

Programme/Classes -	Electronics	Year -	
Subject -		Sem.	
Course Code -		Course Title -	Electronics Components & Devices
Credits -	1	Core -	
Max. Marks -	75+25	Min. Passing Marks -	

Unit	Topics	Total NO of Lectures - 15
1	<b>Introduction of Electronics -</b> Application of electronic in different field Brief introduction to active components and devices	3
2	<b>Passive Components -</b> Resistor - working characteristics properties testing of resistor, voltage dependent resistor, colour coding of resistor, carbon film resistor wire wound resistor Capacitor - specification of capacitor, electrolytic capacitor, paper capacitor	3
3	<b>Voltage &amp; Current Source -</b> Voltage source - D.C. voltage source, A.C. voltage source, Concept of voltage source, Ideal voltage source Current Source - Concept of current source ideal current source Power Supply - Introduction to power supply Grounded D.C. power supply Floating D.C. power supply	3
4	<b>Semi Conductor Diode -</b> PN junction diode - Symbol of P-N junction diode Biasing of P-N junction, characteristics of P-N junction diode, working, application of P-N junction diode LED Light Emitting Diode - Introduction working, symbol, material used in LED, features, advantage, application	3
5	<b>Introduction to Bipolar Transistor -</b> Introduction to Transistor Structure of Transistor Biasing of Transistor PNP Transistor NPN Transistor	3

Suggested - Continuous Evaluation Methods  
Total marks - 25

End Semester Examination/ Test	10 marks
Assignments/ Presentation/ Project/ Seminar	10 marks
Classroom Performance/ Participation	5 marks

Programme/Classes -	Year-		Sem-
Subject -	Electronics		
Course Code -		Course Title -	Electronics Components & Devices
Credits -	2	Core -	
Max. Marks -	75+25	Min. Passing Marks -	

S.No.	List of Practicals	Total NO of Lab - 60
1	To study different types of instruments used in electronics like cathode ray cercilloscope (C.R.O.), multimeter, function generator	6
2	To study resistor used in electronics circuit	6
3	To find the value of resistor by using colour coding method	6
4	To study different types of capacitor used in electronics circuit	6
5	To study different types of semi conductor used in electronics circuit	6
6	To study different types of active components	6
7	To study different types of passive components	6
8	Testing of light emitting diode (LED'S)	6
9	To find the value of different resistor by using multimeter	6
10	To plot V-I characteristics of P-N function diode	6

Suggested - Continuous Evaluation Methods  
Total marks - 25

Examination/ Test	10 marks
Home Assignment/ Presentation/ Project/ Seminar	10 marks
Class Performance/ Participation	5 marks

Reference books -

- V.K. Mehta - "Principles of electronics" S-Chand publication
- P.D. Sharma - "Electronics components & devices" B.B.P. publication Pvt.Ltd.
- P.D. Sharma - "Fundamentals of electronics devices" B.B.P. publication Pvt.Ltd.
- A.K. Saxena - "Electronic components & devices" The Krishna Group