

## Lecture Plan of session Aug-Dec'2020

**Course Title: Advanced Electronic Circuits**

**Course Code: PCC-ECE-302**

S.No	Topic	Date	No. of Lectures Required
<b>Unit I</b>			
01	h parameter model of BJT	18,19,20,21/08/20	04
02	Analysis and Design of transistor amplifier circuits using h parameters	24,25,26/08/20	03
03	Frequency response of amplifiers	27,28/08/20	02
04	Multistage Amplifier	31/08/20,01/09/20	02
05	Darlington compound configuration	02,03/09/20	02
06	Low-frequency small-signal analysis of MOSFETs	04,07,08/09/20	03
	Revision test of <b>Unit I</b>	09/09/20	-
<b>Unit II</b>			
07	High frequency hybrid – pi model	10,11,14,15/09/20	04
08	Analysis and design of transistor amplifier circuits	16,17,18/09/20	03
	Approximate CE high frequency model with resistive load	21/09/20	01
09	CE short circuit current gain	22/09/20	01
10	High-frequency model of MOSFETs.	23,24/09/20	02
	Revision test of <b>Unit II</b>	25/09/20	-
<b>Unit III</b>			
11	Classification of power amplifiers, Class A, Transformer Coupled Amplifier, Transformer Coupled Audio Amplifier	28,29,30/09/20	03
12	Push Pull Amplifier, Complimentary Symmetry Circuits	01/10/20	01
13	Class B, Class AB, Class D operation	05,06/10/20	02
	Revision test of <b>Unit III</b>	07/10/20	-
<b>Unit IV</b>			
14	Feedback concept, characteristics of negative and positive feedback. Effect of negative and positive feedback on performance parameters	08,09/10/20	02
15	Negative Feedback: Voltage series, Voltage shunt, Current series, Current shunt types of Negative feedback	12,13/10/20	02
16	Typical transistor circuits effects of Negative feedback on Input and Output impedance, Voltage and Current gains, Bandwidth, Noise and Distortion	14,15,16/10/20	03
17	Principle of positive feedback, concept of stability in electronics circuits	19/10/20	01

	Revision test of <b>Unit IV</b>	20/10/20	-
<b>Unit V</b>			
18	Basic Oscillator operation, Barkhausen's criteria	21/10/20	01
19	Phase shift Oscillator, Wien bridge Oscillator	22/10/20	01
20	Hartley Oscillator, Colpitt Oscillator	23/10/20	01
21	Tuned Oscillator circuits, Crystal Oscillator (BJT version only)	27/10/20	01

Teacher-In-Charge:

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