

ACADEMIC PLANNING

Department: Physics

Name of the Teacher: Dr. M. A. HANNA

Year 2021- 20 22

Title of the Paper: Properties of Matter & Some Subject Code: 21UEH101

Semester: ODD / EVEN

(1/2)

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 9.8.21 To : 20.10.21	<u>Unit III</u> 1. Surface Tension & Surface energy 2. Pressure in a curved surface of a liquid 3. Shape of liquid Meniscus in a capillary tube 4. Angled Contact & its measurement 5. Rise of a liquid in a capillary tube	9 hrs	As per Time table & Calendar	-	<u>M_o</u>	<u>M_o</u>
II From : 21.10.21 To : 12.1.22	Experimental determination of surface tension by 1. Sealed Torsion balance method 2. Drop-weight method 3. DuRoi's method 4. Jaeger's method 5. Variation of surface tension with temperature	9 hrs	As per Time table & Calendar	-	<u>M_o</u>	<u>M_o</u>

Department: ...*Physics*...

ACADEMIC PLANNING

Name of the Teacher: ...*Dr. N. Seetha*...

Year 2021 - 2022

Title of the Paper: *J. Heat & Thermodynamics*

Subject Code: *21UPH202*

Semester: *ODD / EVEN*

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From : 21.2.22 To : 18.4.22	Unit - II Second law of thermodynamics	15	As per calendar of time table	NIL	<i>[Signature]</i>	<i>[Signature]</i>
II From : 25.4.22 To : 22.6.22	Unit - IV Thermal radiation	15	As per calendar of time table	NIL	<i>[Signature]</i>	<i>[Signature]</i>

ACADEMIC PLANNING

Department: PhysicsName of the Teacher: B. Chandan ShekarYear 204 - 2022Title of the Paper: Condensed Matter Physics-I Subject Code: 20 PPH 105Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 9-8-21 To: 19-10-21	Unit-I: Crystal Structure and Reciprocal Lattice: The space lattices - The Bravais lattices, space lattices and crystal structures - Finding Miller indices of plane, crystal direction and planes, Interplanar distance - Separation between lattice planes in simple cubic, FCC and BCC lattices. Unit-III: Crystal Imperfections: dislocations of impurities - point imperfections: Frenkel defects and Schottky defects - Line imperfections: Dislocations of dislocations, edge dislocations, screw dislocations; Burger's vector, energy of dislocations.	14 hrs	As per calendar and time table	-	<u>B</u>	<u>11</u>
II From: 23-10-21 To: 12-1-22	Unit-I: Hexagonal closed packed structure - Crystal density and packing fraction, The reciprocal lattice - Graphical construction and vector development properties of the reciprocal lattice - Bragg condition in terms of the reciprocal lattice. Unit-III: Surface imperfections: grain boundaries, tilt boundary, twin boundary - Grain deformation by slip - Shear strength of perfect and real crystals, stress to move a dislocation, the effect of temperature on the stress to move a dislocation.	16 hrs	As per calendar and time table	-	<u>B</u>	<u>11</u>

ACADEMIC PLANNING

Department:PHYSICS.....

Name of the Teacher:DR. N. SENTHIL KUMAR.....

Year 2021 - 2022

Title of the Paper:Mechanics.....

Subject Code:BALPH 303.....

Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From: 09.08.21 To: 20.10.21	Unit - II Statics - Centre of gravity - position of G for simple rigid bodies - rigid solid cone - thin hollow hemisphere. Centre of gravity of a body composed of two parts - Equilibrium of bodies.	8 hrs	As per calendar	- Nil -		
II From: 27.10.21 To: 12.01.22	Unit - III Force of friction. <u>Statics</u> Limiting friction Laws of friction - Angle of friction & resultant reaction - cone of friction	7 hrs	As per calendar	- Nil -		

Department: PHYSICSName of the Teacher: Dr. S. SELVI

Year 2021 - 2022

Title of the Paper: Applied PhysicsSubject Code: 20APPH42Semester: ODD / EVEN

Test No. & Period	Topics allotted	No. of hours required for completion	Dates & hrs of handling	Topics not covered, if any	Signature of	
					Staff	HOD
I From 21.2.22 To: 18.4.22	Unit - V <u>Physics of Photovoltaics</u> Generation of solar cells - Solar cell parameters - solar cell characteristics - Spectral response - Recombination	7	As per Calendar & Timetable	NIL		
II From: 25.4.22 To: 22/6/22	Unit - V Open circuit voltage - Short circuit current - Series resistance - Fabrication techniques	8	As per Calendar & Timetable	NIL		