



Marudhar Kesari Jain College for Women (A), Vaniyambadi



PG & Research Department of Physics

Bridge Course Syllabus 2024 – 2025

Course Name: Essential in Physics

Course Objective

- To Determine Difference Between Solids, Liquids & Gases.
- To Learn the Concept of light, Interference and Diffraction.
- To Know the Principles of Electromagnets
- To Know the Principles Current and Thermo Electricity.
- To learn the concept of Space Systems.

Unit-I

Properties of Matter & Mechanics

Pressure – Volume – Hooke's Law – Surface Tension – Compression – Newton's Laws of Motion – Impulse, Friction and Inertia

Unit-II

Optics

Theories on Light- Wave Nature of Light-Interference-Phase Difference and Path Difference- Coherent Sources-Diffraction-Difference between Interference and Diffraction

Unit-III

Electromagnetic induction and alternating Current

Magnetic Flux-Faraday's law - Faraday's Experiment-Lenz's law-Fleming's right-hand Rule- Right hand Rule-Eddy Current-Self Induction

Unit-IV

Current Electricity

Electric Current-Conventional Current-Ohm's Law-Resistivity-Colour code for resistors- Electrical Cells and Batteries.

Unit-V

Space Science and Communication

Newton's law of gravitation- Weather forecasting and communication satellites- Indian Satellites.

Course Outcomes

- The students would gain substantial knowledge in various branches of Physics like Properties of Matter & Mechanics, Optics, Electromagnetic induction and alternating Current, Electricity and Space Science and Gravitation

Teaching Methodology

- Power Point
- Models

Unit Allocation

S.NO	Unit	Handled Faculty
1	Properties of Matter & Mechanics	Ms. M. Elakia
2	Optics	Dr. J. Thirupathy
3	Electromagnetic induction and alternating Current	Dr. C. Pavithra
4	Current Electricity	Dr. C. Pavithra
5	Space Science and Communication	Ms. M. Elakia


18/06/2024
HOD


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COLLEGE FOR WOMEN
Vaniyambadi - 635 751
Vellore District



Marudhar Kesari Jain College for Women (A), Vaniyambadi



PG & Research Department of Physics

Bridge Course Time Table (2024-2025)

Class: I B.Sc. Physics

DAY /HR	I	II	III	IV	V	VI
I	Major Dr. J. Tirupathy	Major Ms. M. Elakia	Major Dr. C. Pavithra	Commu nicative English	Sports	Placement
II	English	Major Dr. J. Thirupathy	Major Dr. C. Pavithra	Placem ent	Major Ms. M. Elakia	Communicative English
III	Placement	Major Ms. M. Elakia	Major Dr. C. Pavithra	Sports	Major Dr. J. Thirupathy	Communicative English
IV	Placement	Sports	Major Dr. J. Thirupathy	Commu nicative English	Major Ms. M. Elakia	Major Dr. C. Pavithra
V	Major Dr. C. Pavithra	Major Dr. J. Thirupathy	Communicative English	Sports	Major Ms. M. Elakia	Placement


HOD 20/06/2024


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Vellore District



Marudhar Kesari Jain College for Women (A), Vaniyambadi

PG & Research Department of Physics

Bridge Course Photos (2024-2025)



Class: I B.Sc. Physics



Lat 12.6388888 Long 78.6042781 Altitude 321.8 m
20/06/2024 23:45 PM
27°C 72.0% 4.8 km/h 754 hpa



Lat 12.6388888 Long 78.6042781 Altitude 321.8 m
24/06/2024 22:44 PM
27°C 72.0% 4.8 km/h 754 hpa



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HOD 26/6/2024

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for Women
Vanivambadi - 635 751



MARUDHAR KESARI JAIN COLLEGE FOR WOMEN, VANIYAMBADI
BRIDGE COURSE ATTENDANCE



DEPARTMENT : PHYSICS

YEAR: 2024-2025

CLASS: I BSc PHYSICS

COURSE NAME: ESSENTIAL IN PHYSICS

S.NO	NAME OF THE STUDENT	SIGNATURE				
		20.6.2024	21.6.2024	24.6.2024	25.6.2024	26.6.2024
1	AISHWARYA LAKSHMI.V					
2	AYEESHA.A					
3	CATHRIN.G					
4	DHARSHINI.M					
5	DHARSHINI.S					
6	KOKILAVAANI.B					
7	MONISHA.R					
8	PAPITHRA .S					
9	POOJA.V					
10	PRIYADHARSHINI.R					
11	SHIFA MEHAR.A					
12	SAVITHA.B					
13	SHALINI.G					
14	SWETHA.S					

M.S.L
28/6/24
CLASS INCHARGE

28/6/2024
HOD

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Vaniyambadi - 635 751
Vellore District



MARUDHAR KESARI JAIN COLLEGE FOR WOMEN (A), VANIAMBADI
PG & RESEARCH DEPARTMENT OF PHYSICS
BRIDGE COURSE FEEDBACK
I B.Sc PHYSICS



S.NO	NAME OF THE STUDENT	FEEDBACK
1	AISHWARYA LAKSHMI.V	good and very use ful to us.
2	AYEESHA.A	It is very useful tour
3	CATHRIN.G	veryful usebul and needed to us
4	DHARSHINI.M	Good and we learnt the basic things related to subject
5	DHARSHINI.S	useful for not related
6	KOKILAVAANI.B	It is very useful.
7	MONISHA.R	It was very useful to us. We learn the many things related to sub
8	PAPITHRA .S	Set is very useful.
9	POOJA.V	Set is good and useful.
10	PRIYADHARSHINI.R	Set is very useful to us.
11	SHIFA MEHAR.A	It is very useful to us
12	SAVITHA.B	It is very useful to us.
13	SHALINI.G	very useful for sub related
14	SWETHA.S	It is very useful to us

M. S. L. P
28/6/24
CLASS INCHARGE

Plt
HOD 28/6/24

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