

ACADEMIC SESSION 2018-19 : COURSE PLANNING

Course Program Name - XII ADHITA

Course Code - RDNEET

Course Duration - 900 Hrs

TARGET EXAM - NEET / AIPMT

Course Commencement : 07.03.2018

Subject - Biology

S.No	No. of week	Week Duration	No. of Class	Topic(s) Name (No. of Lectures)	Sub-topic(s) Name (No. of Lectures)	Topic(s) Name (No. of Lectures)	Sub- Topics Name (No. of Lectures)
1	W1	07.03.2018 To 10.03.2018	6		1. Reproduction in organisms 2. Reproduction, a characteristic feature of all organisms for continuation of species 3. Modes of reproduction – Asexual and sexual 4. Asexual reproduction 5. Modes-Binary fission 6. sporulation		1. Organisms and environment 2. Organisms and environment continues 3. Habitat and niche 4. Population and ecological adaptations 5. Population and ecological adaptations
2	W2	12.03.2018 To 17.03.2018	6		1. budding 2. gemmule 3. fragmentation 4. vegetative propagation in plants 5. vegetative propagation in plants Continues (Discussion of NCERT Questions) 6. Merits of Vegetative Propagation		1. Population interactions 2. mutualism, 3. competition, predation 4. parasitism 5. Population attributes-growth
3	W3	19.03.2018 To 24.03.2018	6		1. Sexual reproduction in flowering plants 2. Flower structure 3. Flower structure 4. Development of male and female gametophytes 5. Embryo sac Formation 6. Pollen germination		1. birth rate 2. death rate 3. age distribution 4. (Discussion of NCERT Questions) 5. Ecosystem 6. Patterns, components

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4	W4	26.03.2018 To 31.03.2018	6	Reproduction	1. Pollination-types, agencies and examples 2. Pollination-types, agencies and examples Continues 3. Pollination-types, agencies and examples Continues 4. Outbreeding devices 5. Pollen-Pistil interaction 6. Double fertilization	Ecology & Environment	1. Energy flow Pyramids of number, biomass, energy 2. Energy flow; Pyramids of number, biomass, energy 3. Energy flow; Pyramids of number, biomass, energy continues 4. Nutrient cycling (carbon and phosphorous); 5. Nutrient cycling (carbon and phosphorous); continues
5	W5	02.04.2018 To 07.04.2018	6		1. Post fertilization events 2. Development of endosperm 3. embryo 4. Development of seed and formation of fruit 5. Types of fruits 6. Special modes-apomixis		1. Ecological succession - Primary Succession 2. Ecological succession - Hydrach Succession 3. Xerarch succession 4. Ecological succession Stability and Advantages 5. Ecological Services-Carbon fixation
6	W6	09.04.2018 To 14.04.2018	6		1. parthenocarpy, polyembryony 2. Significance of seed and fruit formation (Discussion of NCERT Questions) 3. Human Reproduction 4. Male and female reproductive systems 5. Male reproductive systems 6. Male reproductive systems- Accessory glands and Hormones		1. pollination 2. oxygen release 3. (Discussion of NCERT Questions) 4. Biodiversity and its conservation 5. Biodiversity and its conservation Methods

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7	W7	16.04.2018 To 21.04.2018	6		1.Female reproductive systems 2. Female reproductive systems- Accessory glands and Hormones 3. Female reproductive systems- Accessory glands and Hormones Continues 4. Microscopic anatomy of testis 5. Microscopic anatomy of ovary		1. Concept of Biodiversity 2. Patterns of Biodiversity 3. Importance of Biodiversity 4. Loss of Biodiversity 5. Biodiversity conservation; Hotspots
8	W8	23.04.2018 To 28.04.2018	6		1. Gametogenesis 2. spermatogenesis 3. oogenesis 4. Menstrual cycle 5. Estrous Cycle 6. Fertilisation		1. endangered organisms 2. extinction 3. Red Data Book 4. biosphere reserves, 5. National parks
9	W9	30.04.2018 To 05.05.2018	6		1. embryo development upto blastocyst formation 2. embryo development upto blastocyst formation Continues 3. implantation 4. Pregnancy and placenta formation (Elementary idea); 5. Types of placenta formation (Elementary idea); 6. Parturition (Elementary idea); Lactation (Elementary idea) (Discussion of NCERT Questions)		1. sanctuaries. 2. (Discussion of NCERT Questions) 3. Environmental issues 4. Air pollution and its control 5. Air pollution and its control Continues
10	W10	07.05.2018 To 12.05.2018	6		1. Reproductive health: 2. Need for reproductive health 3. Strategies for reproductive health 4. Birth control 5. Need and Methods 6. STDs and its prevention		1. Water pollution and its control 2. Water pollution and its control Continues 3. Water pollution - a global major problem discussion 4. Agrochemicals and their effects 5. Solid waste management

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11	W11	14.05.2018 To 19.05.2018	6	Reproduction + Genetics & Evolution	1. Medical Termination of Pregnancy (MTP) 2. Amniocentesis 3. Infertility and assisted reproductive technologies 4. IVF, ZIFT, GIFT (Discussion of NCERT Questions) 5. Heredity and variation 6. Mendelian Inheritance		1. Solid waste management strategy 2. Solid waste management stages 3. Solid waste management methods 4. Radioactive waste management 5. Greenhouse effect and GHGs
12	W12	21.05.2018 To 03.06.2018			Summer Vacation		
13	W13	04.06.2018 To 09.06.2018	6		1. Deviations from Mendelism-Incomplete dominance 2. Co-dominance 3. Multiple alleles and Inheritance of blood groups 4. Pleiotropy; Elementary idea of polygenic inheritance 5. Chromosome theory of inheritance; 6. Chromosomes and genes	Ecology & Environment	1. International protocols for mitigating GHGs and global warning 2. global warning and causes 3. Ozone depletion 4. Ozone depletion mechanism 5. Deforestation
14	W14	11.06.2018 To 16.06.2018	6		1. Sex determination-In humans, 2. birds, honey bee 3. Linkage and crossing over 4. Linkage and crossing over Continues 5. Sex linked inheritance-Haemophilia, Colour blindness 6. Mendelian disorders in humans-Thalassemia; Chromosomal		1. Any three case studies as success stories addressing environmental issues 2. Any three case studies as success stories addressing environmental issues 3. (Discussion of NCERT Questions)
15	W15	18.06.2018 to 23.06.2018	6		1. disorders in humans 2. Down's syndrome, Turner's and Klinefelter's syndromes (Discussion of NCERT Questions) 3. Molecular basis of Inheritance 4. Search for genetic material 5. Griffith's, Hershey Experiment 6. DNA as genetic material		

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16	W16	25.06.2018 to 30.06.2018	6	Genetics & Evolution	1. Structure of DNA 2. Structure of RNA 3. DNA packaging 4. DNA replication 5. DNA replication Continues, Central dogma 6. Transcription		
17	W17	02.07.2018 to 07.07.2018	6		1. Transcription 2. genetic code 3. Translation 4. Translation Continues 5. Gene expression and regulation 6. Lac Operon		
18	W18	09.07.2018 to 14.07.2018	6		1. Genome and human genome project 2. DNA finger printing (Discussion of NCERT Questions) 3. Evolution, Earths' Formation and other Events 4. Origin of life 5. Oparin and Haldane Hypothesis, Miller's Experiment 6. Biological evolution and evidences for biological evolution		
19	W19	16.07.2018 to 21.07.2018	6		1. Paleontology, comparative anatomy 2. Paleontology, comparative anatomy continues 3. embryology and molecular evidence); 4. Modern Synthetic theory of Evolution 5. Mechanism of evolution-Variation (Mutation and Recombination) Mechanism of evolution-Variation (Mutation and Recombination) Continues		6.
20	W20	23.07.2018 to 28.07.2018	6		1. Darwin's contribution 2. Natural Selection with examples 3. types of natural selection; 4. Gene flow and genetic drift; 5. Hardy-Weinberg's principle 6. Hardy-Weinberg's principle Continues and Adaptive Radiation		

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21	W21	30.07.2018 to 04.08.2018	5	Genetics & Evolution + Biology & Human Welfare	1. Human evolution (Discussion of NCERT Questions) 2. Human evolution continues 3. Health and Disease 4. Pathogens; parasites causing human diseases 5. Pathogens; parasites causing human diseases 6. Malaria		
22	W22	06.08.2018 to 11.08.2018	6	Velfare	1. Filariasis, Ascariasis 2. Typhoid, Pneumonia 3. common cold, amoebiasis, ring worm 4. Basic concepts of immunology 5. Types of Immunity 6. Mechanism of Immunity		
23	W23	13.08.2018 to 18.08.2018	6		1. Mechanism of Immunity Continues 2. vaccines 3. Cancer 4. HIV and AIDS 5. Adolescence INDEPENDENCE DAY		
24	W24	20.08.2018 to 25.08.2018	6		1. drug 2. alcohol abuse (Discussion of NCERT Questions) 3. Improvement in food production 4. Management of farms and farm Animals 5. Plant breeding 6. Methods of Plant breeding		

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25	W25	27.08.2018 to 01.09.2018	6	Biology & Human V	1. tissue culture 2. tissue culture Methods 3. single cell protein 4. Biofortification; 5. Apiculture 6. Animal husbandry (Discussion of NCERT Questions)		
26	W26	03.09.2018 to 08.09.2018	6		1. Animal Breeding 2. Types of Animal Breeding 3. Advantages and Disadvantages of Animal Breeding 4. Microbes in human welfare 5. In household food processing 6. In household food processing Continues		
27	W27	10.09.2018 to 15.09.2018	6		1. industrial production 2. industrial production Continues 3. Isolation and Preservation of products 4. sewage treatment 5. Stages of Sewage Treatments 6. energy generation		
28	W28	17.09.2018 to 22.09.2018	6		1. as biocontrol agents 2. biofertilizers. (Discussion of NCERT Questions) 3. Introduction to Biotechnology 4. Tools of Recombinant DNA Technology 5. Tools of Recombinant DNA Technology Continues 6. Principles and process genetic engineering		
29	W29	24.09.2018 to 29.09.2018	6	Applications	1. Principles and process genetic engineering continues Principles and process genetic engineering continues 3. Downstreaming Processes 4. Application of Biotechnology in health 5. Application of Biotechnology in health Continues 6. gene therapy		2.

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30	W30	01.10.2018 to 06.10.2018	5	Biotechnology & Its Applications	1. Application of Biotechnology in agriculture 2. Application of Biotechnology in agriculture Continues 3. Transgenic Animals 4. Human insulin 5. vaccine production 6. Genetically modified organisms		
31	W31	08.10.2018 to 13.10.2018	6		1. Bt crops 2. Transgenic Animals 3. Biosafety issues-Biopiracy and patents 4. Biosafety issues-Biopiracy and patents 5. Biosafety issues-Biopiracy and patents (Discussion of NCERT Questions)		
32	W32	15.10.2018 to 20.10.2018 19 OCT VIJAYDASHMI				VIJAYDASHMI	
33	W33	22.10.2018 to 27.10.2018					
34	W34	29.10.2018 to 03.11.2018					
35	W35	04.11.2018 to 11.11.2018 07 NOV DEEPAWALI				DIWALI	

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36	W36	12.11.2018 to 17.11.2018					
37	W37	19.11.2018 to 24.11.2018					
38	W38	26.11.2018 to 01.12.2018					
39	W39	03.12.2018 to 08.12.2018				CHRISTMAS	
40	W40	10.12.2018 to 15.12.2018					
41	W41	17.12.2018 to 22.12.2018					
42	W42	24.12.2018 to 29.12.2018 25 DEC CHRISTMAS					
43	W43	02.01.2019 to 05.01.2019					
44	W44	07.01.2019 to 12.01.2019					