

CHEMISTRY (PRACTICAL) (LAB MANUAL IN CHEMISTRY FOR CLASS XI- ARYA BOOK)**First Term (July - Sep)**

01. Cutting, bending and drawing jet of glass tube.
02. Boring the cork
03. To prepare (N/20) 250 ml Na_2CO_3 Solution
04. To determine the strength of given Hcl acid provided with N/20 Na_2CO_3 Solution.
05. To prepare 250 ml (N/20) Oxalic acid solution.
06. To Standardise the given solution of NaoH provided with (N/20) oxalic acid solution.

Final Term (Oct-Feb)

07. Identification of acid and basic radical in given salt sample No.S₁
08. Identification of acid and basic radical in given salt sample No.S₂

Q.Pattern Experiments 10 + 6 + 4 = 20 Mks Viva + Record 10 Mks:Total 30 Mks

BIOLOGY (THEORY) (BIOLOGY FOR CLASS XI N C E R T)

June Unit - I Diversity is the Living World

July **Unit - I continued -**

Aug Unit : III Cell - Structural Organisation in Plants and Animals.

Sep **Unit - I continued - III**

Oct Unit - III Cell, Structure and functions

Nov Unit III Continued, Niit IV Half Chapter

Dec Unit -IV Plant Physiology

Jan Human Physiology

Feb Unit - V Continued

Q.Patterrr : 5 x 1 = 5 Mks 7 x 2 = 14 12 x 03= 36 3 x 5= 15 Total 70 Mks
Practical 30 Mks Total 100 Mks

BIOLOGY (PRACTICAL) (LAB MANUAL IN BIOLOGY FOR CLASS-XI)

List of Experiments

01. Study and describe three locally available common flowering plants, one each from Solanance, Fabaceae and liliaceae families.
02. Study of Plasmolysis in epidermal peels eg. (Rheo leaves)
03. Study of distribution of stomata in lower surface of leaves.
04. Study and identification of different types of inflorescence.
05. Study of different modification in root, stem and leaf.
06. Seperation of plant pigments through paper chromatography .

(Spotting)

Study / observation of following

01. Study parts of a compound microscope and dissecting microscope.
02. Study of specimens/slides and identification with reasons Bacteria, Spirogyra, Rhizopus, Mushroom, Yeast, Moss, Fern, pinus, lichen, one monocot plant and one dicot plant.
03. Study of specimen / slides / Models and identification with reasons - Amoeba, Hydra ,Liverfluke Ascaris, leech, earthworm, prawn, snail, starfish, rohu, pigeon.
04. Study of tissues - Parenchyma, Collenchyma, Sclerenchyma, muscle fibres, nerves cells, squamous epithelium, mammalian blood through permanent slides.
05. Study of mitosis in plant and animal cells through permanent slides.

LOYOLA HIGH SCHOOL, PATNA**SYLLABUS FOR CLASS XI , 2018-2019****(SCIENCE)****MATHEMATICS (MATHEMATICS TEXT BOOK FOR CLASS XI, N C E R T)**

July 1. Sets -

2. Relation

3. Function

4. Trigonometry

Aug 5. Principal of Mathematical Induction

6. Linear Inequation

Sep 7. Permutation and Combination -

8. Binomial Theorem

9. Complex No and Quadratic Equation -

Oct 10. Limit

Nov 11. Sequence and Series

12. Straight lines

13. Conic Sections -

Dec 14. Calculus

15. Mathematical Reasoning-

16. Statistics and Probabilities

Jan 17. Trigonometry (Continued)

Question 01 x 04 = 04
Pattern 02 x 08 = 16
Time : 3 hrs 04 x 11 = 44 = 100
F.M. : 100 06 x 06 = 36

PHYSICS (THEORY) (PHYSICS TEXT BOOK FOR CLASS XI N C E R T)	
First Unit (July-Aug)(50 Mks)	
UNIT I : Physical World and Measurement - July- UNIT II : Kinematics	
Half Yearly (July-Oct)(100 Mks)	
UNIT I : Physical World and Measurement - July- UNIT II : Kinematics - Aug	
UNIT III : Laws of Motion- Aug-Sep UNIT IV : work, Energy & Power Aug-Sep	
UNIT V : Motion of System of particles & Rigid Bodies- Sep-Oct UNIT VI : Gravitation - Sep-Oct	
2nd Unit (Nov-Dec)(50 Mks)	
Unit VI -Gravitation - Contd. UNIT VII : Properties of Bulk matter- Oct-Nov	
Final Term (Nov.-Feb)(100Mks)	
Unit VI - Gravitation - Contd. Unit VII -Properties of Bulk matter- Oct-Nov	
Unit VIII :Thermodynamics Nov - Dec UNIT IX : Behaviour of perfect gas & Kinetic Theory of gases Nov - Dec UNIT X : Oscillations & Waves - Jan - Feb	
Q.Pattern	01 x 5 = 05 Mks 02 x 05 = 10 Mks 03 x 12 = 36 Mks 05 x 3 = 15 Mks
Time : 3 hrs	Theory : 70 Mks, 04 x 01 = 04 Mks Practical : 30 Mks

PHYSICS (PRACTICAL)	
SECTION A Experiments	
Half Yearly (July-Oct)	
<ol style="list-style-type: none"> Use of vernier callipers a. To measure diameter of a small spherical / cylindrical body b. To measure internal diameter and depth of a given beaker/ calorimeter and hence find its volume. Use of Screw-gauge : a. To measure diameter of a given wire. b. To measure thickness of a given sheet. To measure volume of an irregular lamina.using screw gauge To determine the radius of curvature of given spherical surface by a Spherometer. To determine mass of two different objects using beam balance. Using a simple pendulum. To plot $L-T^2$ graph and use it to find the effective length of second's pendulum. To study the relationship between force of limiting friction & normal reaction & to find the coefficient of friction between block & horizontal surface To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination by plotting graph between force and $\sin \theta$ 	
Activities	
<ol style="list-style-type: none"> To make a paper scale of given least count,e.g. 0.2 cm,0.5 cm. To determine mass of a given body using a meter scale by principle of moments. To measure the force of limiting friction for rolling of a roller on a horizontal plane. To study the conservation of energy of a ball rolling down on inclined plane (using a double inclined plane) 	
SECTION - B : Experiments	
Final Term (Nov.- Feb)	
<ol style="list-style-type: none"> To determine Young's modulus of elasticity of the material of a given wire. To find force constant of a helical. Spring by plotting a graph between load and extension. To determine the surface tension of water by capillary rise method. 	

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4. To determine the coefficient of viscosity of given viscous liquid by measuring the terminal velocity of given spherical body.	
5. To study the relation between frequency and length of a given wire under constant tension using sonometer.	
6. Variation in P and V of air at constant T by plotting P vs V & P Vs $1/V$ graph	
7. To find the speed of sound in air at room temperature using a resonance tube by two resonance position .	
Activities	
<ol style="list-style-type: none"> To observe and explain the effect of heating on a bi-metallic strip To note the change in level of liquid in a container on heating and interpret the observations. To study the effect of detergent on surface tension by observing capillary rise To study the effect of load on depression of a suitably clamped metre scale loaded at (i) its end (ii) in the middle. 	
Question	Two Experiments (one from each section) - 2 x 8 =16
Pattern	Practical records of experiment and activities 06 Investigatory Project 03, Viva of experiment, activities and Project 05 Total : 30 Mks

CHEMISTRY (THEORY) (CHEMISTRY TEXT BOOK FOR CLASS -XI N C E R T)	
First Unit (July - Aug.)(50Mks)	
Unit-I	Some basic concepts of chemistry - July
Unit -II	Structure of Atom - July
Unit - III	Classification of elements and Periodicity in properties - August
Unit -IV	Chemical Bonding- Half - August
Half Yearly (July-Oct)(100 Mks)	
Unit - IV	Chemical Bonding and Molecular Structure - Sept. (rest half)
Unit -V	States of Matter: - Sept
Unit VI	Thermodynamics Sept (half of the chapter)
Unit -VII	Equilibrium - Oct Unit VIII Redox Reactionss - Oct
Practicals : i. Titration ii. Salt analysis.	
(Nov-Dec)(50 Mks)	
Unit IX	Hydrogen - Jan
Unit X	S-Block Elements - Jan
Unit XI	Some p-Block Elements - Feb
Half yearly + Final Term (Nov.-Feb)(100Mks)	
Unit VIII	Redox Reactionss- Nov.
2nd Unit Test Rest	Unit XII Organic chemistry basic principles & Techniques Unit- Dec XIII Hydro Carbons - Jan
Unit XIV	Environmental Chemistry
Q.Pattern	Q.No. 1 to 5 05
Time : 3 hrs	Q.nO. 6 to 12 of 2 marks each 14
	Q.No. 13 to 24 of 3 marks each 36
	Q.No. 25to 27 of 5 marks 15 Total 70 Marks

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INFORMATICS PRACTICES (A COMPUTER BOOK FOR XI -) (THEORY)	
July	Ch-1 Hardward Concept - Ch-12 Simple Queries in SQL -July
August	2. Software Concept 14. Table Creation & Data Manipulation Commn
Sep	10. DBMS Concept 11. Introduction to MySQL
Oct	15. IT Application 3. Gettin Start with programming using IDE 4. Programming Fundamentals
Nov	5. Flow of Control
Dec	6. JAVA IDB Programming - I
Jan	7. JAVA IDE Programming - II
Feb	8. JAVA IDB Programming - III

INFORMATICS PRACTICES (PRACTICALS)	
1.1	Handling Windows: Make, Open, Rename and Delete the folder. Perform Copy, Cut , Paste operation in folder
2.1	Creating New document, open, save, close, print preview, page setup in word docment.
2.2	Cut, copy, paste, font operatiion, formatting, allignment, insert object in word document.
3.1	Presentation in Power Point
3.2	Excel Sheet
3.4	Java - simple Programming
3.5	Java simple Programming.
4.1	SQL statement using SELECT statement with different options.
4.2	Write Queries to create Table.
4.3	Write Queries to alter table.
4.4	Write Queries to add records in the given table.
4.5	Write Queries to update records.
4.7	Write Queries to rename table.
4.8	Write Queries to drop table.
4.9	Write Queries to drop column from the given table.
4.10	Write Queries to add constraint in the given table.
4.11	Write Queries to drop constraint from the given table.
Marks : Hands on Experience : 15 Practical File : 06 Project : 05 Viva Voce : 04	

ENGLISH				
First Unit (July-Aug) (50Marks)				
Hornbill (Text Book) SECTION D	SNAPSHOTS (SUPPLEMENTARY READER) SECTION -D	Sections A & B	Section-E	Section-C
July 1. The Portrait of a Lady 2. We're No afraid to Die If We Can All Be Together POETRY : 1. A Photograph	July 1. The Summer of the Beautiful White Horse 2. The Address	August 1.Comprehension Vocabulary, notice/poster/ advertisement 2. The Address (Snapshots)	August Canterville Ghost Ch- I-III	August Error correction, Editing Task, Re-ordering of Sentences.
Half Yearly (July-Oct) (100 mks)				
1. The Portrait of a Lady 2. We're Not afraid to Die If we can all be together 3. Discovering Tut. The Saga Continues. POETRY: 1. A Photograph 2. The Voice of the Rain	September 1. The Summer of the Beautiful White Horse 2. The Address 3. Ranga's Marriage 4. Albert Einstein at School	October Note making Summary, Article, Speech Report/ Narrative	October Chapter I - III Canterville Ghost Ch.III-IV	October (Determiners, tenses, clauses, Modals, Voice)
2nd Unit (Nov-Dec.) (50 Marks)				
November 1. The Ailing Planet 2. The Browning Version POETRY : 1.Childhood	November 1. Mother's Day	December LETTER WRITING 1. Letter to The Editor 2.Business/ Official Letter	December Chapter V-VI Canter ville Ghost Ch.X-XIV	December Sectn-F Conversation Skills (Listening & Speaking)
Final Term (Nov-Feb) (100 Marks)				
January 1. The Ailing Planet 2. The Browning Version POETRY : 1.Childhood 2. Father to Son	January 1. Mother's Day 2. Birth 4. The Tale of Melon City	February LETTER WRITING Application for a job letter to school/ college authorities	February Chapter V-VII Canterville Ghost Ch X-XIV	February Section G Reading Project
Q.Pattern Time : 3 Hrs. F.M.: 100				
Reading A. 20 Mks B. Writing : 20 Mks C Grammar 10 Mks D. Literature : 24 Mks, F.Conversation Skills 10 Mks, E. Long Reading Text (Novel) 6 Mks, G . Reading Project 10 Mks.				