

LESSON PLAN FOR EVEN SEM
SESSION 2017-18

NAME OF ASSISTANT PROFESSOR : MEENAKSHI PUNDEER
CLASS/SECTION : B.SC IVSEM SECT(B,C,E&F,D)
SUBJECT :PHYSICS-WAVE OPTICS-II

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 1-1-18	Polarisation by reflection, refraction and scattering, Malus Law,	(GROUP-1)- Wave length by Newton's Rings.
DAY2 DATE 2-1-18	Phenomenon of double refraction, Huygen's wave theory of double refraction	(GROUP-1)- Wave length by Newton's Rings.
DAY3 DATE 3-1-18	Analysis of polarized Light. Nicol prism	(GROUP-2)-. Wave length by Newton's Rings.
DAY4 DATE 4-1-18	Polarisation by reflection, refraction and scattering, Malus Law,	.....
DAY5 DATE 5-1-18	Phenomenon of double refraction, Huygen's wave theory of double refraction	.....
DAY6 DATE 6-1-18	Analysis of polarized Light. Nicol prism	.....
DAY7 DATE 8-1-18	Quarter wave plate and half wave plate, production and detection of (i) Plane polarized light	(GROUP-1)- To draw common base common emitter characteristics of a transistor
DAY8 DATE 9-1-18	Circularly polarized light and (iii) Elliptically polarized light.	(GROUP-1)- To draw common base common emitter characteristics of a transistor
DAY9 DATE 10-1-18	Optical activity	(GROUP-2)- Wave length by Newton's Rings.
DAY10 DATE 11-1-18	Quarter wave plate and half wave plate, production and detection of (i) Plane polarized light	.....
DAY11 DATE 12-1-18	Circularly polarized light	.....
DAY12 DATE 13-1-18	(iii) Elliptically polarized light.	.....
DAY13 DATE 15-1-18	Fresnel's theory of optical rotation,	(GROUP-1)- To measure the a) area of window ,,b) heighjt of inaccessible object
DAY 14 DATE 16-1-18	Specific rotation	(GROUP-1)- To measure the a) area of window ,,b) heighjt of inaccessible object
DAY15	Polarimeters (half shade and Biquartz).	(GROUP-2)- To draw common

DATE 17-1-18		base common emitter characteristics of a transistor
DAY16 DATE 18-1-18	Optical activity	.....
DAY17 DATE 19-1-18	Fresnel's theory of optical rotation,	.....
DAY18 DATE 20-1-18	Specific rotation	.....
DAY19 DATE 22-1-18	HOLIDAY	
DAY20 DATE 23-1-18	SPORTS DAY	
DAY21 DATE 24-1-18	HOLIDAY	
DAY22 DATE 25-1-18	Polarimeters (half shade and Biquartz).	.....
DAY23 DATE 26-1-18	HOLIDAY	
DAY 24 DATE 27-1-18	TEST OF UNIT 1	.....
UNIT/PART II	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 29-1-18	Fourier theorem	(GROUP-1)- Resolving power of telescope
DAY2 DATE 30-1-18	Fourier series	(GROUP-1)- Resolving power of telescope
DAY3 DATE 31-1-18	HOLIDAY	
DAY4 DATE 1-2-18	Fourier theorem	.....
DAY5 DATE 2-2-18	Fourier series	.....
DAY6 DATE 3-2-18	evaluation of Fourier coefficient	....
DAY7 DATE 5-2-18	evaluation of Fourier coefficient,	(GROUP-1)- refractive index index and dispersive power of prism
DAY8 DATE 6-2-18	importance and limitations of Fourier theorem	(GROUP-1)- refractive index index and dispersive power of prism
DAY9 DATE 7-2-18	even and odd functions	(GROUP-2)- To draw common base common emitter characteristics of a transistor
DAY10 DATE 8-2-18	importance and limitations of Fourier theorem	.....

DAY11 DATE 9-2-18	ASSIGNMENT 1 even and odd functions	.....
DAY12 DATE 10-2-18	HOLIDAY	
DAY13 DATE 12-2-18	Fourier series of functions $f(x)$ between (i) 0 to 2π , (ii) $-\pi$ to π	(GROUP-1)- Graph between minimum deviation and wavelength of a prism
DAY14 DATE 13-2-18	HOLIDAY	
DAY15 DATE 14-2-18	(ii) $-\pi$ to π , (iii) 0 to π , (iv) $-L$ to L , complex form of Fourier series	(GROUP-2)- Graph between minimum deviation and wavelength of a prism
DAY16 DATE 15-2-18	Fourier series of functions $f(x)$ between (i) 0 to 2π , (ii) $-\pi$ to π	.....
DAY17 DATE 16-2-18	(iii) 0 to π , (iv) $-L$ to L , complex form of Fourier series,	.....
DAY18 DATE 17-2-18	Application of Fourier theorem for analysis of complex waves: solution of triangular, rectangular waves	.....
DAY19 DATE 19-2-18	Application of Fourier theorem for analysis of complex waves: solution of triangular, rectangular waves	(GROUP-1)-) To study ripple factor
DAY20 DATE 20-2-18	half and full wave rectifier outputs,	(GROUP-1)-) To study ripple factor
DAY21 DATE 21-2-18	Parseval identity for Fourier Series, Fourier integrals	(GROUP-2)-)- Graph between minimum deviation and wavelength of a prism
DAY22 DATE 22-2-18	half and full wave rectifier outputs	.....
DAY23 DATE 23-2-18	Parseval identity for Fourier Series, Fourier integrals	.....
UNIT/PART III	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 24-2-18	Fourier transforms and its properties	.....
DAY2 DATE 26-2-18	Fourier transforms and its properties	(GROUP-1)- Focal length by nodal slide assembly
DAY3 DATE 27-2-18	TEST & SEMINAR (PG CLASSES)	(GROUP-1)- Focal length by nodal slide assembly
DAY4 DATE 28-2-18	HOLIDAY	
DAY5	HOLIDAY	

DATE 1-3-18		
DAY6 DATE 2-3-18	HOLIDAY	
DAY7 DATE 3-3-18	HOLIDAY	
DAY8 DATE 5-3-18	Application of Fourier transform (i) for evaluation of integrals,	(GROUP-1)- Roots of Quadratic Equation
DAY9 DATE 6-3-18	(ii)for solution of ordinary differential equations	(GROUP-1)- Roots of Quadratic Equation
DAY10 DATE 7-3-18	(iii) to the following functions: 1. $f(x)= e^{-x^2/2} \sin |X|a$ 2 . $f(x) = 0 \quad |X| > a$	(GROUP-2)-)- Focal length by nodal slide assembly
DAY11 DATE 8-3-18	Application of Fourier transform (i) for evaluation of integrals,	.....
DAY12 DATE 9-3-18	(ii)for solution of ordinary differential equations	.....
DAY13 DATE 10-3-18	ASSIGNMENT 2 (iii) to the following functions: 1. $f(x)= e^{-x^2/2} \sin |X|a$ 2 . $f(x) = 0 \quad |X| > a$	.....
DAY 14 DATE 12-3-18	Matrix methods in paraxial optics	(GROUP-1)-)- Max-Min range of given set of numbers
DAY15 DATE 13-3-18	effects of translation and refraction	(GROUP-1)- Max-Min range of given set of numbers
DAY16 DATE 14-3-18	derivation of thin lens and thick lens formulae	(GROUP-2)-)- Max-Min range of given set of numbers
DAY17 DATE 15-3-18	Matrix methods in paraxial optics	.....
DAY18 DATE 16-3-18	effects of translation and refraction	.....
DAY19 DATE 17-3-18	derivation of thin lens and thick lens formulae	(GROUP-1)- To find area of triangle ,sphere,and cylinder
DAY20 DATE 19-3-18	unit plane, nodal planes,	(GROUP-1)- To find area of triangle ,sphere,and cylinder
DAY21 DATE 20-3-18	system of thin lenses	(GROUP-2)- To find area of triangle ,sphere,and cylinder
DAY22 DATE 21-3-18	CONDITIONAL TEST	.....
DAY23 DATE 22-3-18	CONDITIONAL TEST	.....
DAY 24	HOLIDAY	.....

DATE 23-3-18		
DAY 25 DATE 24-3-18	unit plane, nodal planes, system of thin lenses.	.....
UNIT/PART IV	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 26-3-18	Chromatic, spherical, coma	(GROUP-1)- Program to find roots of a quadratic equation
DAY2 DATE 27-3-18	astigmatism and distortions aberrations and their remedies.	(GROUP-1)- Program to find roots of a quadratic equation
DAY3 DATE 28-3-18	Optical fiber, Critical angle of propagation, Mode of Propagation,	(GROUP-2)- Program to find roots of a quadratic equation
DAY4 DATE 29-3-18	HOLIDAY	
DAY5 DATE 30-3-18	Chromatic, spherical, coma	.....
DAY6 DATE 31-3-18	astigmatism and distortion aberrations and their remedies.	.....
DAY7 DATE 2-4-18	Acceptance angle, Fractional refractive index change	(GROUP-1)- Measurement of (a) Specific rotation (b) concentration of sugar solution using polarimeter
DAY8 DATE 3-4-18	Numerical aperture, Types of optics fiber	(GROUP-1)- Measurement of (a) Specific rotation (b) concentration of sugar solution using polarimeter
DAY9 DATE 4-4-18	Normalized frequency	(GROUP-2)- Measurement of (a) Specific rotation (b) concentration of sugar solution using polarimeter
DAY10 DATE 5-4-18	Optical fiber, Critical angle of propagation, Mode of Propagation,	.....
DAY11 DATE 6-4-18	Acceptance angle, Fractional refractive index change	.....
DAY12 DATE 7-4-18	Numerical aperture, Types of optics fiber, Normalized frequency	.....
DAY13 DATE 9-4-18	Pulse dispersion	(GROUP-1)- Study of series and parallel resonance circuits.
DAY14 DATE 10-4-18	Attenuation,	(GROUP-1)- Study of series and parallel resonance circuits.
DAY15	Applications,	(GROUP-2)- Measurement of

DATE 11-4-18		(a) Specific rotation (b) concentration of sugar solution using polarimeter
DAY16 DATE 12-4-18	Pulse dispersion	.....
DAY17 DATE 13-4-18	Attenuation, Applications	.....
DAY18 DATE 14-4-18	HOLIDAY	
DAY19 DATE 16-4-18	Fiber optic Communication, Advantages.	(GROUP-1)- . To find out the frequency of a tuning fork by Melde's experiment.
DAY20 DATE 17-4-18	TEST	(GROUP-1)- To draw common base common emitter characteristics of a transistor
DAY21 DATE 18-4-18	HOLIDAY	
DAY22 DATE 19-4-18	Fiber optic Communication, Advantages.	.....
DAY23 DATE 20-4-18	TEST	.....

NAME OF ASSISTANT PROFESSOR : MEENAKSHI PUNDEER
CLASS/SECTION : B.SC II SEM
SUBJECT :PHYSICS PRACTICALS

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY4 DATE 4-1-18		(GROUP-1) Moment of inertia of a flywheel
DAY5 DATE 5-1-18		(GROUP-1) Moment of inertia of a flywheel
DAY6 DATE 6-1-18		(GROUP2) Moment of inertia of a torsion pendulum
DAY10 DATE 11-1-18		(GROUP-1) Moment of inertia of a flywheel
DAY11 DATE 12-1-18		(GROUP-1) Moment of inertia of a flywheel
DAY12 DATE 13-1-18		(GROUP-2) Moment of inertia of a torsion pendulum
DAY16 DATE 18-1-18		(GROUP-1) Moment of inertia of Torsion Pendulum

DAY17 DATE 19-1-18		(GROUP1) Moment of inertia of Torsion Pendulum
DAY18 DATE 20-1-18		(GROUP-2) Moment of inertia of a torsion pendulum
DAY19 DATE 22-1-18	HOLIDAY	
DAY20 DATE 23-1-18	SPORTS DAY	
DAY21 DATE 24-1-18	HOLIDAY	
DAY22 DATE 25-1-18		(GROUP-1) Surface tension by jeagers's method
DAY23 DATE 26-1-18	HOLIDAY	(GROUP-1) Surface tension by jeagers's method
DAY 24 DATE 27-1-18		(GROUP-2) Young's Modulus by bending of beam
UNIT/PART II	TOPIC	
	THEORY	PRACTICAL
DAY3 DATE 31-1-18	HOLIDAY	
DAY4 DATE 1-2-18		(GROUP-1) Surface tension by jeagers's method
DAY5 DATE 2-2-18		(GROUP-1) E.C.E of hydrogen using an ammeter
DAY6 DATE 3-2-18		(GROUP-2) Young's Modulus by bending of beam
DAY10 DATE 8-2-18		(GROUP-1) E.C.E of hydrogen using an ammeter
DAY11	ASSIGNMENT 1	(GROUP-2)

DATE 9-2-18		Young's Modulus by bending of beam
DAY12 DATE 10-2-18	HOLIDAY	
DAY14 DATE 13-2-18	HOLIDAY	
DAY16 DATE 15-2-18		(GROUP-1) E.C.E of hydrogen using an ammeter
DAY17 DATE 16-2-18		(GROUP-1) zener diode voltage regulation
DAY18 DATE 17-2-18		(GROUP-2) Viscosity of water by capillary tube
DAY22 DATE 22-2-18		(GROUP-1) zener diode voltage regulation
DAY23 DATE 23-2-18		(GROUP-1) Inverse Square law by photocell
UNIT/PART III	TOPIC	
	THEORY	PRACTICAL
DAY1 DATE 24-2-18		(GROUP-2) zener diode voltage regulation
DAY3 DATE 27-2-18	TEST & SEMINAR (PG CLASSES)	
DAY4 DATE 28-2-18	HOLIDAY	
DAY5 DATE 1-3-18	HOLIDAY	
DAY6 DATE 2-3-18	HOLIDAY	
DAY7 DATE 3-3-18	HOLIDAY	
DAY11 DATE 8-3-18		(GROUP-1) Inverse Square law by photocell
DAY12 DATE 9-3-18		(GROUP-1) Inverse Square law by photocell
DAY13	ASSIGNMENT 2	(GROUP-2)

DATE 10-3-18		Viscosity of water by capillary tube
DAY17 DATE 15-3-18		(GROUP-1) Inverse Square law by photocell
DAY18 DATE 16-3-18		(GROUP-1) A.C mains by sonometer
DAY19 DATE 17-3-18		(GROUP-2) Frequency of A.C mains by electrical vibrator
DAY22 DATE 21-3-18	CONDITIONAL TEST	
DAY23 DATE 22-3-18	CONDITIONAL TEST	(GROUP-1) A.C mains by sonometer
DAY 24 DATE 23-3-18	HOLIDAY	
DAY 25 DATE 24-3-18		(GROUP-2) Frequency of A.C mains by electrical vibrator
UNIT/PART IV	TOPIC	
	THEORY	PRACTICAL
DAY4 DATE 29-3-18	HOLIDAY	
DAY5 DATE 30-3-18		(GROUP-1) g by bar pendulum
DAY6 DATE 31-3-18		(GROUP-2) g by bar pendulum
DAY10 DATE 5-4-18		(GROUP-1) Frequency of A.C mains by electrical vibrator
DAY11 DATE 6-4-18		(GROUP-1) Frequency of A.C mains by electrical vibrator
DAY12 DATE 7-4-18		(GROUP-2) g by bar pendulum
DAY16		(GROUP-1)

DATE 12-4-18		To draw forward and reverse bias characteristics
DAY17 DATE 13-4-18		(GROUP-1) To draw forward and reverse bias characteristics
DAY18 DATE 14-4-18	HOLIDAY	
DAY21 DATE 18-4-18	HOLIDAY	
DAY22 DATE 19-4-18		(GROUP-1) elastic constants by Searle's Method
DAY23 DATE 20-4-18		(GROUP-2) To draw forward and reverse bias characteristics

MEENAKSHI PUNDEER
NAME OF TEACHER