SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021[Even Semester]

Department: Physics

Class	:	I BSc-Physics
Semester	:	II
Name of the Faculty	:	Dr.M.Mohamed Roshan
Title of the Course	:	Physical Optics & Spectroscopy
Subject Code	:	18UCPH21
ICT Tools used	:	Google glass room
Text books	:	A Text book of Optics – Brijlal Subramaniam
Reference books	:	College Physics – M. Soundarajan
e-resources	:	Power point

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	4.01.2021	11.30to 12.20 pm	A	I	Concepts of a wave, its characteristics,	04/01/21	
2	6.01.2021	10.30 to 11.20 am	C	I	Superposition of waves and conditions of interference	06/01/21	
3	7.01.2021	8.30 to 9.20 am	D	I	Interference due to reflected light	07/01/21	
4	12.01.2021	11.30to 12.20 pm	A	I	Theory of Newton's rings	12/01/21	
5	18.01.2021	10.30 to 11.20 am	C	I	Experimental determination of R.I	18/01/21	
6	19.01.2021	8.30 to 9.20 am	D	I	Determination of R.I of liquid	19/01/21	
7	22.01.2021	11.30to 12.20 pm	A	I	Theory of Air-wedge	25/01/21	Class Cancelled

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
8	25.01.2021	10.30 to 11.20 am	C	I	Experiment to find thickness of wire-Airwedge	27.01.21	
9	27.01.2021	8.30 to 9.20 am	D	I	Applications of interference in thin films	27.01.21	
10	30.01.2021	11.30to 12.20 pm	A	I	Michelson's interferometer construction and working	30/01/21	
11	2.02.2021	10.30 to 11.20 am	C	I	Determination of thickness of a mica sheet	02/02/21	
12	3.02.2021	8.30 to 9.20 am	D	I	Numericals on related topics	03/02/21	
13	6.02.2021	11.30to 12.20 pm	A	II	Diffraction of light – an introduction	06/02/21	
14	9.02.2021	10.30 to 11.20 am	C	II	Classification of diffraction – Fresnel & fraunhofer	09/02/21	
15	10.02.2021	8.30 to 9.20 am	D	II	Freshnel's Diffraction of a straight edge	15/02/21	CIA-I No theory/Practical in the first hour
16	15.02.2021	11.30to 12.20 pm	A	II	Grating and its theory	17/02/21	
17	17.02.2021	10.30 to 11.20 am	C	II	Determination of Wavelength colours using grating	22/02/21	
18	18.02.2021	8.30 to 9.20 am	D	II	Understanding the concepts of absent spectra.	24/02/21	
19	22.02.2021	11.30to 12.20 pm	A	II	Know about overlapping of spectra	24/02/21	
20	24.02.2021	10.30 to 11.20 am	C	II	Numericals related to grating equation	25/02/21	
21	25.02.2021	8.30 to 9.20 am	D	II	Dispersive power of a grating	25/02/21	
22	01.03.2021	11.30to 12.20 pm	A	II	Resolving power of the grating.	01/03/21	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
23	03.3.2021	10.30 to 11.20 am	C		Comparison of Prism spectrum and grating spectrum	03/03/21	
24	04.03.2021	8.30 to 9.20 am	D	II	Revision of topics	08/03/21	Ayya Vaikundar jeyanthi
25	8.03.2021	11.30to 12.20 pm	A	III	Polarization concepts and Transverse wave	08/03/21	
26	10.03.2021	10.30 to 11.20 am	C	III	Double refraction	10/03/21	
27	11.03.2021	8.30 to 9.20 am	D	III	Huygen's explanation of double refraction	11/03/21	
28	16.03.2021	11.30to 12.20 pm	A	III	Construction of Nicol prism and its working	16/03/21	
29	18.03.2021	10.30 to 11.20 am	C	III	Quarter wave & Half wave plate	18/03/21	
30	19.03.2021	8.30 to 9.20 am	D	III	Production of plane, elliptically and circularly polarized lights	23/03/21	CIA-II
31	23.03.2021	11.30to 12.20 pm	A	III	Detection and analysis of different types of polarization	25/03/21	
32	25.03.2021	10.30 to 11.20 am	C	III	Optical Activity and Fresnel's explanation	25/03/21	
33	26.03.2021	8.30 to 9.20 am	D	III	Working of Bi-Quartz Polarimeter	31/03/21	OD
34	31.03.2021	11.30to 12.20 pm	A	III	Determination of specific rotatory power	04/04/21	
35	04.04.2021	10.30 to 11.20 am	C	III	Numreicals related to topics	05/04/21	
36	5.04.2021	8.30 to 9.20 am	D	III	Revision of topics	08/04/21	OD
37	8.04.2021	11.30to 12.20 pm	A	V	Infrared spectroscopy and its introduction	12/04/21	
38	12.04.2021	10.30 to 11.20 am	C	V	Biological application of IR	15/04/21	
39	15.04.2021	8.30 to 9.20 am	D	V	Other Features and applications of IR	19/04/21	
40	19.04.2021	11.30to 12.20 pm	A	V	Theory of Raman Scattering	21/04/21	
41	21.04.2021	10.30 to 11.20 am	C	V	Numerical related to Raman Scattering	22/04/21	
42	22.04.2021	8.30 to 9.20 am	D	V	Application Raman scattering	26/04/21	
	26.04.2021	11.30to 12.20 pm	A	V	Revision of topics of Chapter I and	28/04/21	

SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	I B.Sc. Physics
Semester	:	II
Name of the Faculty	:	Dr.R.Kumuthini
Title of the Course	:	Optics & Spectroscopy
Subject Code	:	18UCPH21
ICT Tools used	:	Google Classroom
Text books	:	Fundamentals of Molecular Spectroscopy –C.N. Banwell
Reference books	:	Spectroscopy (Atomic and Molecular)-Gurdeep.R. Chatwal
e-resources	:	Power Point Presentation

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	04.01.2021	12.30-1.20	A	IV	Introduction to Spectroscopy	04.01.2021	
2	12.01.2021	12.30-1.20	A	IV	Microwave spectroscopy	12.01.2021	
3	22.01.2021	12.30-1.20	A	IV	Pure rotational spectra of diatomic molecule.	22.01.2021	
4	30.01.2021	12.30-1.20	A	IV	Rigid rotator	30.01.2021	
5	06.02.2021	12.30-1.20	A	IV	Symmetric top and Asymmetric top	06.02.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
6	15.02.2021	12.30-1.20	A	IV	Microwave oven	15.02.2021	
7	22.02.2021	12.30-1.20	A	IV	Microwave spectrometer	22.02.2021	
8	01.03.2021	12.30-1.20	A	V	Infra red spectroscopy – preliminaries and selection rules	01.03.2021	
9	08.03.2021	12.30-1.20	A	V	Vibrating diatomic molecule	08.03.2021	
10	16.03.2021	12.30-1.20	A	V	Diatomic vibrating rotator	16.03.2021	
11	23.03.2021	12.30-1.20	A	V	Normal vibrations of CO_2 and H_2O molecule	23.03.2021	
12	31.03.2021	12.30-1.20	A	V	Vibrations of polyatomic molecule	31.3.21	
13	08.04.2021	12.30-1.20	A	V	Applications of Infra red spectroscopy	8.4.21	
14	19.04.2021	12.30-1.20	A	V	Raman spectroscopy- Classical theory	19.4.21	
15	26.04.2021	12.30-1.20	A	V	Raman spectroscopy- Quantum theory and applications of Raman Spectroscopy	26.4.21	

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Online/Off line -Class Lesson Plan
Academic Year 2020-2021[Even Semester]

Department: Physics

Class	:	I BSc-Physics
Semester	:	II
Name of the Faculty	:	Dr.S.Nazarath Begum
Title of the Course	:	Mechanics and Astrophysics
Subject Code	:	18UCPH22
ICT Tools used	:	Google glass room
Text books	:	College Physics – Volume I & III – N. Sundararajan, George Thomas and Syed Aziz
Reference books	:	Properties of Matter – Brijlal and Subrahmanyam –2. Mechanics & Electrodynamics – Brijlal and Subrahmanyam, S.Chand & Co. Ltd. New Delhi.
e-resources	:	Power point

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	5.01.2021	8.30 to 9.20 am	B	I-F& R motion	Friction between solid surfaces	5.01.2021	
2	6.01.2021	9.30 to 10.20 am	C		Coefficient of static and kinetic friction	6.01.2021	
3	7.01.2021	10.30 to 11.20 am	D		Coefficient of rolling friction , laws of friction	7.01.2021	
4	11.01.2021	10.30 to 11.20 am	F		Angular velocity and angular acceleration	11.01.2021	
5	13.01.2021	8.30 to 9.20 am	B		Rotation with constant angular acceleration	13.01.2021	
6	18.01.2021	9.30 to 10.20 am	C		K.E of rotation	19.01.2021	
7	19.01.2021	10.30 to 11.20 am	D		Work and power in rotation	21.01.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
23	18.02.2021	10.30 to 11.20 am	D		Assignment problems discussed	20.02.2021	
24	20.02.2021	10.30 to 11.20 am	F		Class test	23.02.2021	
25	23.02.2021	8.30 to 9.20 am	B	III-Gravitation	Newtons law of gravitation	24.02.2021	
26	24.02.2021	9.30 to 10.20 am	C		Gravitational field , gravitational potential	25.02.2021	
27	25.02.2021	10.30 to 11.20 am	D		Gravitational potential energy	27.02.2021	
28	27.02.2021	10.30 to 11.20 am	F		Gravitational potential to spherical shells	2.03.2021	
29	2.03.2021	8.30 to 9.20 am	B		Gravitational field due to spherical shells	3.03.2021	
30	3.03.2021	9.30 to 10.20 am	C		Gravitational field and potential due to hollow sphere	6.03.2021	
31	4.03.2021	10.30 to 11.20 am	D		Gravitational potential to solid sphere	09.03.2021	Ayya Vaikunda swami jeyanthi
32	6.03.2021	10.30 to 11.20 am	F		Gravitational field due to solid sphere	09.03.2021	
33	09.03.2021	8.30 to 9.20 am	B		Inertial mass and gravitational mass	10.03.2021	
34	10.03.2021	9.30 to 10.20 am	C		Projectiles	11.03.2021	
35	11.03.2021	10.30 to 11.20 am	D		Escape velocity	15.03.2021	
36	15.03.2021	10.30 to 11.20 am	F		Class test	18.03.2021	Board of studies - Meeting
37	17.03.2021	8.30 to 9.20 am	B	IV-Satellite	Satellite motion	19.03.2021	CIA-II
38	18.03.2021	9.30 to 10.20 am	C		Orbital velocity, time period	19.03.2021	
39	19.03.2021	10.30 to 11.20 am	D		Launching of artificial satellites	22.03.2021	
40	22.03.2021	10.30 to 11.20 am	F		Geo stationary satellite	24.03.2021	
41	24.03.2021	8.30 to 9.20 am	B		Weightlessness	25.03.2021	
42	25.03.2021	9.30 to 10.20 am	C		Binding energy of a satellite	26.03.2021	
43	26.03.2021	10.30 to 11.20 am	D		Artificial gravity in space stations	30.03.2021	
44	30.03.2021	10.30 to 11.20 am	F		Remote sensing through satellite	1.04.2021	

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
8	21.01.2021	10.30 to 11.20 am	F		Torque and angular acceleration	23.01.2021	
9	23.01.2021	8.30 to 9.20 am	B		Angular momentum	25.01.2021	
10	25.01.2021	9.30 to 10.20 am	C		Conservation of angular momentum	27.01.2021	
11	27.01.2021	10.30 to 11.20 am	D		Applications of angular momentum	29.01.2021	
12	29.01.2021	10.30 to 11.20 am	F		Class Test	01.02.2021	
13	01.02.2021	8.30 to 9.20 am	B	II - Collision	Elastic and Inelastic collision	2.02.2021	
14	2.02.2021	9.30 to 10.20 am	C		Lab frame and centre of mass frame	3.02.2021	
15	3.02.2021	10.30 to 11.20 am	D		Perfectly elastic collision in one dimension	5.02.2021	
16	5.02.2021	10.30 to 11.20 am	F		Special cases discussed – one dimension	8.02.2021	
17	8.02.2021	8.30 to 9.20 am	B		Final velocities after collision	9.02.2021	
18	9.02.2021	9.30 to 10.20 am	C		Perfectly in elastic collision in one dimension	10.02.2021	
19	10.02.2021	10.30 to 11.20 am	D		Special cases-Discussed	12.02.2021	
20	12.02.2021	10.30 to 11.20 am	F		Coefficient of restitution	12.02.2021	
21	16.02.2021	8.30 to 9.20 am	B		Elastic collisions in two dimension	17.02.2021	CIA-I
22	17.02.2021	9.30 to 10.20 am	C		Special cases discussed	18.02.2021	

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45	1.04.2021	8.30 to 9.20 am	B		Indian remote sensing satellites	3.04.2021	
46	3.04.2021	9.30 to 10.20 am	C		Indian remote sensing satellites-Explanation	5.04.2021	
47	5.04.2021	10.30 to 11.20 am	D		Applications of remote sensing	5.04.2021	
48	7.04.2021	10.30 to 11.20 am	F		Class test	7.04.2021	
49	9.04.2021	8.30 to 9.20 am	B	V-Astrophysics	Physical properties of star-luminosity , Brightness	9.04.2021	
50	12.04.2021	9.30 to 10.20 am	C		Distance	12.04.2021	
51	15.04.2021	10.30 to 11.20 am	D		surface temperature , Mass	12.04.2021	
52	17.04.2021	10.30 to 11.20 am	F		Chemical composition ,	15.04.2021	
53	20.04.2021	8.30 to 9.20 am	B		internal temperature , Internal pressure	17.04.2021	
54	21.04.2021	9.30 to 10.20 am	C		Mass luminosity relation	20.04.2021	
55	22.04.2021	10.30 to 11.20 am	D		Stellar evolution	21.04.2021	
56	24.04.2021	10.30 to 11.20 am	F		Formation of stars	21.04.2021	
57	27.04.2021	8.30 to 9.20 am	B		White dwarfs	22.04.2021	
58	27.04.2021	9.30 to 10.20 am	C		Black holes	24.04.2021	
59	29.04.2021	10.30 to 11.20 am	D		Supernova explosion	27.04.2021	
60	3.05.2021	10.30 to 11.20 am	F		Class test	27.04.2021	

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Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	I BSc Physics
Semester	:	II
Name of the Faculty	:	Dr. D. Sathya
Title of the Course	:	Value Education- II
Subject Code	:	18USVE2B
ICT Tools used	:	Google Classroom
Text books	:	Value Education-II **Mahadevan, Jindha, Ayubkan**
Reference books	:	
e-resources	:	

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	05.01.2021	11.30-12.20	B	I	Introduction to ethical values	05.01.2021	
2	08.01.2021	12.30-01.20	E	I	Individual Morality	08.01.2021	
3	13.01.2021	11.30-12.20	B	I	Objective of Moral life	13.01.2021	
4	20.01.2021	12.30-01.20	E	I	Living in accordance with the code of Morality	20.01.2021	
5	23.01.2021	11.30-12.20	B	I	the goodness of Morality	23.01.2021	
6	28.01.2021	12.30-01.20	E	I	Morality and *Thirukural*	28.01.2021	
7	01.02.2021	11.30-12.20	B	I	Morality and *Thirukural*	01.02.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
8	04.02.2021	12.30-01.20	E	I	The need for faith	04.02.2021	
				UNIT-II			
9	08.02.2021	11.30-12.20	B	II	Adherence to higher code of Morality	08.02.2021	
10	11.02.2021	12.30-01.20	E	II	Fear of God	11.02.2021	
11	16.02.2021	11.30-12.20	B	II	Good Moral Values	16.02.2021	
12	19.02.2021	12.30-01.20	E	II	Duty to Parents	19.02.2021	
13	23.02.2021	11.30-12.20	B	II	Teacher, respecting elders, Moral Etiquettes	23.02.2021	
14	26.02.2021	12.30-01.20	E	II	Right-minded Principle, High Principles for Proper conduct	26.02.2021	
				UNIT-III			
15	02.03.2021	11.30-12.20	B	III	Inculcating good attitudes	02.03.2021	
16	05.03.2021	12.30-01.20	E	III	Open mindedness – Morale	05.03.2021	
17	09.03.2021	11.30-12.20	B	III	analysing the pros and cons of good and bad	09.03.2021	
18	12.03.2021	12.30-01.20	E	III	Service to others – Mind Power	12.03.2021	
19	13.03.2021	12.30-01.20	E	III	tolerance, respecting others, showing love to others, patience	13.03.2021	
20	17.03.2021	11.30-12.20	B	III	tranquility – Modesty, kindness and forgiveness	17.03.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
				UNIT-IV			
21	20.03.2021	12.30-01.20	E	IV	Quotations and moral Stories expressing Good characters of Great personalities	20.03.2021	
22	24.03.2021	11.30-12.20	B	IV	Quotations and moral Stories expressing Good characters of Great personalities	24.03.2021	
23	27.03.2021	12.30-01.20	E	IV	Life History of Great people: Mahatma Gandhi	27.03.2021	
24	01.04.2021	11.30-12.20	B	IV	Life History of Great people: Mahatma Gandhi	01.04.2021	
25	06.04.2021	12.30-01.20	E	IV	Life History of Great people: Abraham Lincoln	06.04.2021	
26	09.04.2021	11.30-12.20	B	IV	Life History of Great people: Dr. A.P.J. Abdul Kalam.	09.04.2021	
				UNIT-V			
27	10.04.2021	11.30-12.20	B	V	Truth, the importance of uprightness,	10.04.2021	
28	16.04.2021	12.30-01.20	E	V	Truth, the integrity, friendship	16.04.2021	
29	20.04.2021	11.30-12.20	B	V	Health awareness on Alcohol and drug abuse	20.04.2021	
30	23.04.2021	12.30-01.20	E	V	inculcating reading habit	23.04.2021	
31	27.04.2021	11.30-12.20	B	V	reading good books, Hygiene	27.04.2021	

32	30.04.2021	12.30-01.20	E	V	Dowry, Corruption	30.04.2021	

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Online/Off line -Class Lesson Plan
Academic Year 2020-2021[Even Semester]

Department: Physics

Class	:	I BSc Physics
Semester	:	Second Semester
Name of the Faculty	:	Dr.S.Nazarath Begum
Title of the Course	:	Physics Core Practicals-II
Subject Code	:	18UCPH2P1
ICT Tools used	:	Google class room
Text books	:	Practical Physics - Ouseph, Srinivasan & Vijayendran,
Reference books	:	Practical Physics – P. R. Sasi Kumar, PHI
e-resources	:	

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	11.01.2021	11.30 to 1.20 pm	F		Demo class- All practical's	11.01.2021	
2	21.01.2021	11.30 to 1.20 pm	F	I	To determine the Young's Modulus of the material of the bar by Cantilever	21.01.2021	
3	29.01.2021	11.30 to 1.20 pm	F	II	To determine the Rigidity Modulus of a Wire by Torsional pendulum.	29.01.2021	
4	5.02.2021	11.30 to 1.20 pm	F	III	To verify the perpendicular axes theorem by Bifilar pendulum	5.02.2021	
5	12.02.2021	11.30 to 1.20 pm	F	IV	To determine the frequency of a tuning fork – Melde's string	12.02.2021	
6	20.02.2021	11.30 to 1.20 pm	F	V	To determine wavelength of sodium light using Newton's Rings.	20.02.2021	

7	27.02.2021	11.30 to 1.20 pm	F	VI	To determine the wavelength of spectral lines of mercury spectrum-Grating normal incidence method-spectrometer.	27.02.2021	
8	6.03.2021	11.30 to 1.20 pm	F	VII	To determine the coefficient of thermal conductivity of a bad conductor- Lee's Disc method	6.03.2021	
9	15.03.2021	11.30 to 1.20 pm	F	VIII	To study the characteristics of a transistor.	22.03.2021	Board of studies meeting
10	22.03.2021	11.30 to 1.20 pm	F	IX	To determine the coefficient of viscosity by Stokes method.	30.03.2021	
11	30.03.2021	11.30 to 1.20 pm	F	X	To determine the surface tension of a liquid	30.03.2021	

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Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	II Year
Semester	:	IV
Name of the Faculty	:	Dr. D. Sathya
Title of the Course	:	Applied Physics
Subject Code	:	18UCPH41
ICT Tools used	:	Google Classroom
Text books	:	**Applied Physics**- Ubald Raj, Jose Robin
Reference books	:	Energy Sources- G.D. Rai
e-resources	:	Videos

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	04.01.2021	09.30-10.20AM	A	I	World's reserve of commercial energy sources	04.01.2021	
2	08.01.2021	09.30-10.20AM	E	I	Various forms of energy	08.01.2021	
3	12.01.2021	09.30-10.20AM	A	I	Renewable energy sources-: sunlight, wind and waves	12.01.2021	
4	20.01.2021	09.30-10.20AM	E	I	Renewable energy sources-: the tides, biomass, geothermal energy	20.01.2021	
5	22.01.2021	09.30-10.20AM	A	I	Conventional energy sources: coal, oil, natural gas, nuclear power	22.01.2021	
6	28.01.2021	09.30-10.20AM	E	I	Conventional energy sources: nuclear power	28.01.2021	
7	30.01.2021	09.30-10.20AM	A	I	Comparison between conventional sources of energy and non-conventional energy sources.	30.01.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
					UNIT-II		
8	04.02.2021	09.30-10.20AM	E	II	Solar cell	04.02.2021	
9	06.02.2021	09.30-10.20AM	A	II	Solar crop dryers, Solar water heater	06.02.2021	
10	11.02.2021	09.30-10.20AM	E	II	Biomass energy	11.02.2021	
11	15.02.2021	09.30-10.20AM	A	II	Deena Bandhu model of gobar gas plant	15.02.2021	
12	19.02.2021	09.30-10.20AM	E	II	Windmill	19.02.2021	
					UNIT-III		
13	22.02.2021	09.30-10.20AM	A	III	Climate: its classification	22.02.2021	
14	26.02.2021	09.30-10.20AM	E	III	causes of climate change	26.02.2021	
15	01.03.2021	09.30-10.20AM	A	III	global warming and its outcomes	01.03.2021	
16	05.03.2021	09.30-10.20AM	E	III	air pollution; aerosols	05.03.2021	
17	08.03.2021	09.30-10.20AM	A	III	ozone depletion, acid rain	08.03.2021	
18	12.03.2021	09.30-10.20AM	E	III	environmental issues related to climate and control measurements	12.03.2021	
					UNIT-IV		
19	16.03.2021	09.30-10.20AM	A	IV	Introduction, Types of tools	16.03.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
20	20.03.2021	09.30-10.20AM	E	IV	Precaution in handling tools used for wiring, Wires	20.03.2021	
21	27.03.2021	09.30-10.20AM	E	IV	Cables	27.03.2021	
22	31.03.2021	09.30-10.20AM	A	IV	System of domestic wiring	31.03.2021	
23	06.04.2021	09.30-10.20AM	E	IV	Good grounding and its need	06.04.2021	
24	08.04.2021	09.30-10.20AM	A	IV	Fuses, Switch wiring	08.04.2021	
UNIT-V							
25	16.04.2021	09.30-10.20AM	E	V	Electric bell, Electric kettle	16.04.2021	
26	19.04.2021	09.30-10.20AM	A	V	Electric iron, Fan connection	19.04.2021	
27	23.04.2021	09.30-10.20AM	E	V	Washing machine	23.04.2021	
28	26.04.2021	09.30-10.20AM	A	V	Refrigerator, Freezer	26.04.2021	
29	30.04.2021	09.30-10.20AM	E	V	Water cooler	30.04.2021	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	II BSc Physics
Semester	:	IV
Name of the Faculty	:	Dr. D. Sathya
Title of the Course	:	Laser and its applications
Subject Code	:	18UCPH41
ICT Tools used	:	Google Meet, Google Classroom
Text books	:	**Laser and its applications-** Ubald Raj, Jose Robin, **Laser and Spectroscopy-** R. Murugesan, Kiruthika
Reference books	:	Laser Physics
e-resources	:	Videos

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
UNIT-I							
1	04.01.2021	10.30-11.20 am	A	I	Introduction to Laser technology	04.01.2021	
2	06.01.2021	9.30-10.20am	C	I	Absorption, spontaneous & stimulated emission of radiation	06.01.2021	
3	07.01.2021	8.30-9.20am	D	I	Basic principle of laser	07.01.2021	
4	11.01.2021	10.30-11.20 am	F	I	characteristics of laser	11.01.2021	
5	12.01.2021	10.30-11.20 am	A	I	Relation between Einstein's A and B coefficients	12.01.2021	
6	18.01.2021	9.30-10.20am	C	I	Relation between Einstein's A and B coefficients	18.01.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
7	19.01.2021	8.30-9.20am	D	I	Laser operation	19.01.2021	
8	21.01.2021	10.30-11.20 am	F	I	Pumping, Types of Pumping	21.01.2021	
9	22.01.2021	10.30-11.20 am	A	I	Population inversion	22.01.2021	
10	25.01.2021	9.30-10.20am	C	I	Expression for threshold gain	25.01.2021	
11	27.01.2021	8.30-9.20am	D	I	active medium, Optical feedback	27.01.2021	
12	29.01.2021	10.30-11.20 am	F	I	Revision	29.01.2021	
UNIT-II							
13	30.01.2021	10.30-11.20 am	A	II	Resonators	30.01.2021	
14	02.02.2021	9.30-10.20am	C	II	types of resonators	02.02.2021	
15	03.02.2021	8.30-9.20am	D	II	Cavity stability and ABCD matrix	03.02.2021	
16	05.02.2021	10.30-11.20 am	F	II	stability diagram	09.02.2021	
17	06.02.2021	10.30-11.20 am	A	II	modes of resonators	12.02.2021	
18	09.02.2021	9.30-10.20am	C	II	open planar resonator	15.02.2021	
19	12.02.2021	10.30-11.20 am	F	II	laser threshold	17.02.2021	
20	15.02.2021	10.30-11.20 am	A	II	Q-factor	18.02.2021	
21	17.02.2021	9.30-10.20am	C	II	Q-switching	20.02.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
22	18.02.2021	8.30-9.20am	D	II	coherence and directionality of laser	22.02.2021	
				UNIT-III			
23	24.02.2021	9.30-10.20am	C	III	Types of laser	24.02.2021	
24	25.02.2021	8.30-9.20am	D	III	Solid state lasers	25.02.2021	
25	27.02.2021	10.30-11.20 am	F	III	Ruby laser	27.02.2021	
26	01.03.2021	10.30-11.20 am	A	III	Nd:YAG laser	01.03.2021	
27	03.03.2021	9.30-10.20am	C	III	Video demonstration	03.03.2021	
28	06.03.2021	10.30-11.20 am	F	III	semiconductor laser-Nd:glass laser	06.03.2021	
29	08.03.2021	10.30-11.20 am	A	III	Gas lasers-He:Ne laser	08.03.2021	
30	10.03.2021	9.30-10.20am	C	III	Class test	10.03.2021	
31	11.03.2021	8.30-9.20am	D	III	CO_2 laser	11.03.2021	
32	15.03.2021	10.30-11.20 am	F	III	Argon ion laser	15.03.2021	
33	16.03.2021	10.30-11.20 am	A	III	Liquid laser –Dye laser	16.03.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
34	18.03.2021	9.30-10.20am	C	III	Video Demonstration	18.03.2021	
35	19.03.2021	8.30-9.20am	D	III	Revision	19.03.2021	
				UNIT-IV			
36	22.03.2021	10.30-11.20 am	F	IV	Laser drilling	22.03.2021	
37	23.03.2021	10.30-11.20 am	A	IV	laser welding	23.03.2021	
38	25.03.2021	9.30-10.20am	C	IV	laser cutting	25.03.2021	
39	26.03.2021	8.30-9.20am	D	IV	lasers in environmental analysis	30.03.2021	I CIA Test
40	30.03.2021	10.30-11.20 am	F	IV	laser remote sensing	31.03.2021	
41	31.03.2021	10.30-11.20 am	A	IV	LIDAR	01.04.2021	
42	01.04.2021	10.30-11.20 am	A	IV	Video Demonstration	03.04.2021	
43	03.04.2021	9.30-10.20am	C	IV	Raman LIDAR	05.04.2021	
44	05.04.2021	8.30-9.20am	D	IV	Applications of lasers in medicine	07.04.2021	
45	08.04.2021	10.30-11.20 am	A	IV	Applications of lasers in surgery	08.04.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
46	12.04.2021	9.30-10.20am	C	IV	-	-	Semester Practical
				UNIT-V			
47	15.04.2021	8.30-9.20am	D	V	Principle of Holography	17.04.2021	Semester Practical
48	17.04.2021	10.30-11.20 am	F	V	recording and reconstruction of Hologram	17.04.2021	
49	19.04.2021	10.30-11.20 am	A	V	Characteristics of Holograms	19.04.2021	
50	21.04.2021	9.30-10.20am	C	V	Types of Holograms	21.04.2021	
51	22.04.2021	8.30-9.20am	D	V	Types of Holograms	22.04.2021	
52	24.04.2021	10.30-11.20 am	F	V	Applications of Holography-Holographic Interferometry	24.04.2021	
53	26.04.2021	10.30-11.20 am	A	V	Holographic computer memories	26.04.2021	
54	28.04.2021	9.30-10.20am	C	V	Data encoding and in Hologram	28.04.2021	
55	29.04.2021	8.30-9.20am	D	V	Data encoding and in Hologram	29.04.2021	
56	03.05.2021	10.30-11.20 am	F	V	non-destructive testing of artificial heart valves	03.05.2021	
57		10.30-11.20 am	A	V			
58		9.30-10.20am	C	V			

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online/ Off line -Class Lesson Plan
Academic Year 2020-2021[Even Semester]

Department: Physics

Class	:	II BSc Mathematics- Aided
Semester	:	IV
Name of the Faculty	:	Dr.S.Nazarath Begum
Title of the Course	:	Allied Physics Practicals-II
Subject Code	:	18UAPH4P1
ICT Tools used	:	Google class room
Text books	:	Practical Physics - Ouseph, Srinivasan & Vijayendran,
Reference books	:	Practical Physics – P. R. Sasi Kumar, PHI
e-resources	:	

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	6.01.2021	11.30 to 1.20pm	C		Demo all practical's	6.01.2021	
2	18.01.2021	11.30 to 1.20pm	C	I	Young's modulus – Cantilever – depression	25.01.2021	
3	25.01.2021	11.30 to 1.20pm	C	II	Lee's disc – Thermal Conductivity	2.02.2021	
4	2.02.2021	11.30 to 1.20pm	C	III	Transistor Characteristics (CE mode)	9.02.2021	
5	9.02.2021	11.30 to 1.20pm	C	IV	Viscosity- capillary flow	17.02.2021	
6	17.02.2021	11.30 to 1.20pm	C	V	Spectrometer Grating – Normal incidence	24.02.2021	

7	24.02.2021	11.30 to 1.20pm	C	VI	Newton's rings – Refractive Index of lens	3.03.2021	
8	3.03.2021	11.30 to 1.20pm	C	VII	NOR as universal gate	10.03.2021	
9	10.03.2021	11.30 to 1.20pm	C	VIII	NAND as universal gate	18.03.2021	
10	18.03.2021	11.30 to 1.20pm	C	IX	LCR parallel circuit	25.03.2021	
11	25.03.2021	11.30 to 1.20pm	C	X	Calibration of low range Ammeter- Potentiometer	25.03.2021	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	II BSc Physics
Semester	:	IV
Name of the Faculty	:	Dr. D. Sathya
Title of the Course	:	Physics Practicals-IV
Subject Code	:	18UCPH4P1
ICT Tools used	:	Google Class room
Text books	:	Practical Physics- St. Joseph college, Trichy
Reference books	:	Ouseph, Srinivasan& Vijayendran, Practical Physics
e-resources	:	Google Class room- Videos

Sl. No	Actual Date	Order	Practicals	Date-Topics Covered on	Remarks
1	04.01.2021	A	1) A) Write a C++ to read any two numbers through the key board and to perform simple arithmetic operations (i.e. addition, subtraction, multiplication and division) and display the result using **cin** and **cout** functions. Use **do-while** loop. B) Write a C++ to find the sum of the series using **for loop**. a) Sum = 1 + 3 + 5 + ... n b) Sum = $1 + 2^2 + 4^2 +$ ..... n^2	04.01.2021	
2	12.01.2021	A	2) Write a C++ to find the factorial of a number by using **function declaration** with/without using the return statement.	12.01.2021	
3	22.01.2021	A	3) Write a C++ to read a set numbers from a standard input device and to find out the largest number in the given array using **function declaration**. Also sort them in the ascending or the descending order.	22.01.2021	

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Sl. No	Actual Date	Order	Practicals	Date-Topics Covered on	Remarks
4	30.01.2021	A	4) Develop a program in C++ to calculate the Young's modulus of a material from the data obtained from uniform bending method.	30.01.2021	
5	18.02.2021	A	5) Write a C++ to calculate the thickness of a wire by air wedge method.	18.02.2021	
6	22.02.2021	A	6) Write a C++ to generate a series of Fibonacci numbers using **constructor** where the constructor member function has been defined in the scope of class definition out of the definition using the scope resolution operator.	22.02.2021	
7	01.03.2021	A	7) Write a C++ to read the following information from the keyboard in which basic class consists of Name, Roll No. and sex. The derived class contains the data member's height and weight. Display the contents of the class using **inheritance concept**.	01.03.2021	
8	01.03.2021	A	8) Write a C++ to find the period of a pendulum of given length L, in a gravitational field. Accept the required values using the keyboard. Also display the results.	01.03.2021	
9	08.03.2021	A	9) Develop a program in C++ to calculate the Young's modulus of a material from the data obtained from uniform bending method.	08.03.2021	
10	08.03.2021	A	10) Write a C++ to calculate the thickness of a wire by air wedge method.	08.03.2021	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	II B.Sc. Mathematics (Aided)
Semester	:	IV
Name of the Faculty	:	Dr. S.Nazarath Begum
Title of the Course	:	Allied Physics-II
Subject Code	:	18UAPH41
ICT Tools used	:	Google class room
Text books	:	1. Modern Physics – Kiruthiga Sivaprasath – (15th edition) – S.Chand& Co., New Delhi.
Reference books	:	1. Modern Physics –R.Murugeshan 2. Electricity and Magnetism
e-resources	:	Power Point

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	4.01.2021	12.30 to 1.20 pm	A	I-Relativity and Wave Mechanics	Frame of reference	4.01.2021	
2	5.01.2021	10.30 to 11.30 am	B		Galilean transformation	5.01.2021	
3	8.01.2021	11.30 to 12.20 pm	E		Postulates	8.01.2021	
4	11.01.2021	9.30 to 10.20 am	F		Lorentz transformation	11.01.2021	
5	12.02.2021	12.30 to 1.20 pm	A		Lorentz transformation-Expression	12.02.2021	
6	13.02.2021	10.30 to 11.30 am	B		de Broglie's theory of matter waves	13.02.2021	
7	20.01.2021	11.30 to 12.20 pm	E		Expression for de Broglie wavelength	20.01.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
8	21.01.2021	9.30 to 10.20 am	F		Expression for de Broglie wavelength	21.01.2021	
9	22.01.2021	12.30 to 1.20 pm	A		Davison and Germer experiment	23.01.2021	Class Cancelled
10	23.01.2021	10.30 to 11.30 am	B		Davison and Germer experiment	28.01.2021	
11	28.01.2021	11.30 to 12.20 pm	E		Problems discussed	30.01.2021	Thai Boosam
12	29.01.2021	9.30 to 10.20 am	F		Class test	01.02.2021	
13	30.01.2021	12.30 to 1.20 pm	A	II-Nuclear Physics	Nuclear structure	4.02.2021	
14	01.02.2021	10.30 to 11.30 am	B		Nuclear structure	5.02.2021	
15	4.02.2021	11.30 to 12.20 pm	E		Properties of nucleus	6.02.2021	
16	5.02.2021	9.30 to 10.20 am	F		Properties of nucleus	8.02.2021	
17	6.02.2021	12.30 to 1.20 pm	A		Packing fraction	11.02.2021	
18	8.02.2021	10.30 to 11.30 am	B		Binding energy	11.02.2021	
19	11.02.2021	11.30 to 12.20 pm	E		BE/A curve	12.02.2021	
20	12.02.2021	9.30 to 10.20 am	F		Nuclear forces	15.02.2021	
21	15.02.2021	12.30 to 1.20 pm	A		Nuclear stability	16.02.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
22	16.02.2021	10.30 to 11.30 am	B		Liquid drop model	19.02.2021	
23	19.02.2021	11.30 to 12.20 pm	E		Liquid drop model	20.02.2021	
24	20.02.2021	9.30 to 10.20 am	F		Class test	22.02.2021	
25	22.02.2021	12.30 to 1.20 pm	A	III-Electricity and Electromagnetism	Charge, Current	23.02.2021	
26	23.02.2021	10.30 to 11.30 am	B		Potential difference, Resistance & Resistivity	26.02.2021	
27	26.02.2021	11.30 to 12.20 pm	E		Ohm's law, Kirchoff's law	27.02.2021	
28	27.02.2021	9.30 to 10.20 am	F		Potentiometer, Principles	01.03.2021	
29	01.03.2021	12.30 to 1.20 pm	A		Calibration of Voltmeter	2.03.2021	
30	2.03.2021	10.30 to 11.30 am	B		Capacitor, LCR series circuit	5.03.2021	
31	5.03.2021	11.30 to 12.20 pm	E		LCR series circuit	6.03.2021	
32	6.03.2021	9.30 to 10.20 am	F		LCR parallel circuit	8.03.2021	
33	8.03.2021	12.30 to 1.20 pm	A		LCR parallel circuit	9.03.2021	
34	9.03.2021	10.30 to 11.30 am	B		Self induction, self inductance of toroidal solenoid	12.03.2021	
35	12.03.2021	11.30 to 12.20 pm	E		mutual inductance between coils	13.03.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
36	15.03.2021	9.30 to 10.20 am	F		Class Test	15.03.2021	
37	16.03.2021	12.30 to 1.20 pm	A	IV-Basic Electronics	Semiconductor diode	16.03.2021	
38	17.03.2021	10.30 to 11.30 am	B		Diode Characteristics	17.03.2021	
39	20.03.2021	11.30 to 12.20 pm	E		Diode Characteristics	22.03.2021	TANCET-Exam Class Cancelled
40	22.03.2021	9.30 to 10.20 am	F		Zener diode characteristics	23.03.2021	
41	23.03.2021	12.30 to 1.20 pm	A		Zener diode characteristics	24.03.2021	
42	24.03.2021	10.30 to 11.30 am	B		Regulation with Zener diode	27.03.2021	
43	27.03.2021	11.30 to 12.20 pm	E		Bridge rectifier	27.03.2021	
44	30.03.2021	9.30 to 10.20 am	F		Bridge rectifier	30.03.2021	
45	31.03.2021	12.30 to 1.20 pm	A		Biasing of transistor	31.03.2021	
46	01.04.2021	10.30 to 11.30 am	B		RC Coupled Amplifier	01.04.2021	
47	6.04.2021	11.30 to 12.20 pm	E		RC Coupled Amplifier	6.04.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
48	7.04.2021	9.30 to 10.20 am	F		Class Test	7.04.2021	
49	8.04.2021	12.30 to 1.20 pm	A	V-Digital Electronics	Basic logic gates	8.04.2021	
50	9.04.2021	10.30 to 11.20 am	B		NOR, NAND gates – EX – OR gate	8.04.2021	
51	16.04.2021	11.30 to 12.20 pm	E		Boolean equations	9.04.2021	
52	17.04.2021	9.30 to 10.20 am	F		Boolean equations	16.04.2021	
53	19.04.2021	12.30 to 1.20 pm	A		logic circuit from table	17.04.2021	
54	20.04.2021	10.30 to 11.20 am	B		logic circuit from table	19.04.2021	
55	23.04.2021	11.30 to 12.20 pm	E		NOR gates as universal building blocks	20.04.2021	
56	24.04.2021	9.30 to 10.20 am	F		NAND gates as universal building blocks	23.04.2021	
57	26.04.2021	12.30 to 1.20 pm	A		Binary adder	24.04.2021	
58	27.04.2021	10.30 to 11.20 am	B		Half adder	26.04.2021	
59	30.04.2021	11.30 to 12.20 pm	E		Full Adder	27.04.2021	
60	3.05.2021	9.30 to 10.20 am	F		Class Test	30.04.2021	

SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	II B.Sc. Chemistry
Semester	:	IV
Name of the Faculty	:	Dr.R.Kumuthini
Title of the Course	:	Allied Physics-II
Subject Code	:	18UAPH41
ICT Tools used	:	Google classroom
Text books	:	Modern Physics-R. Murugesan and Krithiga Sivaprasath. Introduction to Integrated Electronics, Digital and Analog – V.Vijayendran and S. Viswanathan
Reference books	:	Electricity and Magnetism – R.Murugesan
e-resources	:	Power Point Presentation

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	05.01.2021	10.30-11.20	B	I	Introduction to relative motion	05.01.2021	
2	07.01.2021	10.30-11.20	D		Frame of reference	05.01.2021	
3	08.01.2021	12.30-1.20	E		Galilean transformation	05.01.2021	
4	11.01.2021	08.30-09.20	F		Class- Test	07.01.2021	
5	13.01.2021	10.30-11.20	B		Postulates of special theory of relativity waves	08.01.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
6	19.01.2021	10.30-11.20	D		De-Broglie theory of matter waves	11.01.2021	
7	20.01.2021	12.30-1.20	E		Expression for De-Broglie wavelength	19.01.2021	
8	21.01.2021	8.30-9.20	F		Class -Test	20.01.2021	
10	27.01.2021	10.30-11.20	D		Basics of nucleus and its constitution	21.01.2021	
11	28.01.2021	12.30-1.20	E		Nuclear structure	27.01.2021	
12	29.01.2021	8.30-9.20	F		Properties of nucleus	29.01.2021	
13	01.02.2021	10.30-11.20	B		Packing fraction	01.02.2021	
14	03.02.2021	10.30-11.20	D	II	Class-Test	03.02.2021	
15	04.02.2021	12.30-1.20	E		Binding energy	04.02.2021	
16	05.02.2021	8.30-9.20	F		Binding energy/A curve	05.02.2021	
17	08.02.2021	10.30-11.20	B		Nuclear forces	08.02.2021	
18	10.02.2021	10.30-11.20	D		Nuclear stability	10.02.2021	
19	11.02.2021	12.30-1.20	E		Discussion of Assignment	11.02.2021	
20	12.02.2021	8.30-9.20	F		CIA-I	CIA-I	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
21	16.02.2021	10.30-11.20	B		Liquid drop model	16.02.2021	
22	18.02.2021	10.30-11.20	D		Liquid drop model- contd	18.02.2021	
23	19.02.2021	12.30-1.20	E		Charge	19.02.2021	
24	20.02.2021	8.30-9.20	F		Current	19.02.2021	
25	23.02.2021	10.30-11.20	B		Potential difference	19.02.2021	
26	25.02.2021	10.30-11.20	D		Resistance	25.02.2021	
27	26.02.2021	12.30-1.20	E		Resistivity	25.02.2021	
28	27.02.2021	8.30-9.20	F		Class-Test	26.02.2021	
29	02.03.2021	10.30-11.20	B	III	Ohm's law	05.03.2021	
30	05.03.2021	12.30-1.20	E		Kirchoff's current law	05.03.2021	
31	06.03.2021	8.30-9.20	F		Kirchoff's voltage law	05.03.2021	
32	09.03.2021	10.30-11.20	B		Potentiometer	11.03.2021	
33	11.03.2021	10.30-11.20	D		Principle of potentiometer	11.03.2021	
34	12.03.2021	12.30-1.20	E		Calibration of voltmeter	12.03.2021	
35	13.03.2021	12.30-1.20	E		Class-test	12.03.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
36	15.03.2021	8.30-9.20	F		capacitor	15.03.2021	
37	17.03.2021	10.30-11.20	B		LCR series circuit	19.03.2021	
38	19.03.2021	10.30-11.20	D		LCR parallel circuit	24.03.2021	
39	20.03.2021	12.30-1.20	E		Self-induction	26.03.2021	
40	22.03.2021	8.30-9.20	F		CIA-II	CIA-II	
41	24.03.2021	10.30-11.20	B	IV	Self inductance of a toroidal solenoid	26.03.2021	
42	26.03.2021	10.30-11.20	D		Mutual inductance between two coils	26.03.21	
43	27.03.2021	12.30-1.20	E		Class-Test	27.03.21	
44	30.03.2021	8.30-9.20	F		Semiconductor diode	30.03.21	
45	01.04.2021	10.30-11.20	B		Diode characteristics	01.04.2021	
46	05.04.2021	10.30-11.20	D		Zener diode characteristics	05.04.2021	
47	07.04.2021	12.30-1.20	F		Regulation with zener diode	07.04.2021	
48	09.04.2021	8.30-9.20	B	V	Bridge rectifier	09.04.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
49	10.04.2021	10.30-11.20	B		Biasing of transistor	10.4.21	
50	15.04.2021	10.30-11.20	D		RC coupled amplifier	15.4.21	
51	16.04.2021	12.30-1.20	E		Basic logic gates	16.4.21	
52	17.04.2021	8.30-9.20	F		NOR,NAND and EX-OR gate	17.4.21	
53	20.04.2021	10.30-11.20	B		Boolean equations	20.4.21	
54	22.04.2021	10.30-11.20	D		Logic circuit from table	22.4.21	
55	23.04.2021	12.30-1.20	E		NAND and NOR as universal gates	23.4.21	
56	24.04.2021	8.30-9.20	F		CIA-III	24.4.21	
57	27.04.2021	10.30-11.20	B		Binary adder	27.4.21	
58	29.04.2021	10.30-11.20	D		Half adder	29.4.21	
59	30.04.2021	12.30-1.20	E		Full adder	30.4.21	
60	03.05.2021	8.30-9.20	F		Class-Test	3.5.21	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	II B.Sc. Chemistry
Semester	:	IV
Name of the Faculty	:	Dr.R.Kumuthini
Title of the Course	:	Allied Physics Practicals-II
Subject Code	:	18UAPH4P1
ICT Tools used	:	Google Classroom
Text books	:	Allied Physics-II Laboratory Manual –Dr.S.Nazarath Begam, Dr.R.Kumuthini, Dr.K.V.Amutha
Reference books	:	Practical Physics – Ouseph, Srinivisan &Vijayendran
e-resources	:	Videos demonstrating the experiments

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	05.01.2021	11.30-1.20	B	I	Young's Modulus-Cantilever Pin and Microscope	08.02.2021	
2	13.01.2021	11.30-1.20	B	II	Transistor characteristics	16.02.2021	
3	23.01.2021	11.30-1.20	B	III	Basic Logic Gates- NOT,OR, NOR	23.02.2021	
4	01.02.2021	11.30-1.20	B	IV	Newton's Ring	23.02.2021	
5	08.02.2021	11.30-1.20	B	V	Lee's Disc-Specific heat capacity of a bad conductor	02.03.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
6	16.02.2021	11.30-1.20	B	VI	Spectrometer Grating –Normal incidence	02.03.2021	
7	23.02.2021	11.30-1.20	B	VII	Basic Logic Gates- NOT,AND, NAND	09.03.2021	
8	02.03.2021	11.30-1.20	B	VIII	Viscosity of water – Variable pressure head method.	09.03.2021	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021[Odd Semester]

Department: Physics

Class	:	III Bsc Physics
Semester	:	VI semester
Name of the Faculty	:	Dr.S.Nazarath Begum
Title of the Course	:	Energy Physics
Subject Code	:	18USPH61
ICT Tools used	:	Google class room
Text books	:	Non Conventional Energy Sources, G.D. Rai, Khanna Publishers (4th Ed., 2010).
Reference books	:	Non-conventional energy sources, B.H. Khan, McGraw Hill
e-resources	:	Power Point

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1.	7.01.2021	8.30 to 9.20 am	D	**I-Conventional Energy sources**	World's reserve of commercial energy sources and their availability	7.01.2021	
2	08.01.2021	9.30 to 10.20 am	E		World's reserve of commercial energy sources and their availability	08.01.2021	
3	19.01.2021	8.30 to 9.20 am	D		various forms of energy	19.01.2021	
4	20.01.2021	9.30 to 10.20 am	E		renewable and conventional energy systems	20.01.2021	
5	27.01.2021	8.30 to 9.20 am	D		comparison - coal, oil and natural gas - availability	27.01.2021	
6	28.01.2021	9.30 to 10.20 am	E		statistical details - applications - merits and demerits.	3.02.2021	Thai Boosam
7	3.02.2021	8.30 to 9.20 am	D	II-NCE	Renewable energy sources - solar energy	11.02.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
8	4.02.2021	9.30 to 10.20 am	E		nature of solar radiation - components - solar heaters		
9	10.02.2021	8.30 to 9.20 am	D		crop dryers - space cooling - solar ponds	11.02.2021	CIA-I
10	11.02.2021	9.30 to 10.20 am	E		solar cookers - water desalination	18.02.2021	
11.	18.02.2021	8.30 to 9.20 am	D		photovoltaic generation basics	19.02.2021	
12	19.02.2021	9.30 to 10.20 am	E		merits and demerits of solar energy.	19.02.2021	
13	25.02.2021	8.30 to 9.20 am	D	III-Biomass energy	Biomass energy - classification	25.02.2021	
14	26.02.2021	9.30 to 10.20 am	E		photosynthesis	26.02.2021	
15	4.03.2021	8.30 to 9.20 am	D		biomass conversion process	5.03.2021	Ayya Vaikunda Swami Jeyanthi
16	5.03.2021	9.30 to 10.20 am	E		Kachara gas plants	11.03.2021	
17	11.03.2021	8.30 to 9.20 am	D		Materials used for bio gas generation - wood gasification	12.03.2021	
18	12.03.2021	9.30 to 10.20 am	E		ethanol from wood – advantages and disadvantages	13.03.2021	
19	19.03.2021	8.30 to 9.20 am	D	IV-Geothermal Energy	Geothermal energy, Estimate of Geo thermal power	13.03.2021	CIA-II
20	20.03.2021	9.30 to 10.20 am	E		Nature of Geo thermal fields-	26.03.2021	Class Cancelled-TANCET-2021 Exam
21	26.03.2021	8.30 to 9.20 am	D		Geo thermal sources	26.03.2021	
22	27.03.2021	9.30 to 10.20 am	E		Arrangements for hybrid plants-	27.03.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
23	5.04.2021	8.30 to 9.20 am	D		Arrangements for hybrid plants-	27.03.2021	
24	6.04.2021	9.30 to 10.20 am	E		Applications of Geo thermal energy.	5.04.2021	
25	15.04.2021	8.30 to 9.20 am	D	V- Wind Energy and Ocean Energy	The nature of the wind – site selection consideration	6.04.2021	
26	16.04.2021	9.30 to 10.20 am	E		Basic components of WECS	15.04.2021	
27	22.04.2021	8.30 to 9.20 am	D		Advantage and dis advantages of WECS-Application of wind energy	16.04.2021	
28	23.04.2021	9.30 to 10.20 am	E		ocean thermal energy conversion (OTEC	22.04.2021	
29	29.04.2021	8.30 to 9.20 am	D		Methods of ocean thermal electric power generation	23.04.2021	
30	30.04.2021	9.30 to 10.20 am	E		Bio fouling- Hybrid cycle.	29.04.2021	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	III B.Sc. Physics
Semester	:	VI
Name of the Faculty	:	Dr.R.Kumuthini
Title of the Course	:	Personality Development
Subject Code	:	18USPD62
ICT Tools used	:	Google Classroom
Text books	:	Personality Development - Dr. A.H.Mohideen Badushah and Prof.H.M.Sulthan Ahthar.
Reference books	:	Personality Development – Dr.S.Narayana Rajan, Dr.B.Rajasekaran, G.Venkadasalapathi, V.Vijuresh Nayaham, and Herald .M. Dhas.
e-resources	:	Power-point presentation.

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	08.01.2021	10.30-11.30	E	I	Personality	04.01.2021	
2	11.01.2021	10.30-11.30	F		Personality Traits	05.01.2021	
3	20.01.2021	10.30-11.30	E		Theories of Personality	06.01.2021	
4	21.01.2021	10.30-11.30	F		Self-Awareness	07.01.2021	
5	28.01.2021	10.30-11.30	E		SWOT Analysis	08.01.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
6	29.01.2021	10.30-11.30	F		Goal Setting	12.01.2021	
7	04.02.2021	10.30-11.30	E	II	Self Monitoring	18.01.2021	
8	05.02.2021	10.30-11.30	F		Perception	19.01.2021	
9	11.02.2021	10.30-11.30	E		Errors in Perception	20.01.2021	
10	12.02.2021	10.30-11.30	F		Attitude	22.01.2021	
11	19.02.2021	10.30-11.30	E		Barriers and Methods to Attitude change	25.01.2021	
12	20.02.2021	10.30-11.30	F		Assertiveness	30.01.2021	
13	26.02.2021	10.30-11.30	E	III	Team Building	11.02.2021	
14	27.02.2021	10.30-11.30	F		Leadership Skills	12.02.2021	
15	05.03.2021	10.30-11.30	E		Theories of leadership	19.02.2021	
16	06.03.2021	10.30-11.30	F		Negotiation Skills	20.02.2021	
17	12.03.2021	10.30-11.30	E		Conflict Management	26.02.2021	
18	15.03.2021	10.30-11.30	F	IV	Levels and Resolution of conflicts , Communication	12.03.2021	

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	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
19	20.03.2021	10.30-11.30	E		Barriers of Communication	13.03.2021	
20	22.03.2021	10.30-11.30	F		Transactional Analysis	22.03.2021	
21	27.03.2021	10.30-11.30	E		Emotional intelligence	27.3.21	
22	30.03.2021	10.30-11.30	F		Stress Management	30.3.21	
23	06.04.2021	10.30-11.30	E		Steps to manage stress	06.4.21	
24	07.04.2021	10.30-11.30	F		Social Graces	7.4.21	
25	16.04.2021	10.30-11.30	E	V	Ways to acquire Social Graces	16.4.21	
26	17.04.2021	10.30-11.30	F		Table Manners	17.4.21	
27	23.04.2021	10.30-11.30	E		Dress Code	23.4.21	
28	24.04.2021	10.30-11.30	F		Group Discussion	24.4.21	
29	30.04.2021	10.30-11.30	E		Interview	30.4.21	
30	03.05.2021	10.30-11.30	F		Types of interview skills	3.5.21	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Lesson Plan
Academic Year 2020-2021 [Even Semester]

Department: Physics

Class	:	III B.Sc. Physics
Semester	:	VI
Name of the Faculty	:	Dr.R.Kumuthini
Title of the Course	:	Physics Practicals-VIII
Subject Code	:	18UCPH6P2
ICT Tools used	:	Google Classroom
Text books	:	Electronics Laboratory Manual –Dr.M.Mohamed Roshan, Dr.R.Kumuthini.
Reference books	:	-
e-resources	:	Videos demonstrating the experiments

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
	04.01.2021	9.30-1.20	A	I	NOR as Universal Gate	02.02.2021	
2	12.01.2021	9.30-1.20	A	II	Charateristics of Opto-Electronic Device-LDR	04.02.2021	
	22.01.2021	9.30-1.20	A	III	Hartley's Oscillator	06.02.2021	
4	30.01.2021	9.30-1.20	A	IV	Differentiator and Integrator using Op-Amp	15.02.2021	
5	06.02.2021	9.30-1.20	A	V	Dual Power Supply	22.02.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
6	15.02.2021	9.30-1.20	A	VI	Monostable Multivibrator using IC 555	01.03.2021	
7	22.02.2021	9.30-1.20	A	VII	Charateristics of Opto-Electronic Device-LED	08.03.2021	
8	01.03.2021	9.30-1.20	A	VIII	Record work	16.03.2021	

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SADAKATHULLAH APPA COLLEGE (AUTONOMOUS)
Rahmath Nagar, Tirunelveli - 627 011
Online-Class Lesson Plan
Academic Year 2020-2021[Even Semester]
Department: Physics

Class	:	III BSc-Physics
Semester	:	VI
Name of the Faculty	:	Dr.M.Mohamed Roshan
Title of the Course	:	Communication Electronics
Subject Code	:	**18UEPH6A**
ICT Tools used	:	Google glass room
Text books	:	Principles of communications – K.S.Srinivasan (Anuradha Publications)
Reference books	:	Communication Electronics – Loius E Frenzel (TMH)
e-resources	:	Power point

Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
1	5.01.2021	11.30 to 12.20 pm	B	I	Evolution of communication & Introduction to communication system	5.01.2021	
2	6.01.2021	12.30 to 1.20pm	C	I	Types and ranges of frequency used in communication systems	6.01.2021	
3	8.01.2021	8.30 to 9.20 am	E	I	Why modulation is essential?	8.01.2021	
4	11.01.2021	9.30 to 10.20 am	F	I	Signal to noise ratio	11.01.2021	
5	13.01.2021	11.30 to 12.20 pm	B	I	Modulation and its types	13.01.2021	
6	18.01.2021	12.30 to 1.20pm	C	I	Amplitude modulation theory & equations	18.01.2021	
7	20.01.2021	8.30 to 9.20 am	E	I	Frequency spectrum of AM	20.01.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
8	21.01.2021	9.30 to 10.20 am	F	I	AM Transmitter	21.01.2021	
9	23.01.2021	11.30 to 12.20 pm	B	I	AM Super heterodyne receiver	23.01.2021	
10	25.01.2021	12.30 to 1.20pm	C	I	Frequency modulation	25.01.2021	
11	28.01.2021	8.30 to 9.20 am	E	I	Frequency spectrum of FM and Transmitter	29.01.2021	Thai Boosam
12	29.01.2021	9.30 to 10.20 am	F	I	Comparison of FM and AM	01.02.2021	
13	01.02.2021	11.30 to 12.20 pm	B	II	Wave and Pulse	2.02.2021	
14	2.02.2021	12.30 to 1.20pm	C	II	Introduction to pulse modulation	5.02.2021	
15	4.02.2021	8.30 to 9.20 am	E	II	Types of Pulse modulation	5.02.2021	Ayya Vaikundar jeyanthi
16	5.02.2021	9.30 to 10.20 am	F	II	Generation of Pulse Amplitude modulation	8.02.2021	
17	8.02.2021	11.30 to 12.20 pm	B	II	Detection of PAM	9.02.2021	
18	9.02.2021	12.30 to 1.20pm	C	II	Generation of Pulse Width Modulation	12.02.2021	
19	11.02.2021	8.30 to 9.20 am	E	II	Detection of PWM &Generation of Pulse Position Modulation	16.02.2021	CIA-I
20	12.02.2021	9.30 to 10.20 am	F	II	Detection of PPM	17.02.2021	
21	16.02.2021	11.30 to 12.20 pm	B	II	Generation and detection of Pulse Code Modulation	19.02.2021	
22	17.02.2021	12.30 to 1.20pm	C	II	Frequency Division Multiplexing	20.02.2021	

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Sl. No	Actual Date	Time	Order	Unit	Topics Planned	Date-Topics Covered on	Remarks
23	19.02.2021	8.30 to 9.20 am	E	II	Time Division Multiplexing	23.02.2021	
24	20.02.2021	9.30 to 10.20 am	F	II	Telegraphy and Telemetry	24.02.2021	
25	23.02.2021	11.30 to 12.20 pm	B	III	Digital signal & Analog signal	26.02.2021	
26	24.02.2021	12.30 to 1.20pm	C	III	Principle of digital communication	27.02.2021	
27	26.02.2021	8.30 to 9.20 am	E	III	Characteristics of Data transmission circuits	2.03.2021	
28	27.02.2021	9.30 to 10.20 am	F	III	Distortion, Signal to noise ratio and of data transmission circuits	3.03.2021	
29	2.03.2021	11.30 to 12.20 pm	B	III	Different codes	5.03.2021	
30	3.03.2021	12.30 to 1.20pm	C	III	Digital codes	5.03.2021	
31	5.03.2021	8.30 to 9.20 am	E	III	Modem and its need	6.03.2021	
32	6.03.2021	9.30 to 10.20 am	F	III	Functioning of the Modem	9.03.2021	
33	9.03.2021	11.30 to 12.20 pm	B	III	Networks and their types	10.03.2021	
34	10.03.2021	12.30 to 1.20pm	C	III	Organisation of Networks	12.03.2021	
35	12.03.2021	8.30 to 9.20 am	E	III	Network Protocols	15.03.2021	
36	15.03.2021	9.30 to 10.20 am	F	III	E – mail and Internet	17.03.2021	
37	17.03.2021	11.30 to 12.20 pm	B	IV	Microwave ranges and sources	18.03.2021	
38	18.03.2021	12.30 to 1.20pm	C	IV	Principle of Micro wave links	22.03.2021	
39	20.03.2021	8.30 to 9.20 am	E	IV	Design features of Microwave links & repeaters	24.03.2021	Class Cancelled-TANCET-2021 Exam
40	22.03.2021	9.30 to 10.20 am	F	IV	Long haul systems	25.03.2021	
41	24.03.2021	11.30 to 12.20 pm	B	IV	Submarine cables	30.03.2021	
42	25.03.2021	12.30 to 1.20pm	C	IV	Principle of Satellite communication	30.03.2021	
43	27.03.2021	8.30 to 9.20 am	E	IV	Earth station – construction and working	3.04.2021	

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44	30.03.2021	9.30 to 10.20 am	F	IV	Construction and components of satellite	6.04.2021	
45	1.04.2021	11.30 to 12.20 pm	B	IV	Radar principle and systems	6.04.2021	
46	3.04.2021	12.30 to 1.20pm	C	IV	Doppler effect and its application	7.04.2021	
47	6.04.2021	8.30 to 9.20 am	E	IV	Continuous wave radar	9.04.2021	
48	7.04.2021	9.30 to 10.20 am	F	IV	Pulsed radar system.	12.04.2021	
49	9.04.2021	11.30 to 12.20 pm	B	V	Basic principle involved in Fiber communication	12.04.2021	
50	12.04.2021	12.30 to 1.20pm	C	V	Acceptance angle and Numerical aperture	17.04.2021	
51	16.04.2021	8.30 to 9.20 am	E	V	Characteristics of Optical Fibers and advantages	20.04.2021	
52	17.04.2021	9.30 to 10.20 am	F	V	Losses in fiber cables	20.04.2021	
53	20.04.2021	11.30 to 12.20 pm	B	V	Fiber Optic System and Components	21.04.2021	
54	21.04.2021	12.30 to 1.20pm	C	V	Sources Laser diode and LED	23.04.2021	
55	23.04.2021	8.30 to 9.20 am	E	V	Detectors PIN diode and APD	23.04.2021	
56	24.04.2021	9.30 to 10.20 am	F	V	Optical Links and fiber testing	24.04.2021	
57	27.04.2021	11.30 to 12.20 pm	B	V	Splicing types & Mechanical splicing	27.04.2021	
58	28.04.2021	12.30 to 1.20pm	C	V	Fusion splicing	28.04.2021	
59	30.04.2021	8.30 to 9.20 am	E	V	Optical connectors(Permanent and temporary)	30.04.2021	
60	3.05.2021	9.30 to 10.20 am	F	V	Optical communication receiver	3.05.2021	

Signature of the Faculty

Signature of the HOD