

B.TECH. SEM -IV Electronic & Telecommunication(CBCS)
(2014 COURSE) WINTER - 2017

SUBJECT: LINEAR INTEGRATED CIRCUITS

Day: **Monday**
Date: **20/11/2017**

W-2017-2107

Time: **02.30 PM TO 05.30 PM**
Max Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Use of non programmable **CALCULATOR** is allowed.
 - 4) Assume suitable data if necessary.
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Q1. Draw & explain the frequency response of Operational Amplifier. Define cut off frequency & unity gain Bandwidth (UGB). (10)

OR

Draw & explain Internal & external offset Voltage compensating network. (10)

Q.2 Draw & derive expression for inverting Amplifier. (10)

OR

Derive expression for Integrator and explain it with neat circuit diagram. (10)

Q.3 Draw and explain precision half wave rectifier. (10)

OR

Draw and explain comparator application of operational amplifier. (10)

Q.4 Draw a circuit diagram of second order low pass filter and explain its frequency response. (10)

OR

How Band Pass Filter derived from LPF and HPF and explain its frequency response. (10)

Q.5 Explain working of astable multivibrator with neat circuit diagram. (10)

OR

Draw block diagram for IC 555 and explain it. Define lock range and capture range. (10)

Q6. Explain V to I convertor with neat circuit diagram. (10)

OR

Explain binary weighted and R to 2R resistors type A to D converter. (10)

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