



Pimpri Chinchwad Education Trust's

S.B.Patil College Of Science and Commerce

Sr. no. 110, Gate No 1, Ravet, Pune- 412101

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UDISE NO: 27252001412 College Index No : J.11.16.066



ACA/DI37	Teaching Plan	Academic year 2023-24
Rev:00		Name of Faculty: Mrs Anjum Mulla
Stream: Science		
Standard: 11th A, B	Subject: Biology	Subject Code: 056

Chapter No.	Name of Chapter	Topics/ content of chapter	Planned Date of Commencing	Planned Date of Completion	Media/Teaching Aid/ Teaching Method used
0	Introduction	Introduction paper pattern biology, Chapter wise weightage	17/04/2023	17/04/2023	Board manual
1	Reproduction in Lower and Higher Plants	asexual reproduction in plants	18/04/2023	18/04/2023	PPT and Video
		Sexual Reproduction, structure of a flower	20/04/2023	20/04/2023	PPT and Video
		structure of anther, structure of gynoecium	21/04/2023	21/04/2023	PPT and Video
		Structure of anatropous ovule Development of ovule and anther	24/04/2023	24/04/2023	PPT and Video
		Pollination and its types	25/04/2023	25/04/2023	PPT and Video
		Outbreeding devices , pollen Pistil Interaction	27/04/2023	27/04/2023	PPT and Video
		Double Fertilization	28/04/2023	28/04/2023	PPT and Video
		Seed and Fruit Development Parthenocarpy, Polyembryony	29/04/2023	2/5/2023	PPT and Video
		Chromosomes and Mechanism of inheritance. Mendel's Success, Genetic terminologies	3/5/2023	3/5/2023	PPT and Video
		Laws of Inheritance	8/5/2023	11/5/2023	PPT and Video
		Non mendelian Inheritance	11/5/2023	13/5/2023	PPT and Video

3	Inheritance and Variation	Structure of chromosome, X and Y chromosome	15/5/2023	15/5/2023	PPT and Video
		Linkage and crossing over	16/5/2023	16/5/2023	PPT and Video
		Autosomal Inheritance, Sex Linked Inheritance	18/5/2023	18/5/2023	PPT and Video
		Sex Determination in man, birds, honeybees	19/5/2023	19/5/2023	PPT and Video
		Genetic Disorders	19/5/2023	19/5/2023	PPT and Video
4	Molecular Basis of Inheritance	Discovery of DNA	1/6/2023	2/6/2023	PPT and Video
		Structure of DNA, DNA Packaging DNA replication	5/6/2023	6/6/2023	PPT and Video
		Central Dogma of cell, Transcription	8/6/2023	9/6/2023	PPT and Video
		Genetic code, Translation	10/6/2023	12/6/2023	PPT and Video
		Structure of Operon, Lac operon DNA fingerprinting	13/6/2023	13/6/2023	PPT and Video
5	Origin and Evolution of Life	Origin of life theories Formation of cell, Urey Miller Experiment	15/6/2023	15/6/2023	PPT and Video
		Organic Evolution, Darwins Principles Mutation Theory, Modern Synthesis theory	16/6/2023	16/6/2023	PPT and Video
		Natural selection, types, mechanism, adaptive radiation	19/6/2023	19/6/2023	PPT and Video
		evidences of organic evolution Speciation, Geological Time scale	20/6/2023	20/6/2023	PPT and Video
		Human evolution	22/6/2023	22/6/2023	PPT and Video
6	Plant Water Relation	Water absorbing organs	23/6/2023	23/6/2023	PPT and Video
		Imbibition, diffusion, Osmosis	24/6/2023	24/6/2023	PPT and Video
		Water Potential, factors affecting absorption	26/6/2023	26/6/2023	PPT and Video
		Path of water into roots Mechanism of absorption of water	27/6/2023	27/6/2023	PPT and Video
		Translocation of water Transpiration Pull	30/6/2023	30/6/2023	PPT and Video

		Translocation of Minerals	13/7/2023	13/7/2023	PPT and Video
		Transpiration	14/7/2023	14/7/2023	PPT and Video
		Transport of food	17/7/2023	17/7/2023	PPT and Video
7	Plant Growth and Mineral Nutrition	Plant Growth, Phases of Growth Growth Rate and Types of Growth	18/7/2023	18/7/2023	PPT and Video
		Growth Curve Development, Plasticity, Hormones	20/7/2023	20/7/2023	PPT and Video
		Cytokinins, ethylene, ABA	21/7/2023	24/7/2023	PPT and Video
		Photoperiodism Minerals classification, deficiency disorders	25/7/2023	25/7/2023	PPT and Video
		Toxicity of micronutrients	27/7/2023	27/7/2023	
		Mineral Absorption, Nitrogen cycle and fixation	28/7/2023	28/7/2023	PPT and Video
8	Respiration and Circulation	Definition, Respiratory organs in Plants and animals Human respiratory System	31/7/2024	1/8/2023	PPT and Video
		Mechanism of Respiration Regulation of Breathing	3/8/2023	4/8/2023	PPT and Video
		Modified Respiratory Movements	7/8/2023	7/8/2023	PPT and Video
		Respiratory Disorders, Artificial Ventillation	8/8/2023	8/8/2023	PPT and Video
		Transportation in Living Organisms Composition of Blood, Human Circulatory system	10/8/2023	10/8/2023	PPT and Video
		External and Internal structure of Heart	11/8/2023	11/8/2023	PPT and Video
		Pumping and Conducting system of Heart Blood vessels and Blood Pressure	12/8/2023	12/8/2023	PPT and Video
		Instruments Like ECG, Lymphatic System	14/8/2023	14/8/2023	PPT and Video
		Nervous Co-ordination and Nervous Tissue	17/8/2023	17/8/2023	PPT and Video

9	Control and Co-ordination	Synapse types of synapse	18/8/2023	18/8/2023	PPT and Video
		Transmission of nerve impulse	21/8/2023	21/8/2023	PPT and Video
		Human Nervous System Cranial Nerves and Function	22/8/2023	22/8/2023	PPT and Video
		Spinal cord, TS of spinal cord	24/8/2023	24/8/2023	PPT and Video
		Cranial nerves, Spinal nerves, formation of typical spinal nerve	25/8/2023	25/8/2023	PPT and Video
		Reflex action and types, ANS , SNS	26/8/2023	26/8/2023	PPT and Video
		PNS, Sensory receptors and its types	28/8/2023	28/8/2023	PPT and Video
		Sensory Receptors: Eye and Ear	29/8/2023	29/8/2023	PPT and Video
		Disorders of nervous system	31/8/2023	31/8/2023	PPT and Video
		Chemical Co-ordination Endocrine system Pitutary Gland Thyroid Gland	1/9/2023	1/9/2023	PPT and Video
		Disorders related to thyroid gland, adrenal cortex, Gonads	4/9/2023	5/9/2023	PPT and Video
10	Human health and Diseases	Immunity, types of Immunity	14/9/2023	14/9/2023	PPT and Video
		Mechanism of action of B and T Lymphocytes	15/9/2023	18/9/2023	PPT and Video
		Vaccination and structure of antibody	20/9/2023	20/9/2023	PPT and Video
		Blood groups, Rh factor Common Human Diseases	21/9/2023	22/9/2023	PPT and Video
		Cancer, types, causes, treatment, prevention	23/9/2023	23/9/2023	PPT and Video
		HIV structure, AIDS, Transmission, Detection, Prevention Adolescence, Drugs, Drug abuse, Addiction	25/9/2023	25/9/2023	PPT and Video
		Plant breeding Hybridisation, Indian Hybrid crops	26/9/2023	26/9/2023	PPT and Video

11	Enhancement of Food Production	Tissue culture, micropropagation SCP, Biofortification	29/9/2023	29/9/2023	PPT and Video
		Animal Husbandary Dairy Breeding techniques	30/9/2023	30/9/2023	PPT and Video
		Poultry Farm management, bee culture Fishery, sericulture, Lac culture	3/10/2023	3/10/2023	PPT and Video
		Microbes in Human welfare Vitamin , antibiotic , organic acids, enzymes production	5/10/2023	5/10/2023	PPT and Video
		Microbes in sewage treatment Biogas, Microbes as biofertilizers	6/10/2023	6/10/2023	PPT and Video
12	Biotechnology	Biotechnology, Principles and process of biotechnology	9/10/2023	9/10/2023	PPT and Video
		Gene cloning and RDT	10/10/2023	10/10/2023	PPT and Video
		applications of biotechnology health care biotechnology, gene therapy	12/10/2023	12/10/2023	PPT and Video
		agriculture, GMO Transgenic animals Bioethics, bio-piracy and bio-patent	13/10/2023	13/10/2023	PPT and Video
2	Reproduction in Lower and Higher Animals	Asexual reproduction methods Sexual Reproduction in animals, human reproduction	14/10/2023	14/10/2023	PPT and Video
		Male Reproductive system	16/10/2023	17/10/2023	PPT and Video
		Female Reproductive system	19/10/2023	20/10/2023	PPT and Video
		Puberty, menstrual Cycle	23/10/2023	23/10/2023	PPT and Video
		Gametogenesis	26/10/2023	26/10/2023	PPT and Video
		Fertilization/syngamy Embryo development	27/10/2023	27/10/2023	PPT and Video

		Pregnancy, Parturition Lactation, reproductive health	28/10/2023	28/10/2023	PPT and Video
		Birth Control Methods	30/10/2023	30/10/2023	PPT and Video
		STDs, infertility, IVF, ZIFT	20/11/2023	20/11/2023	PPT and Video
		GIFT, ICSI, Sperm bank, Adoption	21/11/2023	21/11/2023	PPT and Video
13	Organism and Population	Biome, Habitat Niche, Abiotic Factors affecting Environment	23/11/2023	23/11/2023	PPT and Video
		Adaptations, Hibernation Aestivation Population and Population growth	24/11/2023	25/11/2023	PPT and Video
		Population Interactions:	27/11/2023	28/11/2023	PPT and Video
14	Ecosystem and Energy Flow	Ecosystem Structure and Function, Productivity	30/11/2023	30/11/2023	PPT and Video
		Decomposition and Energy Flow	1/12/2023	1/12/2023	PPT and Video
		Food Chain food web and Ecological Pyramids	2/12/2023	4/12/2023	PPT and Video
		Nutrient Cycles: Carbon and Phosphorus	5/12/2023	7/12/2023	PPT and Video
		Ecological succession: Hydrarch and Xerarch Succession	8/12/2023	8/12/2023	PPT and Video
		Ecosystem services	9/12/2023	9/12/2023	PPT and Video
15	Biodiversity Conservation and Environmental issues	Definition and levels of Biodiversity	11/12/2023	11/12/2023	PPT and Video
		Importance of species Diversity to ecosystem	12/12/2023	12/12/2023	PPT and Video
		Loss and Causes of biodiversity	14/12/2023	14/12/2023	PPT and Video
		Conservation of Biodiversity	15/12/2023	15/12/2023	PPT and Video
		Biodiversity Act 2002, Environmental Issues	16/12/2023	16/12/2023	PPT and Video
		Air and Water Pollution	18/12/2023	18/12/2023	PPT and Video
		Noise and Solid waste Pollution	19/12/2023	19/12/2023	PPT and Video
		Green house gases Ozone layer Depletion	21/12/2023	21/12/2023	PPT and Video

		Global warming, Deforestation, Reforestation	22/12/2023	22/12/2023	PPT and Video
		Case studies and Fact Files.	23/12/2023	23/12/2023	PPT and Video

Mrs Anjum Mulla

**HOD of Bology
SBPCSC**

Mr S N Patil

**Principal
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ACA/DI/15	Exam Plan	Academic year 2023-24
Rev:00		Name of Faculty: Mrs Anjum Mulla
Stream: Science		
Standard: 12th	Subject: Biology	Subject Code: 056

Exam	Month	Syllabus
Unit Test -1	4 July to 11 July 2023	Reproduction in Lower and Higher Plants
		Inheritance and Variation
		Molecular Basis of Inheritance
Unit Test -2	6 Sept to 13 Sept 2023	Respiration and Circulation
		Control and Co-ordination
		Origin and Evolution of Life
Term-I	31 Oct to 8 November 2023	Origin and Evolution of Life
		Plant Water Relation
		Human health and Diseases
		Plant Growth and Mineral Nutrition
		Biotechnology
		Reproduction in Lower and Higher Plants
		Inheritance and Variation
		Molecular Basis of Inheritance
		Respiration and Circulation
		Control and Co-ordination
Prelim 1	2 Jan to 9 Jan 2024	Full Syllabus
Prelim 2	22 Jan to 29 Jan 2024	Full Syllabus

**Mrs Anjum
Mulla
HOD of
Biology
SBPCSC**

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Principal
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