Name Of the Faculty:-kamna khetrapal

Discipline:-Applied Science

Semester:-IInd Subject:-Physics

Lesson Plan Duration:-15 weeks(from January,2018 to April,2018)

** Work Load(Lecture/Practical) per week(in hours):-Lectures -04,Practicals-02

Week	Theory		Practical	
	Lecture day	Topic (including assignment/ test)	Practical Day	Topic
	1st	Introduction to wave motion	- 1st	To find the time period of a simple Pendulum (Group I)
lst	2nd	Types of wave motion	150	
	3rd	Terms used in wave motion	254	To find the time period of a simple Pendulum (Group II)
	4th	Continued last topic	2nd	
	5th	Simple harmonic motion	3rd	To determine and verify the time period of cantilever (Group I)
	6th	Cantilever and its time period	Siu	
2nd	7th	Types of vibrations		To determine and verify the time period of cantilever (Group II)
ı	8th	Assignment and checking home work	4th	
	9th	Accoustics of buildings]	Checking practical files and viva (Group I)
	10th	Definitions related with the above topic	5th	
3rd	11th	Reverberation and methods to control reberberation time	6th	Checking practical files and viva (Group II)
	12th	Ultrasonics and its application		
	13th	Reflection and refraction and their laws. Terms related with them.	7th	To verify Ohm's laws by plotting a graph between voltage and current (Group I)
4th	14th	Related numerical problems.		(Group I)
	15th	Total internal reflection and its applications.	8th	To verify Ohm's laws by plotting a graph between voltage and current (Group II)
	16th	Microscope- Telescope		
	17th	Uses of microscope and telescope.	- 9th	To verify laws of resistance in series combination (Group I)
5th	18th	Test on above unit . Unit -3		
	19th	Coulomb's law	10th	To verify laws of resistance in series combination (Group II)
	20th	Electric field - definition and properties		
6th	21th	Electric flux, Electric intensity and Electric potential.	11th	Checking of files and viva. (Group I)

	22th	Electric field intensity due to point charge		
	23rd	Assignment and checking home work.	12th	Checking of files and viva. (Group II)
	24th	Gauss's Law (statement and derivation)		
7th	25th	Capacitor and capacitance with formula and units.	13th	To verify laws of resistance in parallel combination. (Group I)
	26th	Series and parallel combination of capacitors.		
	27th	Numerical problems on the basis of above topic.	14th	To verify laws of resistance in parallel combination. (Group II)
	28th	Class discussion on the unit.		
Week			Practical	
	Lecture day	Topic (including assignment/ test)	Practical Day	Topic
	29th	Class test of above Unit-4	15th	To find resistance of galvanometer by half reflection method. (Group I)
8th	30th	Electric current and its units, direct and alternating current		
	31st	Resistance and specific resistance	16th	To find resistance of galvanometer by half reflection method. (Group II)
	32nd	Conductance, series and parallel combination of resistance.		
	33rd	Assignment and checking home work.	17th	Checking of files and viva. (Group I)
9th	34th	Ohm's law		
	35th	Super conductivity	18th	Checking of files and viva. (Group II)
	36th	Continued above topic		
	37th	Heating effect of current.		
10th	38th	Electric power, Electric energy and its units.	19th	To verify laws of reflection of light using mirror. (Group I)
	39th	Kirchhoff's laws (statement and formula)	· 20th	To verify laws of reflection of light using mirror. (Group II)
	40th	Discussion in class and having problems on above topic.		
11th	41st	Class test Unit-5	21th	To identify different components like resistance capacitor and diode. (Group I)

	42nd	Introduction to magnetism		
	43rd	Types of magnetic materials	22nd	To identify different components like
	44th	Dia, para and ferro maganetic materials with example		resistance capacitor and diode. (Group II)
12th	45th	Magnetic field, Magnetic intensity	23rd	Checking of files and viva.(Group I)
	46th	Magnetic lines of force, magnetic flux and their units.		
	47th	Magnetic induction	24th	Checking of files and viva.(Group II)
	48th	Test of above topic		
13th	49th	Energy bands, Types of materials	25th	To study colour coding scheme of resistance
	50th	Their classification		(Group I)
	51st	P-N junction diode and its characteristics	26th	To study colour coding scheme of resistance
	52nd	Diode as rectifier.		(Group II)
	53rd	Semi conductor transistor	27th	Checking of files and viva. (Group I)
14th	54th	Assignment and checking home - work.		
	55th	Lasers, Characteristics and applications.	28th	Checking of files and viva. (Group II)
	56th	Fibre optics introduction and applications.		
15th	57th	Introduction to nano technology.	29th	Revision (Group I)
	58th	Application of nano technology.		
	59th	Assignment and checking copies	30th	Revision (Group II)
	60th	Revision of syllabus		