HINDI MAHAVIDYALAYA

(AUTONOMOUS & NAAC RE-ACCREDITED)

(Affiliated to Osmania University)

Nallakunta, Hyderabad-44

B.Sc. I YEAR SEMESTER I & II

DEPARTMENT OF PHYSICS

(2020-2021)

HINDI MAHAVIDYALAYA
(AUTONOMOUS)

BOARD OF STUDIES

DEPARTMENT OF PHYSICS

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Department of Physics

Hindi Mahavidyalaya

Nallakunta, Hyderabad.

Department of Physics
Hindi Mahavidyalaya
(Autonomous & NAAC REACCREDITED)
Nallakunta, Hyderabad-500 044.

University Nominee

Dr.G.Prasad-Chairman, BOS

Department of Physics

Osmania University

Hyderabad.

HEAD
Department of Physics
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   Department of Physics

   Osmania University

   Hyderabad.

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Hyderabad-500 007.

2. Prof.M.V Ramana Reddy

   Department of Physics

   Osmania University

   Hyderabad.

Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

3. Dr. D.Sarala

   Head Department of Physics

   St.Ann's Degree College for Women, Hyderabad.

Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
DEPARTMENT OF PHYSICS
AGENDA OF THE MEETING

4.1 Welcome address by the chair.

4.2 Previous Meeting Details.

4.3 Details of choice based credit system.

4.4 Discussion and Distribution of Common Core Syllabus for all the Semester (I and II)

4.5 Marks allotted for internal and end semester exams.

4.6 Discussion on Pattern and model paper of Semester Exam and internal exam for all the Semester (I and II)

4.7 Discussion on Practical exam model paper for all the Semester (I and II)

4.8 Panel of Examiners

4.9 Any other matter

4.10 Vote of thanks

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD (AUTONOMOUS)

COMPOSITION OF THE BOARD OF STUDIES IN AN AUTONOMOUS COLLEGE

I. Composition: Department of Physics

1. **Head of the Department concerned (Chairperson)**
   Dr. Sree Devi Department of Physics
2. The entire faculty of each specialization
   1. Dr. Sree Devi
   2. Mr. K.Balakishan
3. One expert to be nominated by the Vice Chancellor from a panel of six recommended by the College Principal
   1. Prof.G.Prasad Chairman, BOS, Head of physics department, Osmania University, Hyderabad.
4. Three experts on the subject from outside the college to be nominated by the Academic Council.
   1. Prof.Syed Rahman, Professor, Department of Physics, Osmania University, Hyderabad.
   2. Prof.M.V.Ramana Reddy, Professor, Department of Physics, Osmania University, Hyderabad.
   3. Dr.Sarala, Head of Physics Department, St.Ann's Degree College Mehdipatnam, Hyderabad.

(a) Experts from outside the College whenever special courses of studies are to be formulated. To be nominated.
(b) Other members of staff of the same faculty.

Chairperson
Department of Physics
Hindi Mahavidyalaya
(Autonomous & NAAC REACCREDITED)
Nallakunta, Hyderabad-500 044.

University Nominee
Professor
Physics Department
University College Of Science
Osmania University, Hyd-7

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(AUTONOMOUS)
Arts, Commerce & Science
Nallakunta, Hyderabad - 44

Members

1. CHAIRMAN
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2. Department of Physics
Osmania University
Hyderabad-500 007.

3. Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
DEPARTMENT OF PHYSICS
BOARD OF STUDIES
Academic Year – 2020-2021
Minutes of BOS Meeting

BOS meeting of the Department of Physics was held on 8th January, at 1:30pm
The following members were present

Prof. G. Prasad	-	University Nominee
Smt. Dr. Sree Devi	-	Chair person
Prof.Syed Rahman 9849823078		Member of BOS
Prof.M.V.Ramana Reddy	-	Member of BOS
Dr.Sarala	-	Member of BOS

Head of the Department
Physics & Electronics
Maharani's College for Women
Mehdipatnam, Hyd-28

4.1 Welcome address by the chair

The chair welcomed the University Nominee, Chairperson BOS, O.U. Department of Physics and Member of B.O.S.

4.2 Previous Meeting details

The CBCS system has been introduced by Osmania University from 2016-17. The theory and practical syllabus of I, II & III years of B.Sc., question paper pattern for theory and practical, internal assessment pattern, practical examination scheme and panel of examiners were discussed and approved by all the BOS Members in previous BOS meeting.

4.3 Details of choice based credit system.

Members were informed that TSCHE has referred that from the academic year 2016-17 autonomous institutions have to follow CBCS i.e. From the Academic Year 2016-17 Osmania University has instructed all the Degree colleges including Autonomous Degree colleges to follow CBCS under which after passing the exam student will get the Grade in the Final Result. B.Sc. III YEAR in V and VI semester 3 credits are given for theory paper and 1 credit is given for practical in each semester.

4.4 Discussion and Distribution of Common Core Syllabus for semester I and II.

i. Members were informed by the chair that Department of Physics, Hindi Mahavidyalaya is following common core syllabus prescribed by Osmania University B.Sc. I YEAR in I and II semesters.
ii. The syllabus comprises of 4 units.

iii. Syllabus copy for both the semesters is enclosed.
iv. Syllabus was approved by the Members of BOS.

4.5 Marks allotted for Internal and end Semester exams.

1. Internal assessment is of 30 marks in which 20 marks are for online test, where students have to answer 20 MCQs in 25 minutes. Each question carries 1 mark. In each semester two online tests of 20 marks will be conducted and an average of both the tests will be added in the marks of theory exam.
2. Theory Question paper is of 70 marks.
3. Total allotted marks are 70 for each theory paper (I & II)
4. Internal assessment is of 15 marks for AECC. One online internal assessment of 10 marks will be conducted and added in the marks of theory exam.
5. Theory Question paper for AECC is of 35 marks.
6. Total allotted marks are 50 for each AECC.

The distribution of marks was approved by the members of BOS.

4.6 Discussion on Pattern and Model Paper of Semester exam and Model Paper of Internal Exam

1. It was informed by the department that in each Semester Two Internal exams will be conducted for DSC of 20 marks. The continuous internal assessment will have three sections.

   Section – A 20 multiple choice questions each carries 1 marks (20 x 1=20M),
   Section – B Assignment – 5 Marks
   Section – C Seminar– 5 Marks

   Average of marks of these two internal exams will be taken.

2. It was informed by the department that in each Semester one Online test will be conducted for AECC of 10 marks. The internal assessment will have two sections
   Section – A 10 Multiple choice questions each carries 1 marks (10 x 1=10M),
   Section – B Assignment/seminar – 5 Marks

3. Semester exam will be conducted as per the Almanac which will be provided by the exam branch. Internal exam duration will be 25 min and Semester exam duration will be of 2 ½ hrs.

4. Model Question paper for Semester I and Semester II was discussed. Theory paper for each Semester will have 2 sections.
   i) Section A contains 8 short Questions. The student has to answer six questions. Each Question carries 3 Marks (6X3=18 Marks)
   ii) Section B contains 4 Essay type Questions with internal choice. Each Question Carries 13 Marks (4X13=52 Marks)
5. Model Question paper of AECC for Semester I and Semester II was discussed. Theory paper for each AECC will have 2 sections.
   i) Section A contains 4 short Questions. The student has to answer THREE questions. Each Question carries 5 Marks (3X5=15 Marks)
   ii) Section B contains 2 Essay type Questions with internal choice. Each Question Carries 10Marks (2X10=20 Marks)

- Pattern of Model Theory Question Papers for DSC and AECC Paper I and Paper II are enclosed.
- Pattern of Model Theory Question Papers for DSC and AECC was approved by Member of BOS.

4.7 Discussion on Practical Exam Model paper.

It was decided in BOS meeting that 25 Marks Practical Exam of 3hrs. Will be held in each Semester and 1 credit will be given for Practical in each Semester.

- It is decided that the practical examinations held for B.Sc. first years (Semester I & II) from the academic year 2020-21 onwards will have the pattern of 25 marks scheme and the credits will remain the same i.e. 1 credit. The duration of the exam will be 3 hours.
- Pattern of Model Practical Question Papers for Paper I and Paper II are enclosed.
- Pattern of Model Practical Question Papers was approved by Members of BOS

4.8 Panel of Examiners

The panel of examiners was approved by the members.

- List is enclosed

4.9 Any other matter.

4.10 Vote of Thanks

Meeting concluded with the Vote of Thanks by Dr. Sree Devi.

Chairperson **University Nominee** **Members** **Principal**

Department of Physics
Hindi Mahavidyalaya
(Autonomous & NAAC REACCREDITED)
Nallakunta, Hyderabad-500 044.

Professor
Physics Department
University College of Sciences
Osmania University, Hyd-7

1. 08/1/2020.
2. Prof. M.V.Ramana Reddy
Department of Physics
3.

PRINCIPAL
HINDI MAHA VIDYALAYA
(AUTONOMOUS)
Arts, Commerce & Scien
Nallakunta, Hyderabad -

HINDI MAHAVIDYALAYA

(AUTONOMOUS & NAAC RE-ACCREDITED)
(Affiliated to Osmania University)
Nallakunta, Hyderabad-44

SCHEME OF INSTRUCTION

B.Sc. I YEAR SEMESTER I & II
DEPARTMENT OF PHYSICS
(2020-2021)

Semester	THEORY/ PRACTICAL	TITLE	WORKLOAD Hrs/week	CREDITS
I	THEORY-I	Mechanics	4	4
	PRACTICAL-I	Mechanics Practical's	3	1
II	THEORY-II	Thermal Physics	4	4
	PRACTICAL-II	Thermal Physics Practical's	3	1

Chairperson

Department of Physics
Hindi Mahavidyalaya
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University Nominee

Professor
Physics Department
University College Of Science
Osmania University, Hyd-7.

Members

1. 08/1/2020

2.

3. Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Principal

PRINCIPAL
HINDI MAHA VIDYALAYA
(AUTONOMOUS)
Arts, Commerce & Science
Nallakunta, Hyderabad - 4

Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

HINDI MAHAVIDYALAYA

(AUTONOMOUS)
Affiliated to Osmania University
Nallakunta, Hyderabad-44

2020-21 CBCS STRUCTURE

SCHEME OF INSTRUCTIONS & EVALUATION

B.SC. M P CS / M S CS

FIRST YEAR SEMESTER-I					Semester End exam		Continuous Internal Evaluation		Total	Practical 3 HRS
Code	Course Title	Course Type	HPW	Credits	Duration in HRS	Marks	Exam Duration	Marks		
BS101	Environmental Studies	AECC-1	2	2	2	40	30 min	10	50	-
BS102	English	CC-1A	5	5	2½	70	30 min	30	100	-
BS103	Second Language (H/ S/ T)	CC –2A	5	5	2½	70	30 min	30	100	-
BS104	MATHS	DSC-1A	4 T + 3P = 7	4+1=5	2½	70	30 min	30	100	25
BS105	PHYSICS / STATISTICS	DSC-2A	4 T + 3P = 7	4+1=5	2½	70	30 min	30	100	25
BS106	COMPUTER SCIENCE	DSC-3A	4 T + 3P = 7	4+1=5	2½	70	30 min	30	100	25
	TOTAL NO. OF CREDITS			27		390		160	625	

Department of Physics
Hindi Mahavidyalaya
Autonomous & NAAC REACCREDITED
Nallakunta, Hyderabad-500 044

Professor
Physics Department
University College of Sciences
Osmania University Hyd-7

Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

HINDI MAHAVIDYALAYA

(AUTONOMOUS)
Affiliated to Osmania University
Nallakunta, Hyderabad-44

2020-21 CBCS STRUCTURE

SCHEME OF INSTRUCTIONS & EVALUATION

B.SC. M P CS / M S CS / MPC

FIRST YEAR SEMESTER-II					Semester End exam		Continuous Internal Evaluation		Total	Practical 2 HRS
Code	Course Title	Course Type	HPW	Credits	Duration in HRS	Marks	Exam Duration	Marks		
BS201	Gender sensitization	AECC-2	2	2	2	40	30 min	10	50	-
BS202	English	CC-1B	5	5	2½	70	30 min	30	100	-
BS203	Second Language (H/ S/ T)	CC –2B	5	5	2½	70	30 min	30	100	-
BS204	MATHS	DSC-1B	4 T + 3P =7	4+1=5	2 ½	70	30 min	30	100	25
BS205	PHYSICS / STATISTICS	DSC-2B	4 T + 3P =7	4+1=5	2 ½	70	30 min	30	100	25
BS206	COMPUTER SCIENCE / chemistry	DSC-3B	4 T + 3P =7	4+1=5	2 ½	70	30 min	30	100	25
	TOTAL NO. OF CREDITS			27		390		160	625	

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Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Professor
Physics Department
University College of Sciences
Osmania University Hyd-7

Department of Physics
Hindi Mahavidyalaya
(Autonomous & NAAC REACCREDITED)
Nallakunta, Hyderabad-500 044

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc. I Year Semester – I
PHYSICS Paper I
MECHANICS

Theory Classes	**4 Hrs. /Week**
Practical Classes	**3 Hrs. /Week**
Credit for Theory	**4**
Credit for Practical	**1**
Duration of Semester Examination	**2 ½ hours**
Duration of Internal Examination	**15 minutes**
Semester Examination Marks	**70 Marks**
Internal Marks	**30 Marks**

Unit – I **15Hrs**

1. Vector Analysis (10)

Scalar and vector fields, gradient of a scalar field and its physical significance. Divergence and curl of a vector field and related problems. Vector integration, line, surface and volume integrals. Stokes, Gauss and Greens theorems- simple applications.

2. **Motion of variable mass system (5)**

Laws of motion, motion of variable mass system, motion of a rocket, multi-stage rocket, conservation of energy and momentum.

Unit – II **15Hrs**

3. Central Forces (10)

Central forces – definition and examples, conservative nature of central forces, conservative force as a negative gradient of potential energy, equation of motion under a central force, gravitational potential and gravitational field, motion under inverse square law, derivation of Kepler's laws, Coriolis force and its expressions.

4. Mechanics of rigid bodies (5)

Definition of Rigid body, rotational kinematic relations, equation of motion for a rotating body, angular momentum and inertial tensor. Euler's equation, precession of a top, Gyroscope,

Unit – III **15Hrs**

5. Damped and forced oscillations (8)

Damped harmonic oscillator: solution of the differential equation of damped oscillator. Energy Considerations, logarithmic decrement, relaxation time, quality factor.

Forced harmonic oscillator: differential equation of forced oscillator and its solution, Resonance (Amplitude, velocity, sharpness, and Band width), Quality factor.

6. Vibration of Strings and Bars (7)

Transverse wave propagation along a stretched string, modes of vibration, longitudinal vibrations in bars- wave equation and its general solution. Special cases (i) bar fixed at both ends (ii) bar free at both ends (iii) bar clamped at mid point.

Principal
Hindi Mahavidyalaya
(Autonomous & NAAC REACC
Nallakunta, Hyderabad-5

Professor
Physics Department
University College Of Sciences
Osmania University, Hyd-7

Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Head of the Department
Physics & Electronics

Unit – IV **15Hrs**

5. Special theory of relativity (15)

Galilean relativity, absolute frames, Michelson-Morley experiment, Postulates of special theory of relativity. Lorentz transformation, time dilation, length contraction, addition of velocities, mass-energy relation. Concept of four vector formalism.

NOTE: Problems should be solved at the end of every chapter of all units.

Textbooks

1. Berkeley Physics Course. Vol.1, Mechanics by C. Kittle, W. Knight, and M.A. Ruder man - Tata McGraw hill Company Edition 2008.
2. Fundamentals of Physics. Holliday/Resnick/Walker Wiley India Edition 2007.
3. First Year Physics - Telugu Academy.
4. Introduction to Physics for Scientists and Engineers. F.J. Ruche. McGraw Hill.

Reference Books

1. Fundamentals of Physics by Alan Giambattista et al Tata-McGraw Hill Company Edition, 2008.
2. University Physics by Young and Freeman, Pearson Education, Edition 2005.
3. Sears and Zemansky's University Physics by Hugh D. Young, Roger A. Freedman Pearson Education Eleventh Edition.
4. An introduction to Mechanics by Daniel Kleppner & Robert Kolenkow. The McGraw Hill Companies.
5. Mechanics. Hans & Puri. TMH Publications.
6. Engineering Physics. R.K. Gaur & S.L. Gupta. Dhanpat Rai Publications.
7. R P Feymman, RB Lighton and M Sands - The Feymman Lectures in Physics, Vol.-1, BI Publications,
8. J.C. Upadhyay - Mechanics.
9. P.K. Srivastava - Mechanics, New Age International.

Chairperson

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Nallakunta, Hyderabad-500 044

University Nominee

Professor
Physics Department
University College of Science
Osmania University, Hyd-7.

Members

1.

PRINCIPAL
HINDI MAHA VIDYALAYA
(AUTONOMOUS)
Arts, Commerce & Science
Nallakunta, Hyderabad - 44.

2. 18/11/2020

Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

3.

Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
FIRST SEMISTER PRACTICALS (3 hrs / week)
Practical Paper – I: Mechanics

1. Study of a compound pendulum determination of 'g' and 'k'.
2. Y by uniform Bending.
3. Y by Non-uniform Bending.
4. Moment of Inertia of a fly wheel.
5. Momentum of inertia of a fly wheel.
6. Rigidity moduli by torsion Pendulum.
7. Velocity of transverse wave along a stretched string.
8. Determenation of frequency of a Bar-Melde's Experiment.
9. Study of oscillations of a mass under differential combination of springs.
10. Verification of Laws of a stretched string (Three laws).

Note: Minimum of eight experiments should be performed.

Maximum of 15 students per batch and maximum of three students per experiment should be allotted in the regular practical class of three hours per week.

Text and reference books

1. D.P. Khandelwal, "A laboratory manual for undergraduate classes" (Vani Publishing House, New Delhi).
2. S.P. Singh, "Advanced Practical Physics" (Pragati Prakashan, Meerut).
3. Worsnop and Flint- Advanced Practical physics for students.
4. "Practical Physics" R.K Shukla, Anchalsrivastava

Chairperson University Nominee Members Principal

Department of Physics
Hindi Mahavidyalaya
(Autonomous & NAAC REACCREDITED)
Nallakunta, Hyderabad-500 044.

Professor
Physics Department
University College Of Sciences
Osmania University, Hyd-7.

1. 08/11/20

2.

3. Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

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HINDI MAHA VIDYALAYA
(AUTONOMOUS)
Arts, Commerce & Science
Nallakunta, Hyderabad - 44.

Head of the Department
Physics & Electronics
St. Ann's College for Women
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HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)

B.Sc. I Year Semester – II
PHYSICS Paper II
THERMAL PHYSICS

Theory Classes	**4 Hrs. /Week**
Practical Classes	**3 Hrs. /Week**
Credit for Theory	**4**
Credit for Practical	**1**
Duration of Semester Examination	**2 ½ hours**
Duration of Internal Examination	**15 minutes**
Semester Examination Marks	**70 Marks**
Internal Marks	**30 Marks**

Unit – I

1. Kinetic theory of gases: (7)

Introduction – Deduction of Maxwell's law of distribution of molecular speeds, Transport Phenomena – Viscosity of gases – thermal conductivity – diffusion of gases.

2. Thermodynamics: (8)

Basics of thermodynamics-Kelvin's and Claussius statements – Thermodynamic scale of temperature – Entropy, physical significance – Change in entropy in reversible and irreversible processes – Entropy and disorder – Entropy of universe – Temperature Entropy (T-S) diagram – Change of entropy of a perfect gas-change of entropy when ice changes into steam.

Unit – II

3. Thermodynamic potentials and Maxwell's equations: (7)

Thermodynamic potentials, Chemical potential – Derivation of Maxwell's thermodynamic relations – Clausius-Clayperon's equation – Derivation for ratio of specific heats–Phase transitions (First order and second order) – Derivation for difference of two specific heats for perfect gas. Joule Kelvin effect – expression for Joule Kelvin coefficient for perfect and Vanderwaal's gas.

4. Low temperature Physics: (8)

Joule Kelvin effect – liquefaction of gas using porous plug experiment. Joule expansion – Distinction between adiabatic and Joule Thomson expansion – Expression for Joule Thomson cooling – Liquefaction of helium, Kapitsa's method – Adiabatic demagnetization – Production of low temperatures – Principle of refrigeration, vapour compression type.

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Unit – III

5. Quantum theory of radiation: (15)

Black body-Ferry's black body – distribution of energy in the spectrum of Black body – Wien's displacement law, Wien's law, Rayleigh-Jean's law – Quantum theory of radiation - Planck's law – deduction of Wien's distribution law, Rayleigh-Jeans law, Stefan's law from Planck's law. 56 hrs 10 Measurement of radiation using pyrometers – Disappearing filament optical pyrometer – experimental determination – Angstrom pyro heliometer - determination of solar constant, effective temperature of sun.

Professor
Physics Department
University College of Sciences
Osmania University, Hyd-7

Head of the Department
Physics & Electronics

M.V.Ramana Reddy
Department of Physics
City College of Science
Osmania University
Hyderabad-500 007.

Unit – I

6. Statistical Mechanics: (15)

Introduction, postulates of statistical mechanics. Phase space, concept of ensembles and some known ensembles ,classical and quantum statistics and their differences, concept of probability, Maxwell-Boltzmann's distribution law -Molecular energies in an ideal gasMaxwell-Boltzmann's velocity distribution law, Bose-Einstein Distribution law, Fermi Dirac Distribution law, comparison of three distribution laws, Application of B-E distribution to Photons-planks radiation formula, Application of Fermi-Dirac statistics to white dwarfs and Neutron stars.

Textbooks

1. **Fundamentals of Physics**. Halliday/Resnick/Walker.C. Wiley India Editlon 2007.
2. **Second Year Physics** – Telugu Academy.
3. **Modern Physics** by R. Murugeshan and Kiruthiga Siva Prasath (for statistical Mechanics) S. Chand & Co.
4. **Heat and Thermodynamics** by Mark W.Zemansky 5th edition M.C. Graw - Hill
5. **Heat and Thermodynamics** by D.S. Mathur.

Reference Books

1. Modern Physics by G. Aruldhas and P. Rajagopal, Eastern Economy Education.
2. Berkeley Physics Course. Volume-5. Statistical Physics by F. Reif. The McGraw-Hill Companies.
3. An Introduction to Thermal Physics by Daniel V. Schroeder.Pearson Education Low Price Edition.
4. Thermodynamics by R.C. Srivastava, Subit K. Saha&Abhay K. Jain Eastern Economy Edition.
5. Modern Engineering Physics by A.S. Vasudeva. S.Chand& Co. Publications.
6. Feyman's Lectures on Physics Vol. 1, 2, 3& 4. Narosa Publications.
7. Fundamentals of Optics by Jenkins A. Francis and White E. Harvey, McGraw Hill Inc.
8 .B.B. Laud "Introduction to statistics Mechanics" (Macmillan 1981)
9. F.Reif: "Statistical Physics "(McGraw-Hill, 1998)
10. K.Haung:"Statistical Physics "(Wiley Eastern 1988)

PRINCIPAL
HINDI MAHA VIDYALAYA
(AUTONOMOUS)
Arts, Commerce & Science
Nallakunta, Hyderabad - 44.

Chairperson

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Nallakunta, Hyderabad-500 044.

University Nominee

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Physics Department
University College of Science
Osmania University, Hyd-7.

Members

1.
2.
3.

Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Principal

Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)

FIRST SEMISTER PRACTICALS (3 hrs / week)

Practical Paper – II: THERMAL PHYSICS

1. Co-efficient of thermal conductivity of a bad conductor by Lee's method.
2. Measurement of Stefan's constant.
3. Specific heat of a liquid by applying Newton's law of cooling correction.
4. Heating efficiency of electrical kettle with varying voltages.
5. Determination of Thermo emf
6. Cooling Curve of a metallic body (Null method)
7. Resistance thermometer. To Determine temp coeff resistance
8. Thermal expansion of solids
9. Study of mechanical energy to heat.
10. Determine the Specific of a solid (graphite rod)
11. Thermistor Characteristics. Calculation of A and B

Note: Minimum of eight experiments should be performed. Maximum of 15 students per batch and maximum of three students per experiment should be allotted in the regular practical class of three hours per week.

Text and reference books

1. D.P. Khandelwal, "A laboratory manual for undergraduate classes" (Vani Publishing House, New Delhi).
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Nallakunta, Hyderabad-500 044.

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Professor
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University College Of Sciences
Osmania University, Hyd-7

Members

1.
2.
3. Prof. M.V.Ramana Reddy
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Osmania University
Hyderabad-500 007.

Principal

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St. Ann's College for Women
Mehdipatnam, Hyd-28

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc.PHYSICS-IST Year
Semester – I&IIPaper – I&II
Theory Model Question Paper

Time: $2\frac{1}{2}$hrs **Max. Marks: 70**

SECTION A

I Write short notes on any Six of the following: **6 X 3 = 18 Marks**

1. A question from unit I
2. A question from unit I
3. A question from unit II
4. A question from unit II
5. A question from unit III
6. A question from unit III
7. A question from unit IV
8. A question from unit IV

SECTION B

II Answer all the Questions. Each question carries 13 marks **4 X 13 = 52 Marks**

9 (a) A question from Unit I
(b) A question from Unit I
(OR)
(c) A question from Unit I
(d) A question from Unit I

10 (a) A question from Unit II
(b) A question from Unit II
(OR)
(c) A question from Unit II
(d) A question from Unit II

11 (a) A question from Unit III
(b) A question from Unit III
(OR)
(c) A question from Unit III
(d) A question from Unit III

12 (a) A question from Unit IV
(b) A question from Unit IV
(OR)
(c) A question from Unit IV
(d) A question from Unit IV

Department of Physics
Hindi Mahavidyalaya
(Autonomous & NAAC REACCREDITED)
Nallakunta, Hyderabad-500 044.

Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Head of the Department
Physics & Electronics
St. Ann's College for Women
Mehdipatnam, Hyd-28

Professor
Physics Department
University College of Sciences
Osmania University, Hyd-7

Chairperson

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University Nominee

Professor
Physics Department
Nizam College (Autonomous)
Osmania University, Hyd-7.

Members

1.

2.

3. Prof. M.V.Ramana Reddy
Department of Physics
University College of Science
Osmania University
Hyderabad-500 007.

Head of the Department
Physics & Electronics
St. Ann's College for Women
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PRINCIPAL
HINDI MAHA VIDYALAYA
(AUTONOMOUS)
Arts, Commerce & Science
Nallakunta, Hyderabad - 44.

Principal

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc.PHYSICS-IST Year
Semester – I&II
Paper – I&II
Practical Model Question Paper

Time: 3 hrs Max. Marks: 25

1. One practical question paper 15 Marks
2. Record 05 Marks
3. Viva 05 Marks

PRINCIPAL
HINDI MAHA VIDYALAYA
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Professor
Physics Department
University College Of Science
Osmania University Hyd-7

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HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc. PHYSICS-IST Year
Semester – I & II
Paper – I & II
Scheme of Model Question for Paper I&II

Time-$2\frac{1}{2}$ Hrs **Max.Marks:100**

Semester Exam Pattern **70 Marks**

Section –A 8 Short Answer Questions----Answer any Six 6x3=18 Marks
Each carries 3 marks

Section –B 4 Long Answer Questions---With internal choice 4x13=52 Marks
Each carries 13 marks

Total Marks=70

Internal Assessment Pattern 30Marks Duration-30 Min

In internal assessment there will be 1 section	
Section A 20-Multiple choice question	20x1=20 Marks
Two internal Assessment Average is to be considered	=20 Marks
One assignment to be given	- 5 Marks
Seminar	-5 Marks
	Total Marks=30

Note: Equal Weightage has to be given to all units in each semester.

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(AUTONOMOUS)
B.Sc. PHYSICS-IST Year
Semester – I & II
Paper – I & II
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HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
DEPARTMENT OF PHYSICS
Panel of Examinations

Sl no	Name and Designation	Mobile No
1	**Dr.D.Sarala** Head, Department of physics, St.Ann's Degree College for women, Mehdipatnam, Hyd. Email:saralatvs@gmail.com	9440750244
2	**Mrs.Kirana.K.** Asst.Professor,Department of physics Osmania university, Hyd. Email:	9966017561
3	**Dr.Somaiah.T.** University college of science,saifabad Osmania university, Hyd. Email:	9849154671
4	**Dr. N V Prasad** Asst.Professor,Department of physics Osmania university, Hyd. Email:	9849553669
5	**Dr.Upender.G.** Asst.Professor,Department of physics Osmania university, Hyd. Email:upender_b44@yahoo.com	9010726691
6	**Dr.Aparna.D.** Asst.Professor,Department of physics(OU Engineering) Osmania university, Hyd. Email:	8106678887
7	**Mr.D.Srinivasu** Asst.Professor,Department of physics(OU Engineering) Osmania university, Hyd. Email:	9849671840
8	**Ms.A.Usha Rani** Asst.Professor,Department of physics, St.Francis, Hyd. Email:	

Sl no	Name and Designation	Mobile No
9	**MD.Sheriffudin** Asst.Professor,Department of physics Osmania university, Hyd. Email:shareef1775@gamil.com	9866589039
10	**Dr.N.Narsimhulu** Asst.Professor,Department of physics (OU Engineerintg) Osmania university, Hyd. Email:	9885415325
11	**Smt.W.Jaya** Asst.Professor,Department of physics St.Francis, Hyd. St. Ans college for women Email: physics.staums@gmail.com	9848260673 jaya.physics.electronics@gmail.com
12	**Smt.Usha Praveena** Asst.Professor,Department of physics St.Francis, Hyd. Email:oojh vj@yahoo.com	8106265680
13	**Smt.Kumudini** Asst.Professor,Department of physics St.Francis, Hyd. Email:	
14	**Smt.Komala** Asst.Professor,Department of physics St.Pious, Ram Nagar, Hyd. Email:	9989740735
15	**Dr.M.Srinath Reddy** Assoc.Professor,Department of physics Nizam college, Hyd. Email:	
16	**Smt.Hima Bindu** Assoc.Professor,Department of physics Nizam college, Hyd. Email:	
17	**V.R.MANJULA** Asst.Professor,Department of physics Bhavan's New Science College, Narayanguda,Hyd. Email:Vrmanjula@rediffmail.com	9676499011

Sl no	Name and Designation	Mobile No
18	**Smt.Dr.A.Rajini** Assoc.Professor,Department of physics, Osmania University college of women, Koti, Hyd. Email:	
19	**Dr.s.Narendra Babu** Assoc.Professor,Department of physics, Osmania University college of women, Koti, Hyd. Email:	

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