**Rajasthan Institute of Engineering & Technology, Jaipur**

***SET- A***

**I- Mid Term examination**

**Session: 2018-19**

**SEM: V BRANCH:- ECE**

**Subject: - LIC (5EC2)**

Time: 2hrs. M.M.:20

**Instruction for students:**

 No provision for supplementary answer book.

Q.1 Write short notes on voltage comparator.

Or

Q.1 Compare inverting and Non-inverting amplifier.

Q.2 Draw and explain with suitable diagram wide band pass butterworth filter.

Or

Q.2 Explain the following parameters:

 CMRR, slew rate, Gain B.W. product, Offset voltage & current

Q.3. Draw the circuit diagram of Dual input balance output differential amplifier and Perform DC and AC analysis.

 Or

Q.3 Explain voltage series feedback amplifier with suitable diagram and derived closed loop voltage gain

Q.4 Design a high pass filter at a cut off frequency of 1 kHz with pass band gain of 2. Also plot its frequency response.

Or

Q.4 What is feedback; explain the classification of feedback network.

**Rajasthan Institute of Engineering & Technology, Jaipur**

***SET- B***

**I- Mid Term examination**

**Session: 2018-19**

**SEM: V BRANCH:- ECE**

**Subject: - LIC (5EC2)**

Time: 2hrs. M.M.:20

**Instruction for students:**

 No provision for supplementary answer book.

Q.1 Design a first order high pass filter at a cut off frequency of 1 KHz with a pass band gain of 5.

Or

Q.1 Explain Notch Filter. Also explain its applications.

Q.2 Explain the following applications of Op-Amp.

1. Inverting & non-inverting amplifier
2. Adder

 Or

Q.2. Draw and explain with suitable diagram Narrow band pass butterworth filter.

Q.3. Explain Dual input unbalanced output differential amplifier configuration.

Or

Q.3 Explain single input balanced output differential amplifier configuration.

Q.4 Write down the characteristics of ideal op-amp.

Or

Q.4 Explain voltage shunt feedback amplifier with suitable diagram and derived closed loop voltage gain