

TELANGANA STATE BOARD OF INTERMEDIATE EDUCATION, HYDERABAD

ACADEMIC YEAR 2020-2021

30% DELETED CONTENT IN VIEW OF COVID-19 PANDEMIC

(2020-2021) DELETED SYLLABUS

Subject: MATHEMATICS- IA

| <b>Chapter-1<br/>Functions</b>                      | <b>Chapter-2<br/>Mathematical Induction</b>             | <b>Chapter-3<br/>Matrices</b>   | <b>Chapter-5<br/>Product of vectors</b>   | <b>Chapter-7<br/>Trigonometric Equations</b> |
|---|---|---|---|--|
| 1.2 Inverse Functions & Theorems                    | complete chapter  | 3.4.8: Properties of Determinants related Problems and Examples<br>3.6: Consistency and inconsistency of system of simultaneous equations<br>3.7: Solutions of simultaneous linear equations Gauss-Jordan Method<br>3.7.7 onwards | 5.11 Vector Equation of a plain: Different forms, skew lines, shortest distance plain, condition for co-planarity etc.<br>5.12 Vector triple product, results | complete chapter                             |
| <b>Chapter-8<br/>Inverse Trigonometric Function</b> | <b>Chapter-9<br/>Hyperbolic functions</b>               |   |   |  |
| complete chapter                                    | 9.2 Definition of Inverse Hyperbolic functions & Graphs |   |   |  |

## Subject: MATHEMATICS- IB

| Chapter-4<br>Pair of straight lines  | Chapter-7<br>Plane   | Chapter-8<br>Limits and Continuity | Chapter-9<br>Differentiation  | Chapter-10<br>Applications of Derivatives  |
|--|--|------------------------------------|---|--|
| <p><b>4.3</b> Pair of bisectors of angles<br/>Exercise 4(a) and related problems</p> <p><b>4.5</b> Condition of pair of parallel lines and distance between them and point of intersection of pair of lines Exercise 4(b) and related problems</p> | <p>Exercise 7(a) Section II &amp; III<br/>Related examples</p> | <p><b>8.4</b> Continuity</p>       | <p><b>9.3</b> Problems of inverse trigonometric functions<br/>Exercise 9(c) Section III<br/>Deleted<br/>Exercise 9(d) Deleted</p> | <p><b>10.6</b> Derivative as a rate of change,<br/><b>10.7</b> Roles, lagranges, mean value theorems,<br/><b>10.8</b> Increasing and decreasing functions, and related Problems and Examples</p> |

## Subject: PHYSICS- I

| Chapter-I<br>PHYSICAL WORLD  | Chapter-II<br>UNITS AND MEASUREMENTS | Chapter-III<br>MOTION IN A STRAIGHT LINE | Chapter-IV<br>MOTION IN A PLANE | Chapter-V<br>LAWS OF MOTION   |
|--|--------------------------------------|--|---------------------------------|---|
| <p>1.2 Scope and Excitement of Physics.<br/>1.3 Physics Technology and Society<br/>1.5 Nature of Physical Laws</p> | <p>No Deletions</p>                  | <p>No Deletions</p>                      | <p>No Deletions</p>             | <p><b>5.2</b> Aristotle's fallacy<br/><b>5.3</b> The law of inertia<br/><b>5.4</b> Newton's first law of motion<br/><b>5.5</b> Newton's second law of motion<br/><b>5.6</b> Newton's third law of motion<br/><br/>(These topics are deleted, however they must be recapitulated as a pre-requisite to deal with the remaining topics of the chapter.)</p> |

| <b>Chapter-VI<br/>WORK, ENERGY AND<br/>POWER</b>            | <b>Chapter-VII<br/>SYSTEM OF PARTICLES<br/>AND ROTATIONAL<br/>MOTION</b>  | <b>Chapter VIII<br/>OSCILLATIONS</b>   | <b>CHAPTER –IX<br/>GRAVITATION</b>   | <b>CHAPTER –X<br/>MECHANICAL<br/>PROPERTIES OF SOLIDS</b>  |
|---|---|--|--|--|
| No Deletions  | <b>7.10.</b> Theorems of perpendicular and parallel axes.   | No Deletions   | 9.2. Kepler’s laws<br>9.4 The Gravitational Constant (despite the topic is deleted, the value of G should be mentioned to the student)<br>9.5 Acceleration due to gravity of earth | 10.6.2 Determination of Young’s Modulus of the material of a wire.<br>10.6.3 Shear modulus<br><b>10.6.5</b> Poisson’s ratio<br><b>10.6.6</b> Elastic potential energy in a stretched wire<br><b>10.6.7</b> Applications of elastic behavior of materials |
| <b>CHAPTER – XI<br/>MECHANICAL<br/>PROPERTIES OF FLUIDS</b> | <b>CHAPTER – XII<br/>THERMAL PROPERTIES<br/>OF MATTER</b>   | <b>CHAPTER – XIII<br/>THERMODYNAMICS</b>   | <b>CHAPTER – XIV<br/>KINETIC THEORY</b>  |  |
| No Deletions  | 12.9 Heat Transfer<br>12.9.1 Conduction<br>12.9.2 Convection<br>12.9.3 Radiation<br>(These topics are deleted, however they must be recapitulated as a pre-requisite to deal with the remaining topics of the chapter.) | <b>13.9</b> Heat engines<br><b>13.10</b> Refrigerator and heat pumps<br><b>13.13</b> Carnot engine | No Deletions   |  |

### Deleted Experiments of First Year

| <b>1</b>         | <b>2</b>        | <b>3</b>                      |
|------------------|-----------------|-------------------------------|
| Physical balance | Surface tension | Apparent expansion of liquids |

## Subject: CHEMISTRY- I

| Chapter-I<br>Atomic Structure  | Chapter-II<br>Classification of Elements and<br>Periodicity in Properties  | Chapter-III<br>Chemical Bonding and<br>Molecular Structure  | Chapter-IV<br>States of Matter Gases and<br>Liquids   | Chapter-V<br>Stoichiometry  |
|--|--|---|---|---|
| <p><b>1.1 Sub-atomic particles:</b> (Discovery of Electron, proton and Neutron); atomic number, isotopes and isobars.</p> <p><b>1.2 Atomic Models:</b> Thomson's model and its limitations. Rutherford's model and its limitations</p> <p><b>1.6</b> Quantum mechanical model of an atom - shapes of atomic orbitals</p> | <p><b>2.1</b> Need to classify elements</p> <p><b>2.2</b> Genesis of periodic classification.</p>  | -----Nil-----   | <p><b>4.10</b> Distribution of molecular speeds – rms, average and most probable speeds- kinetic energy of gas molecules</p> <p><b>4.12</b> Liquefaction of gases</p> <p><b>4.13</b> Liquid state – properties of liquids in terms of intermolecular interactions- vapour pressure, surface tension and viscosity (Qualitative idea only. No mathematical derivation)</p> | <p><b>5.2</b> Laws of chemical combinations, Gay Lussac's law of gaseous volumes, Dalton's atomic theory, Avogadro law <b>5.6</b> methods of expressing concentration of solutions</p> <p><b>5.11</b> redox reactions in titrimetry.(Applications of redox reactions)</p> |
| Chapter-VI<br>Thermodynamics   | Chapter-VII<br>Chemical Equilibrium and<br>Acids and Bases   | Chapter-VIII<br>Hydrogen and its Compounds  | Chapter-IX<br>S-Block Elements: Alkali and<br>Alkaline Earth Metals   | Chapter-X<br>P-Block Elements : Group-13<br>Boron Family  |
| <p><b>6.2.4</b> heat capacity and specific heat capacity</p> <p><b>6.7</b> Criteria for equilibrium</p>  | <p><b>7.7</b> Relationship between equilibrium constant K, reaction quotient Q and Gibbs energy G</p> <p><b>7.11</b> Ionisation of acids and bases</p> <p><b>7.12</b> Henderson equation</p> | <p><b>8.3</b> Preparation of dihydrogen</p> <p><b>8.4</b> Properties of dihydrogen</p> <p><b>8.7</b> Hydrogen peroxide preparation and properties, structure and use)</p> | <p><b>9.4</b> Some important compounds of sodium: sodium carbonate; sodium chloride; sodium hydroxide; sodium hydrogen carbonate</p> <p><b>9.5</b> Biological importance of sodium and potassium</p>  | <p><b>10.3</b> Important compounds of boron – borax, orthoboric acid, diboran</p> <p><b>10.4</b> Uses of boron, aluminium and their compound.</p>   |

|  |  |   |   |  |
|--|--|---|---|--|
|  | derivation   |   | Group 2 elements<br><b>9.9</b> Some important compounds of calcium<br><b>9.10</b> Biological importance of magnesium and Calcium. |  |
| <b>Chapter-XI</b><br><b>P-Block Elements : Group-14</b><br><b>Carbon Family</b>  | <b>Chapter-XII</b><br><b>Environmental Chemistry</b> | <b>Chapter-XIII</b><br><b>Organic Chemistry : Some Basic Principles and Techniques</b><br><b>Hydrocarbons</b>   |   |  |
| <b>11.4</b> Some important compounds of carbon and silicon, carbon monoxide, carbon dioxide, silicon dioxide, silicones, silicates and zeolites. | <i>ENTIRE CHAPTER DETETED</i>                        | <b>13.8</b> Methods of purification of organic compounds<br><b>13.9</b> Qualitative elemental analysis of organic compounds<br><b>13.10</b> Quantitative elemental analysis of organic compounds.<br><b>Note:</b> Free radical mechanism of halogenations, combustion and pyrolysis |   |  |

### Subject: BOTANY – I

| Unit – I  | Unit – III  | Unit – III  | Unit – IV                                   | Unit VI  |
|---|---|---|---|--|
| <b>Chapter 1</b><br><b>The living world</b><br>1.3 Taxonomic categories | <b>Chapter 5</b><br><b>Morphology of flowering plants</b> | <b>Chapter 6</b><br><b>Modes of reproduction</b><br>6..1 Reproduction & its types | <b>Chapter 8</b><br><b>Plant systematic</b> | <b>Chapter 12</b><br><b>Histology and anatomy of</b> |
|   |   |   |   | <b>Internal organisation of plants</b>               |

|  |   |   |                |   |
|--|---|---|----------------|---|
| 1.4 Taxonomic aids<br><br><b>Chapter 4</b><br><b>Plant kingdom</b><br>4.5 Angiosperms  | 5.1 The Root<br>5.2 The Stem<br>5.3 The Leaf<br>5.6 The Fruit<br>5.7 The Seed   | 6.2 Asexual reproduction<br>6.3 Sexual reproduction | 8.3.1 Fabaceae | <b>flowering plants</b><br>12.1 The tissues<br>12.2 The tissues systems<br>12.3 <b>Anatomy</b><br>12.3.5 Dorsiventral leaf<br>12.5.5 Isobilateral leaf<br>12.4 Secondary growth |
| <b>Unit VII</b>  | Deleted PRATICALS   |   |                |   |
| <b>Chapter 13</b><br><b>Ecological adaptation, Succession &amp; Ecological services</b><br>13.3 Plant succession<br>13.4 Ecological services | <ol style="list-style-type: none"> <li>1. Study of modifications of root</li> <li>2. Study of modifications of stem</li> <li>3. Study of modifications of leaf</li> <li>4. Study and description of Family: Fabaceae</li> <li>5. Study of tissues and diversity in shapes and sizes in plant cells</li> </ol> |   |                |   |

**Subject: ZOOLOGY – I**

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|---|---|--|---|--|
| <b>Unit – I</b><br><b>ZOOLOGY - Diversity of Living World</b> | <b>Unit – V</b><br><b>LOCOMOTION &amp; REPRODUCTION IN PROTOZOA</b> | <b>UNIT- VII</b><br><b>TYPE STUDY OF PERIPLANETA AMERICANA</b> | <b>UNIT- VIII</b><br><b>ECOLOGY &amp; ENVIRONMENT</b> |  |
|---|---|--|---|--|

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| <p>1.4 Need for classification- Zoos as tools for the study of taxonomy</p> <p>1.5 Biological Classification: Biological system of classification- (Phylogenetic classification only)</p> | <p>5.1. Locomotion: Definition, types of locomotor structures pseudopodia (basic idea of pseudopodia without going into different types), flagella &amp; cilia (Brief account giving two examples each)</p> <p>5.2. Flagellar &amp; Ciliary movement - Effective &amp; Recovery strokes in Euglena, Synchronal &amp; Metachronal movements in Paramecium.</p> <p>5.3. Asexual Reproduction</p> <p>5.4. Sexual Reproduction.</p> | <p>7.1 Habitat and habits</p> <p>7.2 External features</p> <p>7.3 Locomotion</p> <p>7.4 Digestive system</p> <p>7.5 Respiratory system</p> <p>7.6 Circulatory system</p> <p>7.7 Excretory system</p> <p>7.8 Nervous system - sense organs, structure of Ommatidium.</p> <p>7.9 Reproductive system</p> | <p>8.4 Ecosystems and their components</p> <p>8.4.1. The Natural Ecosystems:</p> <p>8.4.2. Aquatic Ecosystem</p> <p>8.4.3. Lake Ecosystem</p> <p>8.4.4. Terrestrial Ecosystem</p> <p>8.5.3 Energy Flow</p> <p>8.5.4 Productivity</p> <p>8.5.5 Ecological Pyramids</p> <p>8.6 Nutrient cycles – Carbon, Phosphorous cycles (Brief account)</p> <p>8.8 Environmental issues</p> |  |
|---|---|--|---|--|

**Deleted PRATICALS**

|            |   |  |                                      |
|------------|---|--|--------------------------------------|
| <b>II.</b> | <b>Study of Invertebrate slides and identification with giving Classification and reasons</b> |  |                                      |
|            | <b>4. Cockroach – Mouth Parts</b>   | <b>5. Cockroach – Digestive System</b> | <b>6. Cockroach – Nervous System</b> |