

# Dayanand Mahila Mahavidyalaya, Kurukshetra

## Lesson Plan

Session 2020-21 (17.04.2021 to 12.07.2021)

Name of Teacher.....Ms. Amandeep Kaur Hunjra.....

Subject .....Physics.....

Week	Date	Class...Bsc -IIIrd (N.M.)	Class ....Bsc-III (N.M)	Class .....
		Semester ...VIth	Semester .....VIth	Semester .....
3	17.04.2021	Introduction to crystal structure:- Crystalline and glassy form		
4	19.04.2021	liquid crystal, crystal structure and periodicity		
	20.04.2021	lattice and basis, crystal Translation vector and axes		
	21.04.2021	Ram Navami		
	22.04.2021	Explain unit and primitive cell ,winger Seitz primitive cell , symmetry operation for 2 dimensionalsal Crystal		
	23.04.2021	Explain Bravais lattices in 2 and 3 dimensions		
	24.04.2021	Explain Crystal plains and Miller Indices,Interplaner spacing		
5	26.04.2021	Explain Crystal structures of Zinc Sulphide , Sodium chloride and Diamond		
	27.04.2021	Introduction to unit-2 :- X-ray diffraction, Bragg's Law		
	28.04.2021	Explain K-space and reciprocal lattice and it's physical significance		
	29.04.2021	Explain properties of reciprocal lattice and reciprocal lattice for sc, bcc ,fcc		
	30.04.2021		Introduction of early observations , emission and absorption Spectra,atomic Spectra ,wave no.	
1	01.05.2021		Explain Spectra of Hydrogen atom in balmer series, Bohr atomic model	
2	03.05.2021		Explain spectral lines in Hydrogen atom, un-quantized states. and continuous Spectra, variation in Ryhberg constant due to finite mass	
	04.05.2021		Discuss shortcomings of Bhor 's theory ,Wilson Sommerfeld quantization rule	

	05.05.2021		Explain de-broglie Interpretation of Bohr - Sommerfeld theory, Bohr correspondence principle and shortcomings of Bohr-Sommerfeld theory	
	06.05.2021	Test of unit -1		
	07.05.2021		Explain vector model of atom:-space quantization ,electron spin, coupling of orbital and spin angular momentum	
	08.05.2021		Explain spectroscopy terms and their notation ,Transition probability and selection rules	
<b>3</b>	10.05.2021		Introduction to unit -2 ; explain Bohr magneton , behavior of magnetic dipoles in external magnetic field	
	11.05.2021		Define Penetrating and non-penetrating orbits ; energy determination of electron for Penetrating orbit	
	12.05.2021		Explain quantum defects , spin orbit interaction energy of single valence electron	
	13.05.2021		Explain spin orbit interaction for penetrating and non - penetrating orbits , quantum mechanical relativity correction	
	14.05.2021	Id-ul-Fitr/Parshuram Jayanti		
	15.05.2021		Explain Hydrogen fine Spectra, main feature of alkali Spectra and theoretical interpretation	
<b>4</b>	17.05.2021		Explain terms and series , Rydberg- Ritz combination principle and absorption Spectra of alkali atoms	
	18.05.2021		Discuss observed doublet fine structures in alkali metals and its interpretation	
	19.05.2021		Explain intensity rules for doublets , comparison of alkali Spectra and hydrogen spectrum	
	20.05.2021	Introduction of Unit -3 :- Historical introduction and survey of superconductivity , superconducting system , high Tc superconductors, isotopic effect		
	21.05.2021	Explain critical magnetic field , Meissner effect, isotopic effect		

	22.05.2021	Discuss about London's theory and Pippard's equations, Explain Pippard's Modification equations		
<b>5</b>	24.05.2021	Explain BCS theory of superconductivity and flux quantization and explain classification of superconductor		
	25.05.2021		Introduction to Unit - 3 ; Explain essential features of Spectra of alkaline - earth elements	
	26.05.2021		Explain valence model for two electron atom : application of spectra; coupling scheme; LS or Russell	
	27.05.2021		Explain LS coupling , Lande interval rule , Pauli principle and periodic classification of elements , interaction energy in JJ coupling	
	28.05.2021		Explain equivalent and non - equivalent electrons and 2 valence electrons system spectral terms of equivalent and non-equivalent electrons	
	29.05.2021		Comparison of spectral terms in L-S and J-J coupling	
	31.05.2021		Explain hyperfine structure of spectral lines and its origin; isotopic effect and nuclear spin	
<b>1</b>	01.06.2021		Test of unit-1	
	02.06.2021	Introduction to Unit -4 ; Define Nano physics , length scale , Importance of Nano -scale and technology and history of Nano- technology		
	03.06.2021	Explain benefits and challenges in molecular manufacturing , understanding advanced capabilities		
	04.06.2021	Test of unit-2		
	05.06.2021	Explain molecular Assembler concept		
<b>2</b>	07.06.2021	Explain vision and Objective of Nano-technology and Explain Nano- technology in different fields		
	08.06.2021		Test of unit-2	
	09.06.2021	Explain application of nano - technology in electronics and its uses		

	10.06.2021	Explain nanotechnology application under automobile		
	11.06.2021	Testof unit-3		
	12.06.2021	Introduction to Nano- biotechnology and explain application of nano - biotechnology		
<b>3</b>	14.06.2021		Test unit-3	
	15.06.2021	Explain Nano- biotechnology materials		
	16.06.2021		Introduction to Unit -4 ; Explain. Zeeman effect and Experimental set -up for studying Zeeman effect	
	17.06.2021		Explanation of normal zeeman effect ( classical and quantum mechanical)	
	18.06.2021		Explanation of anomalous Zeeman effect	
	19.06.2021	Revision		
<b>4</b>	21.06.2021		Explain zeeman pattern of D1 and D2 lines of Na- atom and Explain paschen-back effect of a single valence electron system	
	22.06.2021		Explain weak field Stark effect of Hydrogen atom	
	23.06.2021		General consideration of molecular physics	
	24.06.2021	Sant Kabir Jayanti		
	25.06.2021		Explain electronic states of diatomic molecules	
	26.06.2021		Explain Rotational Spectra of diatomic molecules	
<b>5</b>	28.06.2021	Test of unit -4		
	29.06.2021		Explain vibrational Spectra of diatomic molecules	
	30.06.2021	Revision		
<b>1</b>	01.07.2021		Explain Rotator model of diatomic molecule	
	02.07.2021	Revision		
	03.07.2021		Explain Raman effect	
<b>2</b>	05.07.2021		Explanation of electronic spectra	
	06.07.2021		Revision of Unit-4	
	07.07.2021	Revision		
	08.07.2021		Test unit-4	
	09.07.2021	Revision		
	10.07.2021		Revision	
	12.07.2021	Revision		

# Dayanand Mahila Mahavidyalaya, Kurukshetra

## Lesson Plan

Session 2020-21 (17.04.2021 to 12.07.2021)

Name of Teacher.....Mrs. Kiran Ganotra.....

Subject .....physics.....

Week	Date	Class .....bsc 2nd.....	Class .....bsc 2nd.....	Class .....
		Semester .....4th...	Semester ...4th.....	Semester .....
3	17.04.2021	introduction of statistical physics	introduction of statistical physics	
4	19.04.2021	events mutually exclusive, probability	events mutually exclusive, probability	
	20.04.2021	statistical, a - prior probability	statistical, a - prior probability	
	21.04.2021	Ram Navami		
	22.04.2021	probability theorem	probability theorem	
	23.04.2021	some probability consideration, combination processing max probability	some probability consideration, combination processing max probability	
	24.04.2021	minimum probability	minimum probability	
5	26.04.2021	tossing of 2,3 and any number of coin	tossing of 2,3 and any number of coin	
	27.04.2021	permutations and combinations	permutations and combinations	
	28.04.2021	distribution of N particles, micro and macro state	distribution of N particles, micro and macro state	
	29.04.2021	thermodynamical probability	thermodynamical probability	
	30.04.2021	constraints, statistical fluctuation	constraints, statistical fluctuation	
1	01.05.2021	beta-parameter	beta-parameter	
2	03.05.2021	entropy & probability with numerical	entropy & probability with numerical	
	04.05.2021	revision	revision	
	05.05.2021	polarization by reflection & refraction and scattering	polarization by reflection & refraction and scattering	
	06.05.2021	malus law, double refraction phenomenon	malus law, double refraction phenomenon	
	07.05.2021	Huygen wave theory, analysis of polarized light	Huygen wave theory, analysis of polarized light	
	08.05.2021	Nicol prism, quarter & half wave plate	Nicol prism, quarter & half wave plate	
3	10.05.2021	production of plane polarized light	production of plane polarized light	
	11.05.2021	circularly polarized, elliptically polarized light	circularly polarized, elliptically polarized light	
	12.05.2021	optical activity	optical activity	
	13.05.2021	Fresnel theory of optical rotation	Fresnel theory of optical rotation	
	14.05.2021	Id-ul-Fitr/Parshuram Jayanti		
	15.05.2021	specific rotating, polarimeters		
4	17.05.2021	revision	revision	
	18.05.2021	postulates of statistical physics	postulates of statistical physics	
	19.05.2021	phase space & division of phase space	phase space & division of phase space	
	20.05.2021	three kinds of statistics and its basic approach	three kinds of statistics and its basic approach	
	21.05.2021	M.B.M.B statistics, energy distribution law	M.B.M.B statistics, energy distribution law	
	22.05.2021	Speed and velocity distribution law	Speed and velocity distribution law	

Week	Date	Class .....bsc 2nd.....	Class .....bsc 2nd.....	Class .....
		Semester .....4th...	Semester ...4th.....	Semester .....
5	24.05.2021	expression for average speed, r.m.s speed, average velocity	expression for average speed, r.m.s speed, average velocity	
	25.05.2021	r.m.s velocity, most probable energy & mean energy for Maxwell distribution	r.m.s velocity, most probable energy & mean energy for Maxwell distribution	
	26.05.2021	revision	revision	
	27.05.2021	Fourier theorem and Fourier series	Fourier theorem and Fourier series	
	28.05.2021	evaluation, importance and limitations of Fourier theorem	evaluation, importance and limitations of Fourier theorem	
	29.05.2021	even and odd function, Fourier series of functions between 0 to 2pi	even and odd function, Fourier series of functions between 0 to 2pi	
	31.05.2021	complex form of Fourier series	complex form of Fourier series	
1	01.06.2021	application of Fourier theorem	application of Fourier theorem	
	02.06.2021	solution of triangular and rectangular wave	solution of triangular and rectangular wave	
	03.06.2021	half and full wave rectifier	half and full wave rectifier	
	04.06.2021	parseval identity for Fourier series, Fourier integrals	parseval identity for Fourier series, Fourier integrals	
	05.06.2021	revision	revision	
2	07.06.2021	need for quantum statistics, application of B.E statistics	need for quantum statistics, application of B.E statistics	
	08.06.2021	degeneracy and B.E.	degeneracy and B.E.	
	09.06.2021	Fermi dirac energy distribution law, F.D gas	Fermi dirac energy distribution law, F.D gas	
	10.06.2021	fermi energy, fermi temperature, fermi dirac energy distribution law	fermi energy, fermi temperature, fermi dirac energy distribution law	
	11.06.2021	zero point energy, zero point pressure and average speed of electron gas	zero point energy, zero point pressure and average speed of electron gas	
	12.06.2021	specific heat anomaly of metal and its solution	specific heat anomaly of metal and its solution	
3	14.06.2021	M.B distribution as limiting case of B.E & F.D	M.B distribution as limiting case of B.E & F.D	
	15.06.2021	comparison of three statistics	comparison of three statistics	
	16.06.2021	revision	revision	
	17.06.2021	Fourier transform and its properties	Fourier transform and its properties	
	17.06.2021	application of Fourier transform for evaluation of integrals	application of Fourier transform for evaluation of integrals	
	18.06.2021	for solution of ordinary differential equations, to some function	for solution of ordinary differential equations, to some function	
	19.06.2021			
4	21.06.2021	Matrix methods in paraxial optics	Matrix methods in paraxial optics	
	22.06.2021	effect of translation and refraction	effect of translation and refraction	
	23.06.2021	<b>derivation of thin lens and thick lens formula</b>	<b>derivation of thin lens and thick lens formula</b>	
	24.06.2021	Sant Kabir Jayanti		
	25.06.2021	unit plane, nodal plane	unit plane, nodal plane	

Week	Date	Class .....bsc 2nd.....	Class .....bsc 2nd.....	Class .....
		Semester .....4th...	Semester ...4th.....	Semester .....
	26.06.2021	system of thin lenses	system of thin lenses	
<b>5</b>	28.06.2021	revision	revision	
	29.06.2021	<b>dulong and petit law with their derivation</b>	<b>dulong and petit law with their derivation</b>	
	30.06.2021			
<b>1</b>	01.07.2021	Einsteint theory of specific heat	Einsteint theory of specific heat	
	02.07.2021			
	03.07.2021	debye model, Success &shortcomings of debyetheory	debye model, Success &shortcomings of debyetheory	
<b>2</b>	05.07.2021	comparison of Einstein and debye theories	comparison of Einstein and debye theories	
	06.07.2021	<b>charomatic, spherical, coma, astigmatism and distortion</b>	<b>charomatic, spherical, coma, astigmatism and distortion</b>	
	07.07.2021	optical fiber, critical angle of propagation	optical fiber, critical angle of propagation	
	08.07.2021	numerical aperture, types of optics fiber	numerical aperture, types of optics fiber	
	09.07.2021	pulse dispersion, attenuation, application, fiber optics	pulse dispersion, attenuation, application, fiber optics	
	10.07.2021	communication, advantages	communication, advantages	
	12.07.2021	<b>revision</b>	<b>revision</b>	

# Dayanand Mahila Mahavidyalaya, Kurukshetra

## Lesson Plan

Session 2020-21 (17.04.2021 to 12.07.2021)

Name of Teacher.....Mrs. Kiran Ganotra.....

Subject .....physics.....

Week	Date	Class .....bsc 2nd.....	Class .....bsc 2nd.....	Class .....
		Semester .....4th...	Semester ...4th.....	Semester .....
3	17.04.2021	introduction of statistical physics	introduction of statistical physics	
4	19.04.2021	events mutually exclusive, probability	events mutually exclusive, probability	
	20.04.2021	statistical, a - prior probability	statistical, a - prior probability	
	21.04.2021	Ram Navami		
	22.04.2021	probability theorem	probability theorem	
	23.04.2021	some probability consideration, combination processing max probability	some probability consideration, combination processing max probability	
	24.04.2021	minimum probability	minimum probability	
5	26.04.2021	tossing of 2,3 and any number of coin	tossing of 2,3 and any number of coin	
	27.04.2021	permutations and combinations	permutations and combinations	
	28.04.2021	distribution of N particles, micro and macro state	distribution of N particles, micro and macro state	
	29.04.2021	thermodynamical probability	thermodynamical probability	
	30.04.2021	constraints, statistical fluctuation	constraints, statistical fluctuation	
1	01.05.2021	beta-parameter	beta-parameter	
2	03.05.2021	entropy & probability with numerical	entropy & probability with numerical	
	04.05.2021	revision	revision	
	05.05.2021	polarization by reflection & refraction and scattering	polarization by reflection & refraction and scattering	
	06.05.2021	malus law, double refraction phenomenon	malus law, double refraction phenomenon	
	07.05.2021	Huygen wave theory, analysis of polarized light	Huygen wave theory, analysis of polarized light	
	08.05.2021	Nicol prism, quarter & half wave plate	Nicol prism, quarter & half wave plate	
3	10.05.2021	production of plane polarized light	production of plane polarized light	
	11.05.2021	circularly polarized, elliptically polarized light	circularly polarized, elliptically polarized light	
	12.05.2021	optical activity	optical activity	
	13.05.2021	Fresnel theory of optical rotation	Fresnel theory of optical rotation	
	14.05.2021	Id-ul-Fitr/Parshuram Jayanti		
	15.05.2021	specific rotating, polarimeters		

Week	Date	Class .....bsc 2nd.....	Class .....bsc 2nd.....	Class .....	
		Semester .....4th...	Semester ...4th.....	Semester .....	
<b>4</b>	17.05.2021	revision	revision		
	18.05.2021	postulates of statistical physics	postulates of statistical physics		
	19.05.2021	phase space & division of phase space	phase space & division of phase space		
	20.05.2021	three kinds of statistics and its basic approach	three kinds of statistics and its basic approach		
	21.05.2021	M.BM.B statistics, energy distribution law	M.BM.B statistics, energy distribution law		
	22.05.2021	Speed and velocity distribution law	Speed and velocity distribution law		
	24.05.2021	expression for average speed, r.m.s speed, average velocity	expression for average speed, r.m.s speed, average velocity		
<b>5</b>	25.05.2021	r.m.s velocity, most probable energy & mean energy for Maxwell distribution	r.m.s velocity, most probable energy & mean energy for Maxwell distribution		
	26.05.2021	revision	revision		
	27.05.2021	Fourier theorem and Fourier series	Fourier theorem and Fourier series		
	28.05.2021	evaluation, importance and limitations of Fourier theorem	evaluation, importance and limitations of Fourier theorem		
	29.05.2021	even and odd function, Fourier series of functions between 0 to 2pi	even and odd function, Fourier series of functions between 0 to 2pi		
	31.05.2021	complex form of Fourier series	complex form of Fourier series		
	<b>1</b>	01.06.2021	application of Fourier theorem	application of Fourier theorem	
		02.06.2021	solution of triangular and rectangular wave	solution of triangular and rectangular wave	
		03.06.2021	half and full wave rectifier	half and full wave rectifier	
		04.06.2021	parseval identity for Fourier series, Fourier integrals	parseval identity for Fourier series, Fourier integrals	
05.06.2021		revision	revision		
<b>2</b>	07.06.2021	need for quantum statistics, application of B.E statistics	need for quantum statistics, application of B.E statistics		
	08.06.2021	degeneracy and B.E. consideration	degeneracy and B.E. consideration		
	09.06.2021	Fermi dirac energy distribution law, F.D gas	Fermi dirac energy distribution law, F.D gas		
	10.06.2021	fermi energy, fermi temperature, fermi dirac energy distribution law	fermi energy, fermi temperature, fermi dirac energy distribution law		
	11.06.2021	zero point energy, zero point pressure and average speed of electron gas	zero point energy, zero point pressure and average speed of electron gas		

Week	Date	Class .....bsc 2nd.....	Class .....bsc 2nd.....	Class .....
		Semester .....4th...	Semester ...4th.....	Semester .....
	12.06.2021	specific heat anomaly of metal and its solution	specific heat anomaly of metal and its solution	
<b>3</b>	14.06.2021	M.Bdistribution as limiting case of B.E & F.D	M.Bdistribution as limiting case of B.E & F.D	
	15.06.2021	comparison of three statistics	comparison of three statistics	
	16.06.2021	revision	revision	
	17.06.2021	Fourier transform and it's properties	Fourier transform and it's properties	
	17.06.2021	application of Fourier transform for evaluation of integrals	application of Fourier transform for evaluation of integrals	
	18.06.2021	for solution of ordinary differential equations, to some function	for solution of ordinary differential equations, to some function	
	19.06.2021			
<b>4</b>	21.06.2021	Matrix methods in paraxial optics	Matrix methods in paraxial optics	
	22.06.2021	effect of translation and refraction	effect of translation and refraction	
	23.06.2021	<b>derivation of thin lens and thick lens formula</b>	<b>derivation of thin lens and thick lens formula</b>	
	24.06.2021	Sant Kabir Jayanti		
	25.06.2021	unit plane, nodal plane	unit plane, nodal plane	
	26.06.2021	system of thin lenses	system of thin lenses	
<b>5</b>	28.06.2021	revision	revision	
	29.06.2021	<b>dulong and petit law with their derivation</b>	<b>dulong and petit law with their derivation</b>	
	30.06.2021			
<b>1</b>	01.07.2021	Einsteint theory of specific heat	Einsteint theory of specific heat	
	02.07.2021			
	03.07.2021	debye model, Success &shortcomings of debyetheory	debye model, Success &shortcomings of debyetheory	
<b>2</b>	05.07.2021	comparison of Einstein and debye theories	comparison of Einstein and debye theories	
	06.07.2021	<b>charomatic, spherical, coma, astigmatism and distortion</b>	<b>charomatic, spherical, coma, astigmatism and distortion</b>	
	07.07.2021	optical fiber, critical angle of propagation	optical fiber, critical angle of propagation	
	08.07.2021	numerical aperture, types of optics fiber	numerical aperture, types of optics fiber	
	09.07.2021	pulse dispersion, attenuation, application, fiber optics	pulse dispersion, attenuation, application, fiber optics	

Week	Date	Class .....bsc 2nd.....	Class .....bsc 2nd.....	Class .....
		Semester .....4th...	Semester ...4th.....	Semester .....
	10.07.2021	communication, advantages	communication, advantages	
	12.07.2021	<b>revision</b>	<b>revision</b>	

# Dayanand Mahila Mahavidyalaya, Kurukshetra

## Lesson Plan

Session 2020-21 (17.04.2021 to 12.07.2021)

Name of Teacher.....Ms. Mahak Rojra

Subject .....Physics.....

Week	Date	Class....Bsc -IIIrd (C.Sc.)	Class ....Bsc-III (C.Sc.)	Class .....
		Semester ...VIth.. (paper-I)	Semester .....VIth... (Paper-II)	Semester .....
3	17.04.2021	Introduction to crystal structure:- Crystalline and glassy form		
4	19.04.2021	liquid crystal, crystal structure and periodicity		
	20.04.2021	lattice and basis, crystal Translation vector and axes		
	21.04.2021	Ram Navami		
	22.04.2021	Explain unit and primitive cell ,winger Seitz primitive cell , symmetry operation for 2 dimensionalsal Crystal		
	23.04.2021	Explain Bravais lattices in 2 and 3 dimensions		
	24.04.2021	Explain Crystal plains and Miller Indices,Interplaner spacing		
5	26.04.2021	Explain Crystal structures of Zinc Sulphide , Sodium chloride and Diamond		
	27.04.2021	Introduction to unit-2 :- X-ray diffraction, Bragg's Law		
	28.04.2021	Explain K-space and reciprocal lattice and it's physical significance		
	29.04.2021	Explain properties of reciprocal lattice and reciprocal lattice for sc, bcc ,fcc		
	30.04.2021		Introduction of early observations , emission and absorption Spectra,atomic Spectra ,wave no.	
1	01.05.2021		Explain Spectra of Hydrogen atom in balmer series, Bohr atomic model	
2	03.05.2021		Explain spectral lines in Hydrogen atom, un-quantized states. and continuous Spectra, variation in Ryhberg constant due to finite mass	
	04.05.2021		Discuss shortcomings of Bhor 's theory ,Wilson Sommerfeld quantization rule	

	05.05.2021		Explain de-broglie Interpretation of Bohr - Sommerfeld theory, Bohr correspondence principle and shortcomings of Bohr-Sommerfeld theory	
	06.05.2021	Doubt session		
	07.05.2021		Explain vector model of atom:-space quantization ,electron spin, coupling of orbital and spin angular momentum	
	08.05.2021		Explain spectroscopy terms and their notation ,Transition probability and selection rules	
<b>3</b>	10.05.2021		Introduction to unit -2 ; explain Bohr magneton , behavior of magnetic dipoles in external magnetic field	
	11.05.2021		Define Penetrating and non-penetrating orbits ; energy determination of electron for Penetrating orbit	
	12.05.2021		Explain quantum defects , spin orbit interaction energy of single valence electron	
	13.05.2021		Explain spin orbit interaction for penetrating and non - penetrating orbits , quantum mechanical relativity correction	
	14.05.2021	Id-ul-Fitr/Parshuram Jayanti		
	15.05.2021		Explain Hydrogen fine Spectra, main feature of alkali Spectra and theoretical interpretation	
<b>4</b>	17.05.2021		Explain terms and series , Rydberg- Ritz combination principle and absorption Spectra of alkali atoms	
	18.05.2021		Discuss observed doublet fine structures in alkali metals and its interpretation	
	19.05.2021		Explain intensity rules for doublets , comparison of alkali Spectra and hydrogen spectrum	
	20.05.2021	Introduction of Unit -3 :- Historical introduction and survey of superconductivity , superconducting system , high Tc superconductors, isotopic effect		
	21.05.2021	Explain critical magnetic field , Meissner effect, isotopic effect		

	22.05.2021	Discuss about London's theory and Pippard's equations, Explain Pippard's Modification equations		
<b>5</b>	24.05.2021	Explain BCS theory of superconductivity and flux quantization and explain classification of superconductor		
	25.05.2021		Introduction to Unit - 3 ; Explain essential features of Spectra of alkaline - earth elements	
	26.05.2021		Explain valence model for two electron atom : application of spectra; coupling scheme; LS or Russell	
	27.05.2021		Explain LS coupling , Lande interval rule , Pauli principle and periodic classification of elements , interaction energy in JJ coupling	
	28.05.2021		Explain equivalent and non - equivalent electrons and 2 valence electrons system spectral terms of equivalent and non-equivalent electrons	
	29.05.2021		Comparison of spectral terms in L-S and J-J coupling	
	31.05.2021		Explain hyperfine structure of spectral lines and its origin; isotopic effect and nuclear spin	
<b>1</b>	01.06.2021	Test :-unit-I		
	02.06.2021	Introduction to Unit -4 ; Define Nano physics , length scale , Importance of Nano -scale and technology and history of Nano- technology		
	03.06.2021	Explain benefits and challenges in molecular manufacturing , understanding advanced capabilities		
	04.06.2021	Test of unit-2		
	05.06.2021	Explain molecular Assembler concept		
<b>2</b>	07.06.2021	Explain vision and Objective of Nano-technology and Explain Nano- technology in different fields		
	08.06.2021		Numerical practice and test	
	09.06.2021	Explain application of nano - technology in electronics and its uses		
	10.06.2021	Explain nanotechnology application under automobile		

	11.06.2021	Doubt session		
	12.06.2021	<b>Test</b>		
<b>3</b>	14.06.2021	Introduction to Nano- biotechnology and explain application of nano - biotechnology		
	15.06.2021	Explain Nano- biotechnology materials		
	16.06.2021		Introduction to Unit -4 ; Explain. Zeeman effect and Experimental set -up for studying Zeeman effect	
	17.06.2021		Explanation of normal zeeman effect ( classical and quantum mechanical)	
	18.06.2021		Explanation of anomalous Zeeman effect	
	19.06.2021	Revision		
<b>4</b>	21.06.2021		Explain zeeman pattern of D1 and D2 lines of Na- atom and Explain paschen-back effect of a single valence electron system	
	22.06.2021		Explain weak field Stark effect of Hydrogen atom	
	23.06.2021		General consideration of molecular physics	
	24.06.2021	Sant Kabir Jayanti		
	25.06.2021		Explain electronic states of diatomic molecules	
	26.06.2021		Explain Rotational Spectra of diatomic molecules	
<b>5</b>	28.06.2021	Test of unit -4		
	29.06.2021		Explain vibrational Spectra of diatomic molecules	
	30.06.2021	Doubt session		
<b>1</b>	01.07.2021		Explain Rotator model of diatomic molecule	
	02.07.2021	Revision		
	03.07.2021		Explain Raman effect	
<b>2</b>	05.07.2021		Explanation of electronic spectra	
	06.07.2021		Revision and numerical practice	
	07.07.2021	Doubt session and numerical practice		
	08.07.2021		Doubt session	
	09.07.2021	Revision		
	10.07.2021		Full length test	
	12.07.2021	Full length test		

# Dayanand Mahila Mahavidyalaya, Kurukshetra

## Lesson Plan

Session 2020-21 (17.04.2021 to 12.07.2021)

Name of Teacher...Mrs. Suman Rani.....

Subject ...Physics.....

Week	Date	Class ...B.Sc. 1.....	Class .....B.Sc. 1.....	Class .....
		Semester ...2nd ( Paper 1).....	Semester ...2nd(Paper 2).....	Semester .....
3	17.04.2021		Energy Bands in solids, Intrinsic and Extrinsic semiconductors	
4	19.04.2021	Rotation of rigid body, Moment of Inertia		
	20.04.2021	Torque, Angular momentum, Kinetic energy of rotation.		
	21.04.2021	Ram Navami		
	22.04.2021		Carrier mobility and electrical resistivity of semiconductors	
	23.04.2021		Hall effect p- n junction diode and their characteristics	
	24.04.2021		Zener and Avalanche breakdown, Zener diode	
5	26.04.2021	Theorem of perpendicular and parallel axis (with proof)		
	27.04.2021	Moment of Inertia of Solid Sphere, Hollow sphere, Spherical shell		
	28.04.2021	Solid cylinder and Hollow cylinder		
	29.04.2021		Zener diode as a Voltage regulator, Light emitting diodes(LED)	
	30.04.2021		Photo conduction in Semiconductor, Photodiode	
1	01.05.2021		Solar cell, p-n junction as a rectifier	
2	03.05.2021	Solid bar of rectangular cross section, Fly Wheel		
	04.05.2021	Moment of Inertia of an irregular body, Acceleration of a body rolling down on a inclined plane		
	05.05.2021	Test of unit 1		
	06.05.2021		Half wave and Full wave rectifiers (with derivation)	
	07.05.2021		Filters (series inductor, shunt capacitance, L-section or choke)	
	08.05.2021		pie and R.C. filter circuits)	
3	10.05.2021	Elasticity, Stress and Strain, Hooke's law		
	11.05.2021	Elastic constant and their relations, Poisson's ratio		
	12.05.2021	Torsion of cylinder and Twisting couple		

Week	Date	Class ...B.Sc. 1.....	Class .....B.Sc. 1.....	Class .....
		Semester ...2nd ( Paper 1).....	Semester ...2nd(Paper 2).....	Semester .....
	13.05.2021		Junction transistors, Working of NPN and PNP transistors	
	14.05.2021	Id-ul-Fitr/Parshuram Jayanti		
	15.05.2021		Three configuration of Transistor (CB,CE,CC modes)	
<b>4</b>	17.05.2021	Determination of coefficients of modulus of rigidity for the material of wire by Maxwell's needle		
	18.05.2021	Bending of beam(Bending moment and its magnitude)		
	19.05.2021	Cantilever and Centrally Loaded beam		
	20.05.2021		CB,CE,CC Characteristics of transistor	
	21.05.2021		Constants of transistor and their relation	
	22.05.2021		Advantages and disadvantages of C-E configuration	
<b>5</b>	24.05.2021	Determination of young's modulus for the material of the beam		
	25.05.2021	Elastic constants for the material of the wire by Searle's method		
	26.05.2021	Revision of unit 2		
	27.05.2021		D.C.Load Line, Transistor biasing	
	28.05.2021		various methods of transistor biasing and stabilization	
	29.05.2021		revision of 2 unit	
	31.05.2021	Test of unit 2		
<b>1</b>	01.06.2021	Assumption of Kinetic theory of gases, Pressure of an ideal gas (with derivation)		
	02.06.2021	Kinetic interpretation of Temperature, Ideal Gas equation		
	03.06.2021		Test of unit 2	
	04.06.2021		Amplifiers, Classification of amplifiers	
	05.06.2021		Common base and common emitter amplifiers	
<b>2</b>	07.06.2021	Degree of freedom		
	08.06.2021	Law of equipartition of energy		
	09.06.2021	Application for Specific Heat of Gases		
	10.06.2021		Coupling in amplifiers , Various methods of coupling	
	11.06.2021		R-C Coupled Amplifiers	

Week	Date	Class ...B.Sc. 1.....	Class .....B.Sc. 1.....	Class .....
		Semester ...2nd ( Paper 1).....	Semester ...2nd(Paper 2).....	Semester .....
	12.06.2021		Feed back in amplifiers	
3	14.06.2021	Real gases		
	15.06.2021	Vander Waals equation		
	16.06.2021	Brownian motion		
	17.06.2021		Advantages of negative feedback	
	18.06.2021		Emitter follower,Distortion in amplifiers	
	19.06.2021			
4	21.06.2021	Test of unit 3		
	22.06.2021	Maxwell's distribution of speed and velocities		
	23.06.2021	<b>Experimental verification of Maxwell's law of speed distribution</b>		
	24.06.2021	Sant Kabir Jayanti		
	25.06.2021		Test of unit 3	
	26.06.2021		Oscillators	
5	28.06.2021	Most probable speed		
	29.06.2021	<b>Average and r.m.s speed</b>		
	30.06.2021			
1	01.07.2021		Principle of Oscillation , Classification of Oscillators	
	02.07.2021			
	03.07.2021		Condition for self sustained oscillation	
2	05.07.2021	Mean free path,Transport of energy and momentum		
	06.07.2021	<b>Diffusion of gases</b>		
	07.07.2021	Test of unit 4		
	08.07.2021		Barkhausen criterion , Tuned collector C-E Oscillators	
	09.07.2021		Hartley Oscillator,C.R.O	
	10.07.2021		test of unit 4	
	12.07.2021	<b>Revision</b>		