

	Academic planner-2022-2023			
	Biology			
	CLASS -XII			
Date & number of days	Topics/ Content	Teaching pedagogy	No. Of Assignments/H.W	Activities/practicals
1/4/22- 15/4/22	Chapter-2		Assignment	
	Sexual reproduction in flowering plants		questions & from N.C.E.R.T	
No.of days-10	Structure of flower, Pre fertilization	Brainstroming		Pollen germination on stigma through a permanent slide.
	grains, pistil, megasporangium & embryo			Study of flowers adapted to pollination by different agencies
16/4/2022 - 30/4/2022	sac, pollination kinds & agents out breeding			Excercise on controlled pollination emasculatation,bagging and tagging
No.of days-13	devices, artificial hybridization, double			To study pollen germination on a slide in nutrient medium
	fertilization, post fertilization events,			
	apomixes & polyembryony.ignificance of seed dispersal and fruit formation.			
1/5/22 - 15/5/22	Chap. 3 Human reproduction		Assignment containing extra	
No.of days-10	Female reproductive system,gametogenesis &	CT I chapter 2	questions & from N.C.E.R.T	Study of T.S of Blastula through permanent slide
	menstrual cycle			
	Fertilization & implantation, Pregnancy &	Direct instruction	Assignment containing extra	Identification of stages of gamete development T.S of testis and T.S of ovary through permanent slide

	embryonic devpt. Parturition & lactation (elementary idea).		questions & from N.C.E.R.T	
	Chapter-4			
	Reproductive health, problems & strategies,		Assignment containing extra	
	population explosion& Birth control, medical		questions & from N.C.E.R.T	
	termination of pregnancy (MTP), STDs infertility. infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness).			
1/7/22- 15/7/22	Chapter-5			Study Mendelian inheritance
No.of days-12	Principles of inheritance & variation		Assignment containing	using seeds of
	Mendel's laws ,Incomplete dominance		problems of genetics & 1 Assignment	different colours size of any
	Codominance, blood groups, inheritance thallemia,pleiotropy, polygenic inheritance (elementary idea)		from TBQ of Chapter-5	plant
	sex determination, mutation, genetic disorders			
16/7/2022 -	Chapter-6	CT II chapter 3		
No.of days-13	Molecular basis of inheritance			Isolate DNA from available plant material
	Introduction, DNA, search for genetic material, RNA world, replication, transcription,			
	the genetic code, mutations			Study prepared pedigree
	Chapter-6 Contd.		Assignment on	charts of genetic traits such as
	translation, regulation of gene expression,		problem in genetics	rolling of tongue,blood groupsand widow's peek

	human and rice genome project, DNA fingerprinting.			
1/8/2022 - 15/8/2022	Chapter 7 Evolution			
No.of days-9	Evolution of life forms, evidences for			
	evolution, (paleontology, comparative anatomy, embryology and molecular evidences); Darwin's contribution, modern synthetic theory of evolution, brief account of evolution & origin &	Animated videos on evolution would be shown		Flash cards models showing examples of homologous and analogous organs
16/8/22 - 31/8/22	Chapter 8			
No.of days-13	Human health & diseases		Assignment containing	
	Common diseases in humans, (malaria, dengue, chickengunia, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control ; immunity.	Padlet and sway making(Microsoft tools)	extra questions from ch-8	Study common disease causing organisms like Ascaris. Entamoeba, plasmodiumany fungus causing ringworm through permanent slides, models or virtual images
	Chap.8 Contd.Basic concepts of immunology - vaccines; cancer, HIV and AIDS; Adolescence - drug and alcohol abuse. Allergies, AIDS, Cancer,Drugs & alcohol abuse.		Assignment containing	Prepare temporary stained mount of onion root tips & study mitosis in them
1/9/2022- 15/9/2022	Revision		Assignments containing	
No.of days-12			extra questions and	
16/9/22 - 30/9/22	Term I examination	Term I exams Chapter 2 to 8	Term I examination	
No.of days-13				

1/10/22-15/10/22	Chapter 10			
No.of days-8	Microbes in Human Welfare	Reciprocated teaching		
	Microbes & Household products, Industria			
	Products, Antibiotics, Microbes & Sewage			
	Treatment & Production of Bio-Gas.			
	Microbes as biocontrol agents & as biofertilisers.		CW-1& assignment from chap. 12	
16/10/22 - 31/10/22	Chapter11 Biotechnology:Principles & processes Introduction & Revision	Cooperative learning		Isolation of DNA from available plant , material such as spinach, green pea seeds, papaya etc.
No.of days-10	Chap. 11 contd. Principles of biotechnology, tools of rDNA technology			
	Chapter-12 Biotechnology & its applications		Assignments containing	Study the pH water holding capacity of soil., correlate with the kinds of plants found in them
	Biotechnological applications in agriculture application of biotechnology in health and agriculture: Human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms - Bt crops; transgenic animals; biosafety issues, bio piracy and patents.	Story telling		
1/11/22 - 15/11/22	Chapter-13: Organisms and Populations Organisms and environment: Habitat and niche, population and ecological adaptations; population interactions - mutualism, competition, predation, parasitism; population attributes - growth, birth rate and death rate, age distribution Organisms & its environment Populations growth,	CT III Chapter 10	extra questions and	Models specimen showing symbiotic association in root nodules of leguminous plants, cuscuta on host and lichens

No.of days-9		Class Test	Assignment containing	the two widely different sites.
			extra questions and	pH, clarity & presence of any living organisms.
16/11/22 - 30/11/22	Chapter -14		TBQ from ch-14	Collect water from different water bodies & study them for
No.of days-13	Ecosystem structure & function, productivity			pH, clarity & presence of any
	decomposition, Energy flow ecological pyramids			Study of plant population density by quadrat method
	Ecological successions nutrient cycling, ecosystem			
	Chapter- 15			
	Biodiversity & conservation		Assignment	
	Biodiversity types, Patterns, Loss of biodiversity endangered organisms, extinction, Red Data Book, biosphere reserves, national parks , sanctuaries and Ramsar sites	Students would be given a field trip		Study of plant population frequency by quadrat method
	& its conservation			
	supplementary text Discussion of CBSE sample papers & other sample papers		Sample papers, revision & problem solving.	
1/12/22- 15/12/22 No. of days - 12	Preboard Examination	Preboard Examination	Preboard Examination	Preboard Examination
16/12/22- 31/12/22 No. of days - 14		Entire syllabus		