

Session 2024-25

Class: 11th SCIENCE

Class XI

Chemistry

Term 1 : (April- September)

UT- I :

Chapter-1: Some basic concept of chemistry

Chapter-2:Structure of atom

LAB MANUAL:

1. Some basic laboratory technique like (a) cutting glass tube

(b) Bending a glass tube. (c) Drawing a glass jet

Mid term exam (Including all the chapters of UT-1)

Chapter-3:Classification of element and periodicity in properties

Chapter-4:Chemical bonding and molecular structure

Chapter-5:Chemical thermodynamics

LAB MANUAL:

2. Determination of melting point of the given organic compound.

3. To determine the boiling point of liquid.

4. To prepare crystal of copper sulphate from a given impure sample of the blue vitriol.

5. To determine the PH of vegetable and fruit juice using PH paper and universal indicator.

6. To determine the PH of solution of some salts using PH paper or universal indicator.

7. To prepare 0.1 M sodium carbonate solution.

8. To prepare 0.1M oxalic acid solution.

9. To determine the molarity and strength of the given Sodium Hydroxide solution you are provided with 0.05 M oxalic acid solution

Whole Term – 1 syllabus.



Term 2 : (October-March)

UT-II

**Chapter-
6:Equilibrium**

LAB MANUAL:

10. To determine the molarity and the strength of given hydrochloric acid solution you are provided with 0.05M.

11. Salt analysis

12. Salt analysis

ANNUAL EXAM

Chapter-8:Organic chemistry

Chapter-9:Hydrocarbon

LAB MANUAL:

13. Salt analysis

14. Salt analysis

15. Salt analysis

ANNUAL EXAMINATION : Whole syllabus to be

English

Term-I (April-September)

U.T. 1

Hornbill (Prose): - Ch-1) A Portrait of a Lady

(ch-2) We're not afraid to die... If we can be together

(Poem):- (P-1) A Photograph



Edit with WPS Office

Snapshot -(ch.1) The Summer of the Beautiful white Horse.

Grammar - Tenses

Writing - Advertisement.

Debate Writing.

Activity: 1. Present a pen-portrait of your grandparents describing their qualities you admire and appreciate the most?

2. Character sketch of the different characters in the chapter.

Mid Term Examination: Whole syllabus of Term- I including all chapters & UT- 1

Hornbill (Prose) :- (ch-3) Discovering Tut: The Saga Continues
(ch-4) The Adventure

(Poem):- (P-2) The Laburnum Top.

(P-3) the Voice of the Rain

Snapshot (ch-2) The Address.

(ch-3) Mother's Day.

Grammar:- Clauses.

Writing :- Speech-writing.

Activity :- 1. Optimism helps to endure the direct stress. Discuss.

Term-II

U.T. 2

Hornbill (ch-5) Silk Road

(Poem)- (P4) Childhood

P5) Father to Son

Snapshot: (Ch-4) Birth.

(ch-5) The Tale of Melon city.

Grammar:- Re-ordering Sentence

Writing:- Poster Making & Note Making & Summary.

Activity - 1. What is the similarity between rain & music?



2. Draw flowchart to draw king Tut's family line & their description.

ASL and Project work will be concluded.

Physical Education

U.T 1-

Ch-1 Changing trades and careers in physical education

Ch-2 Olympism value Education

Ch-4 Physical Education and sports CWSN

MID term exam –

Ch-6 Test measurement and evaluation

Ch -7 Fundamentals of anatomy, physiology in sports.

(Including all the chapter in UT1)

Lab Manual -1 fitness test administration (SAI khelo test)

U.T 2—

Ch – 3 Yoga

Ch - 4 physical education and sports CWSN

Ch - 8 fundamental of kinesiology and Biomechanics

Ch- 9 psychology and sports

Annual Exam -ch -5 physical fitness wellness

Ch -10 training and doping in sports

Lab Manual

-2 practical-procedure from Assam benefit contradiction for any two asana each lifestyle disease

3 practical. Anyone ioa recognised sports/game of choice lable diagram of field and equipments also mention its rules terminology and skills

Annual Exam –(whole syllabus)

Mathematics

Term 1 (up to September)

PT 1

- Chapter 1 Sets
- Chapter 2 Relations and functions
- Chapter 3 Trigonometric Functions
- Chapter 4 Complex Numbers and Quadratic Equations



Mid Term Exam: (Including P.T. 1)

- Chapter 5 Linear Inequalities
- Chapter 6 Permutations and Combinations
- Chapter 11 Introduction to Three-dimensional Geometry (Do not include in mid term exam)

Activity : To interpret geometrically the meaning of $i = \sqrt{-1}$ and its integral powers.

Term 2

PT 2

- Chapter 7 Binomial Theorem
- Chapter 8 Sequence and Series
- Chapter 9 Straight Lines
- Chapter 10 Conic Sections

Annual Examination : (Including Whole syllabus)

- Chapter 12 Limits and Derivatives
- Chapter 13 Statistics
- Chapter 14 Probability

Activity : To explain the concept of octants by three mutually perpendicular planes in space.

PHYSICS

Unit test 1

Chapter–1: Chapter–2: Units and Measurements

Chapter–2: Motion in a Straight Line

Chapter–3: Motion in a Plane

Mid term exam

Chapter–1: Chapter–2: Units and Measurements

Chapter–2: Motion in a Straight Line

Chapter–3: Motion in a Plane

Chapter–4: Laws of Motion

Chapter–5: Work, Energy and Power

Chapter–6: System of Particles and Rotational Motion

Chapter–7: Gravitation

Experiments

1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume.
2. To measure diameter of a given wire and thickness of a given sheet using screw gauge.
3. To determine volume of an irregular lamina using screw gauge.
4. To determine radius of curvature of a given spherical surface by a spherometer.
5. To determine the mass of two different objects using a beam balance.



6. To find the weight of a given body using parallelogram law of vectors.
7. Using a simple pendulum, plot its L-T² graph and use it to find the effective length of second's pendulum.
8. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.
9. To study the relationship between force of limiting friction and normal reaction and to find the co-efficient of friction between a block and a horizontal surface.

Term 2

Unit test 2

Chapter–8: Mechanical Properties of Solids
Chapter–9: Mechanical Properties of Fluids
Chapter–10: Thermal Properties of Matter
Chapter–11: Thermodynamics
Chapter–12: Kinetic Theory

Annual exam

Chapter–1: Chapter–2: Units and Measurements
Chapter–2: Motion in a Straight Line
Chapter–3: Motion in a Plane
Chapter–4: Laws of Motion
Chapter–5: Work, Energy and Power
Chapter–6: System of Particles and Rotational Motion
Chapter–7: Gravitation
Chapter–8: Mechanical Properties of Solids
Chapter–9: Mechanical Properties of Fluids
Chapter–10: Thermal Properties of Matter
Chapter–11: Thermodynamics
Chapter–12: Kinetic Theory
Chapter–13: Oscillations
Chapter–14: Waves

Experiments

1. To determine Young's modulus of elasticity of the material of a given wire.
2. To find the force constant of a helical spring by plotting a graph between load and extension.
3. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and 1/V.



4. To determine the surface tension of water by capillary rise method.
5. To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.
6. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
7. To determine specific heat capacity of a given solid by method of mixtures.

COMPUTER SCIENCE

April-August

Unit 1: Computer Systems and Organisation

Unit 2: Computational Thinking and Programming – I

September-October

Unit 2: Computational Thinking and Programming – I

Lab Manual:-

Input a welcome message and display it. • Input two numbers and display the larger / smaller number. • Input three numbers and display the largest / smallest number. Determine whether a number is a perfect number, an Armstrong number or a palindrome. • Input a number and check if the number is a prime or composite number. • Display the terms of a Fibonacci series. • Compute the greatest common divisor and least common multiple of two integers. • Count and display the number of vowels, consonants, uppercase, lowercase characters in string. students who have marks above 75.

November-December

Unit 3: Society, Law and Ethics

Lab Manual

• Input a string and determine whether it is a palindrome or not; convert the case of characters in a string. • Find the largest/smallest number in a list/tuple • Input a list of numbers and swap elements at the even location with the elements at the odd location. • Input a list/tuple of elements, search for a given element in the list/tuple. • Create a dictionary with the roll number, name and marks of n students in a class and display the names

BIOLOGY

Term 1 :

UT- I :

Chapter-1: The Living World



Edit with WPS Office

Chapter-2: Biological Classification

Chapter-3: Plant Kingdom

Chapter-4: Animal Kingdom

LAB MANUAL:

1. Parts of a compound microscope.

2. Specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.

3. Virtual specimens/slides/models and identifying features of - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.

4. Study and describe locally available common flowering plants, from family Solanaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).

5. Different types of inflorescence (cymose and racemose).

HALF-YEARLY (April- September) (Including all the chapters of UT-1)

Chapter-5: Morphology of Flowering Plants

Chapter- 6: Anatomy of Flowering Plants

Chapter-7: Structural Organisation in Animals

Chapter-8: Cell-The Unit of Life

Chapter-9: Biomolecules

Chapter-10: Cell Cycle and Cell Division

LAB MANUAL:



1. Study of plasmolysis in epidermal peels (e.g. Rhoeo/lily leaves or flashy scale leaves of onion bulb).
2. Study of distribution of stomata on the upper and lower surfaces of leaves.
3. Comparative study of the rates of transpiration in the upper and lower surfaces of leaves.
4. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
5. To study mitosis through permanent slides.

HALF YEARLY EXAMINATION :

Whole Term – 1 syllabus.

Term 2 :

UT-II

Chapter-13: Photosynthesis in Higher Plants

Chapter-14: Respiration in Plants

Chapter-15: Plant – Growth and Development

Chapter-17: Breathing and Exchange of Gases

ANNUAL EXAM :

Chapter-18: Body Fluids and Circulation

Chapter-19: Excretory Products and their Elimination

Chapter-20: Locomotion and Movement

Chapter-21: Neural Control and Coordination

Chapter-22: Chemical Coordination and Integration

LAB MANUAL:

1. Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.
2. Separation of plant pigments through paper chromatography.
3. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
4. Test for presence of urea in urine.
5. Test for presence of sugar in urine.



6. Test for presence of albumin in urine.
7. Test for presence of bile salts in urine.
8. Human skeleton system and joints

ANNUAL EXAMINATION : Whole syllabus to be included.

