LED
