

TELANGANA STATE BOARD OF INTERMEDIATE EDUCATION, HYDERABAD

ACADEMIC YEAR 2020-2021

30% DELETED CONTENT IN VIEW OF COVID-19 PANDEMIC

(2020-2021) DELETED SYLLABUS – Part - III

Subject: MATHEMATICS- IIA

<b>Chapter-1</b> <b>Complex Numbers</b>	<b>Chapter-2</b> <b>Demovier's Theorem</b>	<b>Chapter-3</b> <b>Quadratic expressions</b>	<b>Chapter-5</b> <b>Permutations and Combinations</b>	<b>Chapter-6</b> <b>Binomial Theorem</b>
<b>1.3</b> Modulus and amplitude, <b>1.4</b> Geometrical and polar representation	Exercise 2 (b) section II onwards	<b>3.3</b> Quadratic inequalities	<b>5.3</b> Permutations when repetitions are allowed, <b>5.4</b> Circular permutations, <b>5.5</b> Permutations with constraint repetitions Exercise 5(e) Section III	Exercise 6(a) Section II 5th problem onwards and related examples Exercise 6(b) Section II and related examples Exercise 6(c)
<b>Chapter-7</b> <b>Partial Fractions</b>	<b>Chapter-8</b> <b>Measures of Dispersion</b>	<b>Chapter-9</b> <b>Probability</b>		
Exercise 7 (d)	<b>8.2.2</b> Mean Deviation for grouped data onwards Exercise 8(a) Section I Problem 3 onwards	<b>9.3.9</b> Baye's Theorem and problems on Baye's theorem		

## Subject: MATHEMATICS- IIB

<b>Chapter-3 Parabola</b>	<b>Chapter-4 Ellipse</b>	<b>Chapter-5 Hyperbola</b>	<b>Chapter-6 Integration</b>	<b>Chapter-7 Definite Integrals</b>
<b>3.2</b> Equation of tangent and normal at a point on the parabola	<b>4.2</b> Equation of tangent and normal at a point on the ellipse	<b>5.2</b> Equation of tangent and normal at a point on the hyperbola Exercise 5(a) Section II onwards and related examples	<b>6.2(b)</b> Integration by parts onwards <b>6.3</b> Integration-partial fraction method <b>6.4</b> Reduction formulae	Exercise-7(b) Section II (8 to 15), <b>7.5</b> Reduction formula <b>7.6</b> Application of definite integrals to areas
<b>Chapter-8 Differential equations</b>				
<b>8.2(b)</b> Homogeneous DE, <b>8.2(c)</b> Non homogeneous DE, <b>8.2(d)</b> Linear differential equations				

## Subject: PHYSICS- II

<b>Chapter-1 WAVES</b>	<b>Chapter-2 RAY OPTICS AND OPTICAL INSTRUMENTS</b>	<b>Chapter-3 WAVE OPTICS</b>	<b>Chapter-4 ELECTRIC CHARGES AND FIELDS</b>	<b>Chapter-5 ELECTROSTATIC POTENTIAL AND CAPACITANCE</b>
<b>1.8</b> Doppler Effect	<b>2.2</b> Reflection of light by Spherical Mirrors <b>2.8.2</b> Scattering of light	<b>3.6.3</b> Resolving power of optical instruments <b>3.7</b> Polarization	<b>4.15.3</b> Field due to a uniformly charged thin spherical shell	5.16 Van de Graaf generator

<b>Chapter-6</b> <b>CURRENT ELECTRICITY</b>	<b>Chapter-7</b> <b>MOVING CHARGES AND MAGNETISM</b>	<b>Chapter-8</b> <b>MAGNETISM AND MATTER</b>	<b>Chapter-9</b> <b>ELECTROMAGNETIC INDUCTION</b>	<b>Chapter-10</b> <b>ALTERNATING CURRENT</b>
<b>6.7</b> Resistivity of various Materials <b>6.10</b> Combination of resistors- series and parallel	<b>7.4</b> Motion in combined electric and magnetic fields	<b>8.2.2</b> Bar Magnet as a equivalent solenoid <b>8.2.3</b> The dipole in a uniform magnetic field <b>8.6</b> Magnetic properties of materials <b>8.7</b> Permanent magnets and electromagnets	No deletions	<b>10.7</b> Power in AC Circuits: The power factor
<b>Chapter-11</b> <b>ELECTRO MAGNETIC WAVES</b>	<b>Chapter-12</b> <b>DUAL NATURE OF RADIATION AND MATTER</b>	<b>Chapter-13</b> <b>ATOMS</b>	<b>Chapter-14</b> <b>NUCLEI</b>	<b>Chapter-15</b> <b>SEMICONDUCTOR ELECTRONICS: MATERIALS, DEVICES AND SIMPLE CIRCUITS</b>
<b>11.2</b> Displacement Current	<b>12.9</b> Davisson and Germer Experiment	No deletions	<b>14.4.2</b> Nuclear Binding energy <b>14.6</b> Radioactivity	<b>15.8.1</b> Zener diode <b>15.9.3</b> Transistor as a device <b>15.9.4</b> Transistor as an amplifier (CE configuration) <b>15.9.5</b> Feedback amplifier and transistor oscillator
<b>Chapter-16</b> <b>COMMUNICATION SYSTEMS</b>				
No deletions				

### Deleted Experiments of Second Year

<b>1</b>	<b>2</b>	<b>3</b>
Concave mirror	Tangent galvanometer	Characteristics of transistor

## Subject: CHEMISTRY - II

<b>Chapter-I</b> <b>Solid state</b>	<b>Chapter-II</b> <b>Solutions</b>	<b>Chapter-III</b> <b>Electrochemistry and Chemical Kinetics Electrochemistry</b>	<b>Chapter-IV</b> <b>Surface Chemistry</b>	<b>Chapter-V</b> <b>General Principles of Metallurgy</b>
<b>1.11</b> Electrical properties <b>1.12</b> Magnetic properties( Band theory of metals, conductors, semiconductors and insulators and n and p type semiconductors)	<b>2.7</b> Abnormal molar masses	<b>3.1</b> Electrochemical cells <b>3.2</b> Galvanic cells <b>3.5</b> Electrolytic cells <b>3.6</b> Batteries: primary and secondary batteries <b>3.7</b> Fuel cells <b>3.8</b> Corrosion of metals- Hydrogen economy <b>3.14</b> Collision theory of chemical reaction rates.	<b>4.5</b> Emulsions – types of emulsions, catalysis, homogenous and heterogenous, activity and selectivity of solid catalysis, enzyme catyalsis.	<i>Entire chapter deleted</i>
<b>Chapter-VI</b> <b>p-block Elements Group-15 Elements</b>	<b>Chapter-VII</b> <b>d and f Block Elements &amp; Coordination Compounds</b>	<b>Chapter-VIII</b> <b>Polymers</b>	<b>Chapter-IX</b> <b>Biomolecules</b>	<b>Chapter-X</b> <b>Chemistry in Everyday life</b>
<b>6.7</b> Phosphine-preparation and properties <b>6.8</b> Phosphorous halides <b>6.9</b> Oxoacids of phosphorous <b>6.17</b> Sulphuric acid-industrial process of manufacture.	<b>7.4</b> Some important compounds of transition elements <b>7.5</b> Inner transition elements <b>7.6</b> Actinoids <b>7.7</b> Some applications of d and f block elements and Coordination Compounds (preparation and properties of $KMnO_4$ and $K_2Cr_2O_7$ , structure and stereoisomerism of coordination compounds, extraction of metals and biological system)	<i>Entire chapter deleted</i>	<b>9.1</b> Disaccharides (sucrose, lactose, maltose), poly saccharides( starch, cellulose, glycozen), importance of carbohydrates) <b>9.3</b> Enzymes: Enzymes, mechanism of enzyme action <b>9.4</b> Vitamins <b>9.6</b> Hormones.	<i>Entire chapter deleted</i>

Chapter-XI Halo Alkanes and Halo Arenes	Chapter-XII Organic Compounds Containing C,H and O	Chapter-XIII Organic compounds containing nitrogen		
11.6 Polyhalogen compounds.	12.7 Commercially important alcohols (uses with special reference to methanol and ethanol)	<b>II. Diazonium salts</b> 13.7 Methods of preparation of diazonium salts 13.8 Physical properties 13.9 Chemical reactions 13.10 Importance of diazonium salts in synthesis of aromatic compounds <b>III. Cyanides and Isocyanides</b> 13.11 Structure and nomenclature of cyanides and isocyanides 13.12 Preparation, physical properties and chemical reactions of cyanides and isocyanides.		

### Deleted PRATICALS

**b. Preparation of one Lyophilic and one lyophobic sol** Lyophilic sol – starch, egg albumin and gum lyophobic sol – aluminium hydroxide, ferric hydroxide, arsenous sulphide.

**c. Chromatography**

- i) Separation of pigments from extracts of leaves and flowers by paper chromatography and determination of R<sub>f</sub> values.
- ii) Separation of constituents present in an inorganic mixture containing two cations only (constituents having large difference in R<sub>f</sub> values to be provided).

## Subject: BOTANY – II

CHAPTER 1 TRANSPORT IN PLANTS	CHAPTER 2 MINERAL NUTRITION	CHAPTER 6 PLANT GROWTH AND DEVELOPMENT	CHAPTER 7 BACTERIA	CHAPTER 8 VIRUSES
1 TO 25 pages	29 TO 42 pages	105 to 113 pages & 118 to 123 pages	127 to 135 Pages	137 to 145 pages
<b>CHAPTER 13 STRATEGIES FOR ENHANCEMENT IN FOOD PRODUCTION</b>	Deleted PRATICALS			
241 TO 256 Pages	<p><b><u>Part-I (To be performed by students)</u></b></p> <ol style="list-style-type: none"> <li>1. Study of Osmosis by potato Osmoscope.</li> <li>2. Study of plasmolysis in epidermal peel.</li> <li>3. Comparative study of rates of transpiration in the upper and lower surfaces of leaf ( by <math>\text{CO}_2</math> method)</li> <li>4. Study of plant population density and frequency by quadrant method.</li> </ol> <p><b><u>Part II (To be demonstrated by teacher)</u></b></p> <ol style="list-style-type: none"> <li>5. Study of imbibition of seeds</li> <li>6. Observe &amp; Comment: Suction due to transpiration pull</li> <li>7. <i>Activity</i>: Exercise on controlled pollination- Emasculation, tagging &amp; bagging</li> </ol>			

## Subject: ZOOLOGY – II

UNIT-I Human Anatomy and Physiology -I	UNIT III Human Anatomy and Physiology-III	UNIT VII Organic Evolution	UNIT VIII Applied Biology	
<p><b>Unit I A:</b> <b>Digestion and absorption</b> Alimentary canal and digestive glands; Role of digestive enzymes and gastrointestinal hormones; Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats, egestion, Calorific value of proteins, carbohydrates and fats (for box item-not to be evaluated); Nutritional disorders: Protein Energy Malnutrition (PEM), indigestion, constipation, vomiting, jaundice, diarrhea, Kwashiorkor.</p>	<p><b>Unit IIIA: Muscular and Skeletal system</b> Skeletal system and its functions; Joints. <i>(to be dealt with relevance to practical syllabus)</i>; Disorders of the muscular and skeletal system: myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout, regormortis.</p> <p><b>Unit III B: Neural control and co-ordination</b> Reflex action; Sensory perception; Sense organs; Brief description of other receptors; Elementary structure and functioning of eye and ear.</p>	<p>Origin of Life, Biological evolution and Evidences for biological evolution (palaeontological, comparative anatomical, embryological and molecular evidences); Theories of evolution: Lamarckism (in brief), Darwin's theory of Evolution -Natural Selection with example (Kettlewell's experiments on Bistonbitularia), Mutation Theory of Hugo De Vries; Modern synthetic theory of Evolution - Hardy-Weinberg law ; Types of Natural Selection; Gene flow and genetic drift; Variations (mutations and genetic recombination); Adaptive radiation - viz., Darwin's finches and adaptive radiation in marsupials; Human evolution; Speciation - Allopatric, sympatric; Reproductive isolation.</p>	<p>Bio-medical Technology : Diagnostic Imaging X-ray, CTscan, MRI, ECG, EEG; ELISA.</p>	

## ZOOLOGY – II - Deleted PRATICALS

<b>A. DISSECTIONS AS MODELS THROUGH UNLABELLED MODELS OR CHARTS</b>	<b>B. PHYSIOLOGY EXPERIMENTS</b>	<b>C. VERTEBRATE SLIDES OF MAMMAL</b>	<b>D. OSTEOLOGY – JOINTS</b>
Human Digestive system	<ol style="list-style-type: none"><li>1. Identification of presence of lipids/fats in the given samples.</li><li>2. Identification of presence of starch in the given samples.</li></ol>	<ol style="list-style-type: none"><li>1. T.S. of stomach</li><li>2. T.S. of intestine</li><li>3. T.S. of liver</li><li>4. T.S. of pancreas</li></ol>	<ol style="list-style-type: none"><li>1. Ball and socket joint</li><li>2. Hinge joint</li><li>3. Pivot joint</li><li>4. Gliding joint</li></ol>