ACADEMIC SESSION 2018-19 : COURSE PLANNING

Course Program Name - XI ADHITA	Course Code - RDNEET	Course Duration - 850 Hrs

TARGET EXAM - NEET/AIPMT

Course Commencement : **04.06.2018**	**Subject - biology**

S.No	No. of week	Week Duration	No. of Classes	Topic(s) Name (No. of Lectures)	Sub-topic(s) Name (No. of Lectures)
1	**W1**	04/6/2018 to 09/06/18	6	Diversity in Living world- I	**"1. What is living? ; Biodiversity; Need for classification 2. Three domains of life 3. Taxonomy & Systematics 4. Concept of species and taxonomical hierarchy 5. Binomial nomenclature 6. Tools for study of Taxonomy – Museums, Zoos, Herbaria, Botanical gardens (Discussion of NCERT Questions)"**
2	**W2**	11/06/18 to 16/06/18	6	Diversity in Living world- I	**1. Five kingdom classification 2. salient features and classification of Monera 3. salient features and classification of Monera 4. Protista 5. Protista Continnues 6. Fungi into majar groups**
3	**W3**	18/06/18 to 23/06/18	6	Diversity in Living world- I	1. Fungi into major groups 2. Lichens; Viruses and Viroids 3. (Discussion of NCERT Questions)
4	**W4**	25/06/18 to 30/06/18	6		**Summer Vacation**
5	**W5**	02/07/18 to 07/07/18	6	Diversity in Living world- II	**1. Algae 2. Bryophytes 3. Pteridophytes 4. Gymnosperms 5. Gymnosperms Continues 6. to 9. Angiosperms (three to five salient and distinguishing features and at least two examples of each category); Angiosperms- classification up to class, characteristic features and examples). (Discussion of NCERT Questions)**
6	**W6**	09/07/18 to 14/07/18	6	Structural Organisation in Plants	**1. Morphology of flowering plants 2. Roots 3. Modifications of Root 4. Stem 5. Modifications of Stem 6. Leaf**
7	**W7**	16/07/18 to 21/07/18	6	Structural Organisation in Plants	**1. Modifications of Leaves 2. Inflorescence 3. Flower 4. Flower Continues 5. Fruits 6. Seeds**

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8	**W8**	23/07/18 to 28/07/18		Structural Organisation in Plants	**1. Dispersal of Fruits and Seeds (Discussion of NCERT Questions)** **2. Anatomy and functions of different parts of flowering plants"** **3. Tissues - Meristematic Tissue** **4. Tissues - Permanent Tissue** **5. Tissue System - Epidermal Tissue System** **6. Tissue System - Ground Tissue System**
9	**W9**	30/07/18 to 04/08/18	6	Structural Organisation in Plants	**1. Tissue System - Vascular Tissue System** **2. anatomy of Dicotyledons Roots and Monocotyledons Roots** **3. anatomy of Dicotyledons Stem and Monocotyledons Stem** **4. anatomy and functions of leaf** **5. Secondary Growth in Stem** **6. Secondary Growth in Root**
10	**W10**	06/08/18 to 11/08/18	6	Structure and Functions (Cell, Biomolecule, and Cell cycle)	**1. Cell theory and cell as the basic unit of life** **2. Structure of prokaryotic and eukaryotic cell,** **3. Plant cell and animal cell** **4. Cell envelope, cell membrane, cell wall**
11	**W11**	13/08/18 to 18/08/18	6	Structure and Functions (Cell, Biomolecule, and Cell cycle)	**1. Cell organelles-structure and function** **2. Endomembrane system-endoplasmic reticulum, Golgi bodies,** **3. lysosomes, vacuoles; mitochondria, ribosomes,** **4. plastids, micro bodies;** **5. Cytoskeleton, cilia, flagella, centrioles (ultra structure and function)** **6. Cytoskeleton, cilia, flagella, centrioles (ultra structure and function) continues**
12	**W12**	20/08/18 to 25/08/18	6	Structure and Functions (Cell, Biomolecule, and Cell cycle)	**1. Nucleus-nuclear membrane, chromatin, nucleolus** **2. Chemical constituents of living cells** **3. Biomolecules-structure and function of proteins** **4. Biomolecules-structure and function of proteins continues** **5. carbodydrates** **6. carbodydrates continues**
13	**W13**	27/08/18 to 01/09/18	6	Structure and Functions (Cell, Biomolecule, and Cell cycle)	**1. lipids** **2. nucleic acids** **3. nucleic acids continues** **4. Enzymes-types, properties, enzyme action.** **5. Enzymes-types, properties, enzyme action continues** **6. Cell division**
14	**W14**	03/09/18 to 08/09/18	6	Structure and Functions (Cell, Biomolecule, and Cell cycle)	**1. Cell cycle** **2. mitosis** **3. mitosis continues** **4. meiosis** **5. meiosis and their significance.**
15	**W15**	10/09/18 to 15/09/18	6	Plant Physiology	1. Transport in plants: Movement of water, gases and nutrients 2. Cell to cell transport-Diffusion 3. facilitated diffusion, active transport 4. Plant – water relations – Imbibition 5. Plant – water relations – water potential 6. osmosis, plasmolysis

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16	**W16**	17/09/18 to 22/09/18	6	Plant Physiology	1. Long distance transport of water 2. Absorption, apoplast, symplast 3. transpiration pull 4. root pressure and guttation 5. Transpiration-Opening and closing of stomata 6. Transpiration-Opening and closing of stomata
17	**W17**	24/09/18 to 29/09/18	6	Plant Physiology	1. Uptake and translocation of mineral nutrients 2. phloem transport 3. Mass flow hypothesis 4. Mass flow hypothesis continues 5. Diffusion of gases (brief mention). (Discussion of NCERT Questions) 6. Mineral nutrition - Essential minerals, macro and micronutrients
18	**W18**	01/10/18 to 06/10/18	6	Plant Physiology	1. their role Deficiency symptoms 2. Mineral toxicity 3. Elementary idea of Hydroponics as a method to study mineral nutrition" 4. Nitrogen metabolism 5. Nitrogen cycle 6. biological nitrogen fixation
19	**W19**	08/10/18 to 13/10/18	6	Plant Physiology	1. biological nitrogen fixation" (Discussion of NCERT Questions) 2. Photosynthesis - Photosynthesis as a means of Autotrophic nutrition 3. Site of photosynthesis take place 4. Photochemical and biosynthetic phases of photosynthesis 5. Chemiosmotic hypothesis-Cyclic & non cyclic photophosphorylation 6. pigments involved in photosynthesis (elementary idea)
20	**W20**	15/10/18 to 20/10/18	6	Plant Physiology	1. Photorespiration 2. C3 3. C4 pathways 4.Factors affecting photosynthesis" (Discussion of NCERT Questions) 5. Respiration, Exchange gases 6. Cellular respiration-glycolysis
21	**W21**	22/10/18 to 27/10/18	5	Plant Physiology	1. fermentation (anaerobic) Link Reaction 2. TCA cycle 3. electron transport system (aerobic) molecules generated, Respiratory quotient 4. Amphibolic pathways (Discussion of NCERT Questions) 5. Plant growth and development 6. Energy relations-Number of ATP
22	**W22**	29/10/18 to 03/11/18	6	Plant Physiology	1. Seed germination" 2. Phases of Plant growth and plant growth rate 3. Conditions of growth, Differentiation, dedifferentiation and redifferentiation 4. Sequence of developmental process in a plant cell; 5. Growth regulators-auxin, 6. Growth regulators - gibberellin
23	**W23**	05/11/18 TO 10/11/18			**Diwali**
24	**W24**	12/11/18 TO 17/11/18	6	Plant Physiology	1. Growth regulators - cytokinin 2. Growth regulators - ethylene 3.Growth regulators - ABA 4. Seed dormancy 5. Vernalisation

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25	**W25**	19/11/18 to 24/11/18	6	Plant Physiology + Human Physiology	1. Photoperiodism (Discussion of NCERT Questions) 2. Digestion and absorption 3. Alimentary canal and digestive glands 4. Alimentary canal and digestive glands 5. Role of digestive enzymes and gastrointestinal hormones 6. Role of digestive enzymes and gastrointestinal hormones
26	**W26**	26/11/18 to 01/12/18	6	Human Physiology	1. Peristalsis 2. absorption 3.. assimilation of proteins, carbohydrates and fats 4. assimilation of proteins, carbohydrates and fats 5. Caloric value of proteins, carbohydrates and fats 6. Egestion
27	**W27**	26/11/18 to 01/12/18	6	Human Physiology	1. Nutritional and digestive disorders - PEM, indigestion, constipation, vomiting, jaundice, diarrhea 2. (Discussion of NCERT Questions) 3. Breathing and Respiration 4. Respiratory organs in animals 5. Respiratory system in humans 6. Mechanism of breathing and its regulation in humans
28	**W28**	03/12/18 to 08/12/18	6	Human Physiology	1. Mechanism of breathing and its regulation in humans" 2.Exchange of gases 3. transport of gases 4. regulation of respiration 5. Respiratory volume 6. Disorders related to respiration-Asthma, Emphysema, Occupational respiratory disorders (Discussion of NCERT Questions)
29	**W29**	10/12/18 to 15/12/18	5	Human Physiology	**1. Body fluids and circulation** **2. Composition of blood 3.** **Composition of blood** **4. blood groups, coagulation of blood 5. Formation, Composition and function of Lymph** **6. Human circulatory system**
30	**W30**	17/12/18 to 22/12/18	5	Human Physiology	**1. Structure of human heart and blood vessels** **2. Cardiac cycle** **3. cardiac output, ECG, Double circulation** **4. Regulation of cardiac activity 5.** **Disorders of circulatory system-Hypertension, Coronary artery disease, Angina pectoris, Heart failure (Discussion of NCERT Questions)** **6. Excretory products and their elimination**
31	**W31**	24/12/18 to 29/12/18		Human Physiology	**1. Modes of excretion - Ammonotelism, ureotelism, uricotelism** **2. Human excretory system-structure and fuction continues** **3. Human excretory system-structure and fuction continues** **4. Urine formation** **5. Osmoregulation** **6. Regulation of kidney function**
32	**W32**	31/12/18 to 05/01/19	6	Human Physiology	**1. Renin-angiotensin, Atrial Natriuretic Factor** **2. ADH and Diabetes insipidus "** **3. Role of other organs in excretion** **4. Disorders; Uraemia, Renal failure, Renal calculi, Nephritis; Dialysis and artificial kidney (Discussion of NCERT Questions)** **5. Locomotion and Movement - Types of movement- ciliary, fiagellar, muscular** **6. Types of Muscles**

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33	**W33**	07/01/19 to 12/01/19	6	Human Physiology	1. Skeletal muscle" 2. contractile proteins and muscle contraction 3. contractile proteins and muscle contraction continues 4. Skeletal system and its functions 5. Skeletal system and its functions continues
34	**W34**	14/01/19 to 19/01/19	6	Human Physiology	1. Joints 2. Disorders of muscular and skeletal system - Myasthenia gravis, Tetany, Muscular dystrophy, Arthritis, Osteoporosis, Gout (Discussion of NCERT Questions) 3. Neural control and coordination: Neuron and nerve 4. Nervous system in humans - central nervous system 5. central nervous system continues 6. peripheral nervous system
35	**W35**	21/01/19 to 26/01/19	6	Human Physiology	**1. peripheral nervous system** **2. visceral nervous system** **3. visceral nervous system continues** **4. Generation and conduction of nerve impulse** **5. Generation and conduction of nerve impulse continues** **6. Reflex action**
36	**W36**	28/01/19 to 02/02/19	6	Human Physiology	**1. Sense organs** **2. Elementary structure and function of eye** **3. Elementary structure and function of eye continues** **4. ear** **5. ear continues (Discussion of NCERT Questions)** **6. Chemical coordination and regulation, Types of Glands**
37	**W37**	4/2/2019 to 09/02/19	6	Human Physiology	1. Human endocrine system 2. Hypothalamus, 3. Pituitary, Pineal 4. Thyroid, Parathyroid 5. Adrenal 6. Pancreas
38	**W38**	11/02/19 to 16/02/19	6	Human Physiology	1. Gonads 2. Mechanism of hormone action (Elementary Idea) 3. Mechanism of hormone action (Elementary Idea) continues 4. Role of hormones as messengers and regulators
39	**W39**	18/02/18 to 23/02/18		Structural Organisation in Animals	1. Salient features and Basis of Classification 2. Classification of Animals 3. Porifera 4. Coelenterata (cnidaria) 5. Ctenophora 6. Platyhelminthes 7. Aschelminthes 8. Annelida 9. Arthropoda
40	**W40**	25/02/19 to 02/03/19	5	Structural Organisation in Animals	1. Arthropoda continues 2. Mollusca 3. Echinodermata 4. Hemichordata 5.Chordata - Urochordata 6. Chordata - Cephalochordata

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41	**W41**	04/03/19 to 09/03/19	6	Structural Organisation in Animals	1. Chordata - Vertibrata 2. Chordata - Vertibrata (Cyclostomata) 3. Chordata - Vertibrata (Pisces) 4. Chordata - Vertibrata (Amphibia) 5. Chordata - Vertibrata (reptilia) 6. Chordata - Vertibrata (aves)
42	**W42**	11/03/18 to 16/03/18	6	Structural Organisation in Animals	1.Chordata - Vertibrata (mammalia) 2. Chordata - Vertibrata (mammalia) continues (Discussion of NCERT Questions) 3. Salient features and classification of plants into major groups
43	**W43**	28.01.2019 to 31.01.2019		Structural Organisation in Animals	1. Animal Tissues- Epithelial Tissue 2. Connective Tissue 3. Muscles Tissues 4. Neural Tissue 5. Morphology and Anatomy of Earthworm 6. Morphology and Anatomy of Earthworm Continues 7. Morphology and Anatomy of Cockroach 8. Morphology and Anatomy of Frog