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- ① DC circuit analysis
- ② magnetic circuit analysis
- ③ Single phase AC circuits analysis
- ④ 3 phase AC circuit analysis
- ⑤ Power System components

Assessment

10% Quiz	continuous assessment	In sem	End Semester
5 th calendar week	20%	20%	50%
30 minutes	2 marks each quiz imm after every class 5 th calendar week	90 min	180 min
	10-15 min	4 ques - 10 marks each	5 ques - 50 marks

References for Numericals

- (1) Hughes C. Electrical and Electronic Technology (12e) Pearson Education
- (2) BET
- (3)
- (4)

Scientific Calculator

Casio fx-991ES plus (2nd edition) [non graphical non programmable]

What is an electric circuit?

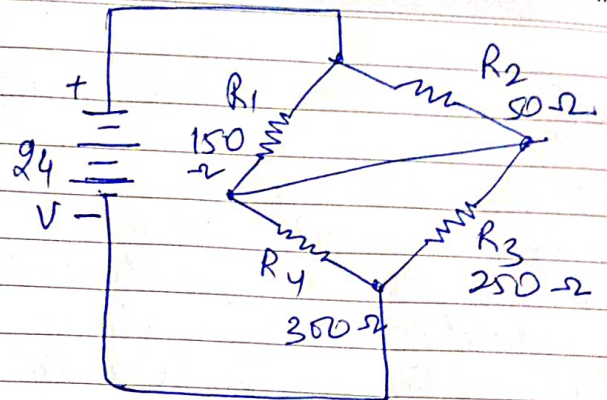
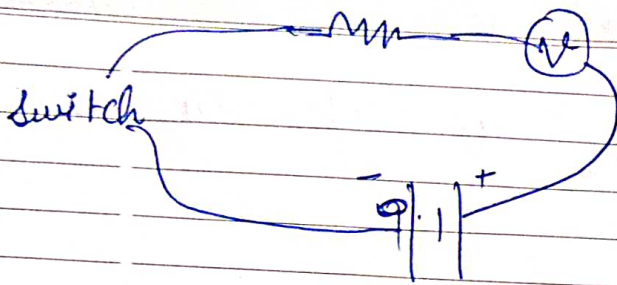
An inter connection of simple electrical devices with at least one closed path in which current may flow.

- Consists of a source of electrical energy, elements that either transform, dissipate or store energy, connecting wires

To prevent power overload, circuits often include fuse or circuit breaker.

JULY							AUGUST						
Wk	S	M	Tu	We	Th	F	Wk	S	M	Tu	We	Th	F
27	31						32						
28	3	4	5	6	7	8	33	1	2	3	4	5	6
29	10	11	12	13	14	15	34	7	8	9	10	11	12
30	17	18	19	20	21	22	35	21	22	23	24	25	26
31	24	25	26	27	28	29	36	28	29	30	31		

WORK TO DO



Circuit Elements

- * Active and Passive :
- Active elements : voltage & current sources.
 - Passive elements : Resistor, Inductor, Capacitor.

- * Linear & Non linear Elements :
- Linear : Resistor, Inductor, Capacitor
 - Non-linear : Diode, LDR (Light dependent Resistor), Thermistor, Transistor

- * Unilateral & Bilateral :
- Unilateral (current flows in one direction) : Diode, Transistor

Bilateral : Resistor, Inductor, capacitor

- * Lumped & distributed : Lumped elements are simplified version of distributed elements.

[Our study is limited to Lumped linear bilateral circuit elements.]

MAY								2011								JUNE								2011							
Wk.	S	M	T	W	T	F	S	Wk.	S	M	T	W	T	F	S	Wk.	S	M	T	W	T	F	S	Wk.	S	M	T	W	T	F	S
19	1	2	3	4	5	6	7	23						1	2	3	4														
20	8	9	10	11	12	13	14	24	5	6	7	8	9	10	11	24	5	6	7	8	9	10	11	24	5	6	7	8	9	10	
21	15	16	17	18	19	20	21	25	12	13	14	15	16	17	18	25	12	13	14	15	16	17	18	25	12	13	14	15	16	17	
22	22	23	24	25	26	27	28	26	19	20	21	22	23	24	25	26	19	20	21	22	23	24	25	26	19	20	21	22	23	24	
23	29	30	31					27	26	27	28	29	30			27	26	27	28	29	30			27	26	27	28	29	30		