HINDI MAHAVIDYALAYA

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

B.Sc. II YEAR SEMESTER III & IV

DEPARTMENT OF PHYSICS

2017-2018

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
DEPARTMENT OF PHYSICS
BOARD OF STUDIES
Academic Year - 2017-18
Minutes of BOS Meeting

BOS meeting of the Department of Physics held on 21st August 2017, at 1:00PM

The following members were present

The following members were present

Prof. C. Vishnu Vardhan Reddy	-	University Nominee
Smt. Jyoti Hastak	-	Chairperson
Dr. G. Prasad	-	Member
Prof. M V. Ramana Reddy	-	Member
Mrs. Kirana	-	Member

CHAIRMAN
Board of Studies in PHYSICS
Osmania University, Hyd.

2.1 Welcome address by the chair

The chair welcomed the University Nominee and O.U Department of Physics and Members of B.O.S.

2.2 Previous meeting details.

Smt. Jyoti Hastak informed the respective members regarding the previous meeting which was held on 26th September 2016. She informed that from the academic year 2012-2013 onwards Hindi Mahavidyalaya was granted Autonomous status for the period of 6 years. College has implemented semester system as required under Autonomy for the last 5 years.

2.3 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. 4 Credits are given for theory paper and 1 credit is given for practical in each semester.

2.4 Discussion and Distribution of Common Core Syllabus and Skill Enhancement Course.

iii. Members were informed by the chair that Department of Physics, Hindi Mahavidyalaya is following common core syllabus prescribed by Osmania University for B.Sc II Year for Semester III and IV.

iv. We are adopting Osmania University same syllabus of each Semester as it is with minor changes in theory papers of Semester III and IV.

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

2.4 Marks allotted for Internal and End Semester exams.

2. Internal assessment is of 20 marks. (15M for Internal + 5 M for assignment).In each Semester two internal assessment of 15 Marks will be conducted and an average of both the internal assessments will be added in the marks of Theory exam.
2. Theory Question paper is of 80 marks.
3. Total allotted marks are 100.

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

2.5 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 15 marks. The internal assessment will have three sections.
   Section – A 10 Multiple choice questions each carries ½ marks (10* ½ = 5M),
   Section – B 10 Fill in the blanks each carries ½ marks (10* ½ = 5M) and
   Section – C 5 short notes each 1mark (5*1=5)
   Average of marks of these two internal exams will be taken. 5 marks will be allotted for assignment.
2. Semester exam will be conducted as per the Almanac which will be provided by the exam branch. Internal exam duration will be 30Mts and Semester exam duration will be of 3 hrs.
3. Model Question paper for Semester III and Semester IV was discussed. Theory paper for each Semester will have 2 sections.
   i) Section A contains 8 short Questions. The student has to answer four questions. Each question carries 5 Marks (4X5=20 Marks)
   ii) Section B contains 4 Essay type Questions with internal choice. Each question carries 15 Marks (4X15=60 Marks)

- Pattern of Model Theory Question Papers for DSC Paper III and Paper IV are enclosed.
- Pattern of Model Theory Question Papers for DSC was approved by Member of BOS.

2.6 Discussion on Practical Exam Model paper.

It was decided in BOS meeting that 50 Marks Practical Exam of 3 hrs will be held in each Semester and 1 credit will be given for Practical in each Semester.

- Pattern of Model Practical Question Papers for Paper III and Paper IV are enclosed.
- Pattern of Model Practical Question Papers was approved by Members of BOS

2.7 Panel of Examiners

The panel of examiners was approved by the members.

- List is enclosed

2.8 Any other matter.

2.9 Vote of Thanks

Meeting concluded with the Vote of Thanks by Sri Devarshi Gangaji

Chairperson University Nominee Members Principal

CHAIRMAN
Board of Studies in Physics
Osmania University, Hyd

1.
2.
3.

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
BOARD OF STUDIES
DEPARTMENT OF PHYSICS

COMPOSITION OF THE BOARD OF STUDIES IN AN AUTONOMOUS COLLEGE

5. **Head of the department concerned (Chairperson)**
   Smt. Jyothi Hastak – Department of physics

6. The entire faculty of each specialization.
   Mr. Devarshi Gangaji

7. One expert to be nominated by the vice-chancellor from a panel if six recommended by the College Principal.

   Prof.C. Vishnu Vardhan Reddy Chairman, BOS, Dept. of Physics

8. Three experts in the subject from outside the college to be nominated by the Academic Council.
   Dr. G.Prasad, Head of Physics Department, Osamnia University
   Prof. M. V. Ramana Reddy, Professor , Department of Physics, Osmania University,Hyderabad.
   Mrs K.Kirana, Asst Prof-Department of Physics, Osmania University,Hyderabad

5. Alumni: Shri.Kailash

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

CHAIRMAN
Board of Studies in Physics
Osmania University, Hyd

1.
2.
3.

HINDI MAHAVIDYALAYA

(AUTONOMOUS)
Affiliated to Osmania University
Nallakunta, Hyderabad 44

2017-18 CBCS STRUCTURE

SCHEME OF INSTRUCTIONS & EVALUATION

B.SC. M P CS / M S CS

SECOND YEAR SEMESTER-III					Semester End exam		Continuous Internal Evaluation		Total	Practical 3 HRS
Code	Course Title	Course Type	HPW	Credits	Duration in HRS	Marks	Exam Duration	Marks		
BS301	A/B	SEC-1	2	2	2	40	30 min	10	50	-
BS302	English	CC-1C	5	5	3	80	30 min	20	100	-
BS303	Second Language	CC-2C	5	5	3	80	30 min	20	100	-
BS304	MATHS	DSC-1C	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	50
BS305	PHYSICS / STATISTICS	DSC-2C	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	50
BS306	COMPUTER SCIENCE	DSC-3C	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	50
			30	27		440		110	700	

HINDI MAHAVIDYALAYA

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

2017-18 CBCS STRUCTURE

SCHEME OF INSTRUCTIONS & EVALUATION

B.SC. M P CS / M S CS

SECOND YEAR SEMESTER-IV					Semester End exam		Continuous Internal Evaluation		Total	Practical 3 HRS
Code	Course Title	Course Type	HPW	Credits	Duration in HRS	Marks	Exam Duration	Marks		
BS401	C/D	SEC-2	2	2	2	40	30 min	10	50	-
BS402	English	CC -1D	5	5	3	80	30 min	20	100	-
BS403	Second Language	CC-2D	5	5	3	80	30 min	20	100	-
BS404	MATHS	DSC-1D	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	50
BS405	PHYSICS / STATISTICS	DSC-2D	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	50
BS406	COMPUTER SCIENCE	DSC-3D	4 T + 2P = 6	4+1=5	3	80	30 min	20	100	50
			30	27		440		110	700	

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD

(AUTONOMOUS)

B.Sc II Year Semester – III & IV

PHYSICS

Practical Model Question Paper III & IV

Time – 3 Hrs | Max. Marks: 50

1. One Practical Question Paper — 30 Marks
2. Record — 10 Marks
3. Viva — 10 Marks

Chairperson | University Nominee Members | Principal

CHAIRMAN
Board of Studies in Physics
Osmania University, Hyd.

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc. II Year Semester III
Physics
Paper - III
Thermodynamics

Subject Code:	
Theory Classes	4 Hrs/ Week
Duration of the Semester Examination	3 Hrs
Duration of the Internal Examination	30 Minutes
Semester Examination	80 Marks
Internal Examination	20 Marks
No of Credits	5 Credits

Objective:

Aim of the department is to impart the knowledge of basic concepts in physics, through theory and practicals.

Unit – I

1. **Kinetic theory of gases: (6)**
   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 – Derivation of Maxwell's thermodynamic relations – Clausius-Clayperon's equation – Derivation for ratio of specific heats – 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: (7)**
   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, Kapitza's method – Adiabatic demagnetization – Production of low temperatures – Principle of refrigeration, vapour compression type.

Unit – III

5. **Quantum theory of radiation: (14)**

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

Unit – IV

6. **Statistical Mechanics: (14)**

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 gas-Maxwell-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 Edition 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 Mc 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. *Norosa 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)

Chairperson

University
CHAIRMAN
Board of Studies in Physics
Osmania University, Hyd.

Nominee Members

1.
2.
3.

Principal

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD

(AUTONOMOUS)

B.Sc. II Year Semester III

Physics

Paper - III

Practical Paper : Thermodynamics

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).
2. S.P. Singh, "Advanced Practical Physics" (PragatiPrakashan, Meerut).
3. Worsnop and Flint- Advanced Practical physics for students.
4. "Practical Physics" R.K Shukla, AnchalSrivastava

Chairperson

University

CHAIRMAN
Board of Studies in Physics
Osmania University, Hyd.

Nominee Members

1.
2.
3.

Principal

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc. II Year Semester IV
Physics
Paper - IV
OPTICS

Subject Code:	
Theory Classes	4 Hrs/ Week
Duration of the Semester Examination	3 Hrs
Duration of the Internal Examination	30 Minutes
Semester Examination	80 Marks
Internal Examination	20 Marks
No of Credits	5 Credits

Objective:

Aim of the department is to impart the knowledge of basic concepts in physics, through theory and practicals.

Unit I

1 **Interference: (14)**

Principle of superposition – coherence – temporal coherence and spatial coherence – conditions for Interference of light

Interference by division of wave front: Fresnel's biprism – determination of wave length of light. Determination of thickness of a transparent material using Biprism – change of phase on reflection – Lloyd's mirror experiment.

Interference by division of amplitude: Oblique incidence of a plane wave on a thin film due to reflected and transmitted light (Cosine law) – Colours of thin films – Non reflecting films – interference by a plane parallel film illuminated by a point source – Interference by a film with two non-parallel reflecting surfaces (Wedge shaped film) – Determination of diameter of wire-Newton's rings in reflected light with and without contact between lens and glass plate, Newton's rings in transmitted light (Haidinger Fringes) – Determination of wave length of monochromatic light – Michelson Interferometer – types of fringes – Determination of wavelength of monochromatic light, Difference in wavelength of sodium D_1,D_2 lines and thickness of a thin transparent plate.

Unit II :

2 Diffraction: (14)

Introduction – Distinction between Fresnel and Fraunhoffer diffraction Fraunhoffer diffraction:- Diffraction due to single slit and circular aperture – Limit of resolution – Fraunhoffer diffraction due to double slit – Fraunhoffer diffraction pattern with N slits (diffraction grating)

Resolving Power of grating – Determination of wave length of light in normal and oblique incidence methods using diffraction grating. Fresnel diffraction-Fresnel's half period zones – area of the half period zones –zone plate– Comparison of zone plate with convex lens – Phase reversal zone plate – diffraction at a straight edge – difference between interference and diffraction.

Unit III:

3 Polarization (14)

Polarized light : Methods of Polarization, Polarization by reflection, refraction, Double refraction, selective absorption , scattering of light – Brewsters law – Malus law – Nicol prism polarizer and analyzer – Refraction of plane wave incident on negative and positive crystals (Huygen's explanation) – Quarter wave plate, Half wave plate – Babinet's compensator – Optical activity, analysis of light by Laurent's half shade polarimeter.

Unit IV:

4 Aberrations and Fiber Optics : (14)

Introduction – Monochromatic aberrations, spherical aberration, methods of minimizing spherical aberration, coma, astigmatism and curvature of field, distortion. Chromatic aberration – the achromatic doublet – Removal of chromatic aberration of a separated doublet.

Fiber Optics : Introduction – Optical fibers – Principles of fiber communication – Step and graded index fibers – Rays and modes in an optical fiber – Fiber material – Types of optical fibers and advantages of fiber communication.

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

Textbooks

1. **Optics** by AjoyGhatak. *The McGraw-Hill companies.*
2. **Optics** by Subramaniyam and Brijlal. *S. Chand & Co.*
3. **Fundamentals of Physics.** Halliday/Resnick/Walker.*C. Wiley India Edition 2007.*
4. **Optics and Spectroscopy**. R. Murugeshan and Kiruthiga Siva Prasath. *S. Chand & Co.*
5. **Second Year Physics** – *Telugu Academy.*

Reference Books

1. **Modern Engineering Physics** by A.S. Vasudeva. *S.Chand & Co. Publications.*
2. **Feyman's Lectures on Physics** Vol. 1,2,3& 4. *Narosa Publications.*
3. **Fundamentals of Optics** by Jenkins A. Francis and White E. Harvey, *McGraw Hill Inc.*
4. K. Ghatak, **Physical Optics'**
5. D.P. Khandelwal, Optical and Atomic Physics' (Himalaya Publishing House, Bombay,1988)
6. Jenkins and White: „Fundamental of Optics' (McGraw-Hill)
7. Smith and Thomson: „Optics' (John Wiley and sons)

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

CHAIRMAN
Board of Studies in Physics
Osmania University

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc. II Year Semester IV
Physics
Paper - IV
Practical-OPTICS

1. Thickness of a wire using wedge method.
2. Determination of wavelength of light using Biprism.
3. Determination of Radius of curvature of a given convex lens by forming Newton's rings.
4. Resolving power of grating.
5. Study of optical rotation-polarimeter.
6. Dispersive power of a prism
7. Determination of wavelength of light using diffraction grating minimum deviation method.
8. Wavelength of light using diffraction grating – normal incidence method.
9. Resolving power of a telescope.
10. Refractive index of a liquid and glass (Boys Method).
11. Pulfrich refractometer – determination of refractive index of liquid.
12. Wavelength of Laser light using diffraction grating.

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

CHAIRMAN
Board of Studies in Physics
Osmania University

Nominee Members

1.

2.

3.

Principal

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc II Year Semester – III & IV
PHYSICS
Paper – III & IV
Theory Question Paper Pattern

Time: 3 hrs

Max. Marks: 80

SECTION A

I Write any Four of the following (Short Questions) 4 X5 = 20 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 Essay Questions. Answer all the Questions 4 X 15= 60 Marks

9. (a) A Question from Unit I
   (OR)
   (b) A Question from Unit I

10. (a). A Question from Unit II
    (OR)
    (b). A Question from Unit II

11. (a) A Question from Unit III
    (OR)
    (b) A Question from Unit III

12. (a) A Question from Unit IV
    (OR)
    (b) A Question from Unit IV

Chairperson

University
CHAIRMAN
Board of Studies in
Osmania University, Hyd.

Nominee Members

1.

2.

3.

Principal

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
B.Sc II Year Semester – III & IV
PHYSICS

Scheme of Model Question For Paper III & IV

Time – 3 Hrs | Max. Marks: 100

80 Marks

Semester Exam Pattern

Section – A 8 Short Answer Questions ------ Answer any four — 4 X 5 = 20 Marks
Each carries 5 marks

Section—B - 4 Long answer questions -----with internal choice — 4 X 15 = 60 Marks
Each carries 15 Marks

Total Marks = 80

Duration - 30 Min

Internal Assessment Pattern — 20 Marks

In Internal Assessment there will be 3 sections

Sections A 10 –Multiple choice questions — 10 X ½ =5 Marks

Section –B 10—Fill in the Blanks — 10 X ½ =5 Marks

Section –C 5 - Short Answer Questions — 5 X 1= 5Marks

15 Marks

CHAIRMAN
Board of Studies in Physics
Osmania University

Two Internal Assessment Average is to be considered $\frac{15+15}{2}$ = 15 Marks

One Assignment to be given — 5 Marks

Internal Assessment Total — 20 Marks

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

HINDI MAHAVIDYALAYA, NALLAKUNTA, HYDERABAD
(AUTONOMOUS)
Department of Physics
Panel of Examiners

S.No	Name and Designation	Mobile No
1	D.Sreedevi Head Department Of Physics New Science College Ameerpet Hyd	9701893897
2	Dr.Sarala Department of physics St.Anns Degree College for women Mehdipatnam	9440750244
3.	Mrs.Kirana Assistant Professor Department of Physics Osmania university	9966017561
4.	Dr.somayya University college of science saifabad Osmania university	9849154671
5.	Dr.MV prasad Assistant Professor Department of Physics Osmania university	9849553669
6.	Dr.Upender Assistant Professor Department of Physics Osmania university	
7.	Dr.Aparna Assistant Professor Department of Physics (OU Engineering.) Osmania university	
8.	D.Srinivas Assistant Professor Department of Physics (OU Engineering.) Osmania university	9849671840

Chairperson

Nominee Members

Principal

CHAIRMAN
Board of Studies in Physics
Osmania University, Hyd.

CHAIRMAN
Board of Studies in Physics
Osmania University, Hyd.

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	2 ½	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	

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

Head of Physics
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-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	2½	70	30 min	30	100	25
BS205	PHYSICS / STATISTICS	DSC-2B	4 T + 3P =7	4+1=5	2½	70	30 min	30	100	25
BS206	COMPUTER SCIENCE	DSC-3B	4 T + 3P =7	4+1=5	2½	70	30 min	30	100	25
	TOTAL NO. OF CREDITS			27		390		160	625	

54

Department of Physics
University College of Science
Osmania University

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

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
(Autonomous & NAAC REACCREDITED)
Nallakunta, Hyderabad-500 044.

University Nominee

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

Members

1. 08/1/2020

2.

3.

Prof. M.V.Ramana Reddy
Department of Physics

Head of
St. Ann's Degree & PG College for Women
Mehdipatnam, Hyd.-28