

ACA/DI37	Teaching Plan	Academic year 2026-2027
Rev:00		Name of Faculty: Mrs Anjum Mulla,
Stream: Science		
Standard: 12th 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, Chapetr wise weightage	04.02.2026	04.02.2026	Board manual
1	Reproduction in Lower and Higher Plants	asexual reproduction in plants	04.03.2026	04.06.2026	PPT and Video
		Sexual Reproduction, structure of a flower	04.07.2026	04.08.2026	PPT and Video
		structure of anther, structure of gynoecium	04.10.2026	13/4/2026	PPT and Video
		Structure of anatropous ovule Development of ovule and anther	15/4/2026	17/4/2026	PPT and Video
		Pollination and its types	20/4/2026	22/04/2026	PPT and Video
		Outbreeding devices , pollen Pistil Interaction	23/4/2026	27/4/2026	PPT and Video
		Double Fertilization	28/4/2026	30/4/2026	PPT and Video
		Seed and Fruit Development Parthenocarpy, Polyembryony	05.04.2026	05.04.2026	PPT and Video
3	Inheritance and Variation	Chromosomes and Mechanism of inheritance. Mendel's Success, Genetic terminologies	05.05.2026	05.05.2026	PPT and Video
		Laws of Inheritance	05.06.2026	05.09.2026	PPT and Video
		Non mendelian Inheritance	06.01.2026	06.05.2026	PPT and Video
		Structure of chromosome, X and Y chromosome	06.08.2026	06.08.2026	PPT and Video
		Linkage and crossing over	06.09.2026	06.09.2026	PPT and Video

3	Inheritance and Variation	Autosomal Inheritance, Sex Linked Inheritance	06.10.2026	13/6/2026	PPT and Video
		Sex Determination in man, birds, honeybees	15/6/2026	16/6/2026	PPT and Video
		Genetic Disorders	17/6/2026	17/6/2026	PPT and Video
4	Molecular Basis of Inheritance	Discovery of DNA	18/6/2026	18/6/2026	PPT and Video
		Structure of DNA, DNA Packaging DNA replication	19/6/2026	20/6/2026	PPT and Video
		Central Dogma of cell, Transcription, Genetic code	22/6/2026	22/6/2026	PPT and Video
		Translation	22/6/2026	22/6/2026	PPT and Video
		Structure of Operon, Lac operon DNA fingerprinting	23/6/2026	25/6/2026	PPT and Video
5	Origin and Evolution of Life	Origin of life theories Formation of cell, Urey Miller Experiment	26/6/2026	27/6/2026	PPT and Video
		Organic Evolution, Darwins Principles Mutation Theory, Modern Synthesis theory	29/6/2026	29/6/2026	PPT and Video
		Natural selection, types, mechanism, adaptive radiation	30/6/2026	30/6/2026	PPT and Video
		evidences of organic evolution Speciation, Geological Time scale	07.01.2026	07.01.2026	PPT and Video
		Human evolution	07.02.2026	07.02.2026	PPT and Video
6	Plant Water Relation	Water absorbing organs	07.03.2026	07.03.2026	PPT and Video
		Imbibition, diffusion, Osmosis	07.04.2026	07.04.2026	PPT and Video
		Water Potential, factors affecting absorption	07.05.2026	07.05.2026	PPT and Video
		Path of water into roots Mechanism of absorption of water	07.06.2026	07.06.2026	PPT and Video
		Translocation of water Transpiration Pull	07.07.2026	07.07.2026	PPT and Video
		Translocation of Minerals Transpiration	07.08.2026	07.08.2026	PPT and Video
		Transport of food	07.09.2026	07.09.2026	PPT and Video
		Transpiration	07.10.2026	07.10.2026	PPT and Video

7	Plant Growth and Mineral Nutrition	Plant Growth, Phases of Growth Growth Rate and Types of Growth	17/7/2026	20/7/2026	PPT and Video
		Growth Curve Development, Plasticity, Hormones	22/7/2026	23/7/2026	PPT and Video
		Cytokinins, ethylene, ABA	24/7/2026	24/7/2026	PPT and Video
		Photoperiodism Minerals classification, deficiency disorders	25/7/2026	26/7/2026	PPT and Video
		Toxicity of micronutrients	27/7/2026	27/7/2026	PPT and Video
		Mineral Absorption, Nitrogen cycle and fixation	29/7/2026	30/7/2026	PPT and Video
8	Respiration and Circulation	Definition, Respiratory organs in Plants and animals Human respiratory System	31/7/2026	08.01.2026	PPT and Video
		Mechanism of Respiration Regulation of Breathing	08.03.2026	08.04.2026	PPT and Video
		Modified Respiratory Movements	08.05.2026	08.05.2026	PPT and Video
		Respiratory Disorders, Artificial Ventillation	08.06.2026	08.06.2026	PPT and Video
		Transportation in Living Organisms Composition of Blood, Human Circulatory system	08.07.2026	08.09.2026	PPT and Video
		External and Internal structure of Heart	08.10.2026	08.12.2026	PPT and Video
		Pumping and Conducting system of Heart Blood vessels and Blood Pressure	13/8/2026	13/8/2026	PPT and Video
		Instruments Like ECG, Lymphatic System	14/8/2026	17/8/2026	PPT and Video
9	Control and Co- ordination	Nervous Co-ordination and Nervous Tissue	18/8/2026	19/8/2026	PPT and Video

9	Control and Co-ordination	Synapse types of synapse	20/8/2026	22/8/2026	PPT and Video
		Transmission of nerve impulse	23/8/2026	23/8/2026	PPT and Video
		Human Nervous System Cranial Nerves and Function	24/8/2026	27/8/2026	PPT and Video
		Spinal cord, TS of spinal cord	28/8/2026	28/8/2026	PPT and Video
		Cranial nerves, Spinal nerves, formation of typical spinal nerve	29/8/2026	30/8/2026	PPT and Video
		Reflex action and types, ANS , SNS	31/8/2026	31/8/2026	PPT and Video
		PNS, Sensory receptors and its types	09.01.2026	09.02.2026	PPT and Video
		Sensory Receptors: Eye and Ear	09.03.2026	09.04.2026	PPT and Video
		Disorders of nervous system	09.07.2026	09.08.2026	PPT and Video
		Chemical Co-ordination Endocrine system Pitutary Gland Thyroid Gland	09.10.2026	09.12.2026	PPT and Video
		Disorders related to thyroid gland, adrenal cortex, Gonads	15/9/2026	17/9/2026	PPT and Video
10	Human health and Diseases	Immunity, types of Immunity	21/9/2026	22/9/2026	PPT and Video
		Mechanism of action of B and T Lymphocytes	23/9/2026	24/9/2026	PPT and Video
		Vaccination and structure of antibody	10.01.2026	10.01.2026	PPT and Video
		Blood groups, Rh factor Common Human Diseases	10.03.2026	10.03.2026	PPT and Video

		Cancer, types, causes, treatment, prevention	10.05.2026	10.05.2026	PPT and Video
		HIV structure, AIDS, Transmission, Detection, Prevention Adolescence, Drugs, Drug abuse, Addiction	10.06.2026	10.07.2026	PPT and Video
11	Enhancement of Food Production	Plant breeding Hybridisation, Indian Hybrid crops	10.08.2026	10.09.2026	PPT and Video
		Tissue culture, micropropagation SCP, Biofortification	30/9/2026	10.01.2026	PPT and Video
		Animal Husbandary Dairy Breeding techniques	10.03.2026	10.03.2026	PPT and Video
		Poultry Farm management, bee culture Fishery, sericulture, Lac culture	10.05.2026	10.05.2026	PPT and Video
		Microbes in Human welfare Vitamin , antibiotic , organic acids, enzymes production	10.06.2026	10.07.2026	PPT and Video
		Microbes in sewage treatment Biogas, Microbes as biofertilizers	10.08.2026	10.09.2026	PPT and Video
12	Biotechnology	Biotechnology, Principles and process of biotechnology	10.10.2026	10.10.2026	PPT and Video
		Gene cloning and RDT	10.12.2026	10.12.2026	PPT and Video
		applications of biotechnology health care biotechnology, gene therapy	13/10/2026	14/10/2026	PPT and Video
		agriculture, GMO Transgenic animals Bioethics, bio-piracy and bio-patent	15/10/2026	15/10/2026	PPT and Video
	Reproduction in Lower and Higher Animals	Asexual reproduction methods Sexual Reproductionin animals, human reproduction	16/10/2026	16/10/2026	PPT and Video
		Male Reproductive system	19/10/2026	19/10/2026	PPT and Video
		Female Reproductive system	21/10/2026	21/10/2026	PPT and Video

2	Reproduction in Lower and Higher Animals	Puberty, menstrual Cycle	22/10/2026	22/10/2026	PPT and Video
		Gametogenesis	23/10/2026	23/10/2026	PPT and Video
		Fertilization/syngamy Embryo development	24/10/2026	24/10/2026	PPT and Video
		Pregnancy, Parturition Lactation, reproductive health	26/10/2026	26/10/2026	PPT and Video
		Birth Control Methods	27/10/2026	27/10/2026	PPT and Video
		STDs, infertility, IVF, ZIFT	28/10/2026	28/10/2026	PPT and Video
		GIFT, ICSI, Sperm bank, Adoption	29/10/2026	29/10/2026	PPT and Video
13	Organism and Population	Biome, Habitat Niche, Abiotic Factors affecting Environment	23/11/2026	24/11/2026	PPT and Video
		Adaptations, Hibernation Aestivation Population and Population growth	25/11/2026	25/11/2026	PPT and Video
		Population Interactions:	26/11/2026	28/11/2026	PPT and Video
14	Ecosystem and Energy Flow	Ecosystem Structure and Function, Productivity	30/11/2026	30/11/2026	PPT and Video
		Decomposition and Energy Flow	12.01.2026	12.01.2026	PPT and Video
		Food Chain food web and Ecological Pyramids	12.02.2026	12.02.2026	PPT and Video
		Nutrient Cycles: Carbon and Phosphorus	12.03.2026	12.03.2026	PPT and Video
		Ecological succession: Hydrarch and Xerarch Succession	12.03.2026	12.03.2026	PPT and Video
		Ecosystem services	12.03.2026	12.03.2026	PPT and Video
	Biodiversity Conservation and Environmental issues	Definition and levels of Biodiversity	12.04.2026	12.04.2026	PPT and Video
		Importance of species Diversity to ecosystem	12.04.2026	12.04.2026	PPT and Video
		Loss and Causes of biodiversity	12.05.2026	12.05.2026	PPT and Video
		Conservation of Biodiversity	12.05.2026	12.05.2026	PPT and Video

15	Biodiversity Conservation and Environmental issues	Biodiversity Act 2002, Environmental Issues	12.06.2026	12.06.2026	PPT and Video
		Air and Water Pollution	12.06.2026	12.06.2026	PPT and Video
		Noise and Solid waste Pollution	12.07.2026	12.07.2026	PPT and Video
		Green house gases Ozone layer Depletion	12.08.2026	12.08.2026	PPT and Video
		Global warming, Deforestation, Reforestation	12.09.2026	12.09.2026	PPT and Video
		Case studies and Fact Files.	12.10.2026	12.10.2026	PPT and Video

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