

Academic planner-2017-2018

Biology				
CLASS -XII				
Date	Topic	Mode of Assessment	No. Of Assignment/ HW	Activity
21/3/17-31/3/17	Chapter-1 Reproduction in organisms			
No.of days-9	Asexual reproduction pre fertilization			
	events, sexual and asexual reproduction; asexual reproduction - binary fission, sporulation, budding, gemmule formation, fragmentation; vegetative propagation in plants. gamete transfer, Fertilization &	Assignment based on Chapter-1 & 2	Assignment containing extra	
	post fertilization events		questions & from N.C.E.R.T	
	Chapter-2			
1/4/2017 - 15/4/2017	Sexual reproduction in flowering plants			To study pollen germination on a slide in nutrient medium
No.of days-8	Structure of flower, Pre fertilization			
	events, stamen, microsporangium, pollen grains, pistil, megasporangium & embryo sac, pollination kinds & agents out breeding devices, artificial hybridization, double fertilization, post fertilization events, apomixes & polyembryony.ignificance of seed dispersal and fruit formation.			
	Chap. 3 Human reproduction			
	Female reproductive system,gametogenesis &			
	menstrual cycle			
16/4/17-30/4/17	Chapter 3 (contd.) Fertilization & implantation, Pregnancy &			
	embryonic devpt. Parturition & lactation (elementary idea).		Assignment containing extra	Study of flowers adapted to pollination by different agencies
No.of days-12			questions & from N.C.E.R.T	(Wind & animals)
	Chapter-4			
			Assignment containing extra	
	Reproductive health, problems & strategies,		questions & from N.C.E.R.T	
	population explosion& Birth control, medical			

	termination of pregnancy (MTP), STDs infertility. infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness).			
1/5/17-15/5/17	Chapter-5	UT I Ch 1-3 & 4 (half)		
No.of days-9	Principles of inheritance & variation	Class Test	Assignment containing	Study Mendelian inheritance using
	Mendel's laws ,Incomplete dominance		problem of genetics & 1 Assignment	inheritance using seeds
	Codominance, blood groups, inheritance thalassaemia, pleiotropy, polygenic inheritance (elementary idea) of two genes, chromosomal theory of inheritance linkage & recombination, sex determination, mutation, genetic disorders		from TBQ of Chapter-5	of different colours size of any plant
				Study prepared pedigree charts of genetic traits such as
1/7/17-15/7/17	Chapter-6			rolling of tongue, blood groups, widow's peak, colour blindness
No.of days-12	Molecular basis of inheritance			
	Introduction, DNA, search for genetic material, RNA world, replication, transcription,			
	the genetic code, mutations			
	Chapter-6		Assignment on	
	translation, regulation of gene expression,		problem in genetics	Study of evolutionary history of man from internet
	human and rice genome project, DNA fingerprinting.	UT II Ch4		
16/7/2017 - 31/7/2017	Chapter 7		Assignment containing extra	
No.of days-13	Evolution		questions from ch-7	
	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 &			
	adaptive radiation; evolution of man.			
	Chapter 8			

	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.		extra questions from ch-8	
1/8/2017 - 15/8/2017	Chap.8 Contd.Basic concepts of immunology - vaccines; cancer, HIV and AIDS; Adolescence - drug and alcohol abuse. Allergies, AIDS, Cancer,Drugs & alcohol abuse.	UT II Continue	Assignment containing	Study of T.S of Blastula through permanent slide
No.of days-10	Chap. 9 Animal husbandry, management of farms &		extra questions and	
	farm animals, animal breeding , bee keeping &		TBQ from ch-9	
	single cell protein, Biofortification, Apiculture and Animal husbandry. culture.			
16/8/17 - 31/8/17	Chapter 10			
No.of days-14	Microbes in Human Welfare			To study the effect of the different temperatures & 3
	Eukaryotic cells, all the cell organelles,		Assignments containing	different pH on the activity of salivary aqmylase on starch
	Microbes & Household products, Industrial		extra questions and	
	Products, Antibiotics, Microbes & Sewage		TBQ from ch-10	
	Treatment & Production of Bio-Gas.	Class Test		Excercise on controlled pollination emasculation,bgging & tagging
	Microbes as biocontrol agents & as biofertilisers.			
1/9/2017- 15/9/2017	Half yearly Exams & revision	Half Year (1-10)	Assignments containing	Prepare temporary stained mount of onion root tips & study mitosis in them
No.of days-11			extra questions and	animals
			TBQ from ch-11	
16/9/17 - 30/9/17	Chapter11 Biotechnology:Principles & processes Introduction & Revision	Chap.1-10		
No.of days-10				

			CW-1& assignment from chap. 12	
		Class Test		Isolation of DNA from available plant , material such as spinach, green pea seeds, papaya etc.
1/10/17-15/10/17	Chap. 11 contd. Principles of biotechnology, tools of rDNA technology			
No.of days-09	Chapter-12 Biotechnology & its applications		Assignments containing	Study the pH water holding capacity of soil., correlate with
	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.			
16/10/16 - 31/10/16	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,		extra questions and	the kinds of plants found in them
No.of days-11	Chapter -14	Class Test	Assignment containing	Collect water from different water bodies & study them for
	Ecosystem structure & function, productivity		extra questions and	pH, clarity & presence of any living organisms.
	decomposition, Energy flow ecological pyramids		TBQ from ch-14	
	Ecological successions nutrient cycling, ecosystem services.			
1/11/17-15/11/17	Chapter- 15			
No.of days-11	Biodiversity & conservation		Assignment	Study of plant population density by quadrat method

	Biodiversity types, Patterns, Loss of biodiversity endangered organisms, extinction, Red Data Book, biosphere reserves, national parks , sanctuaries and Ramsar sites & its conservation			
				Study of plant population frequency by quadrat method.
16/11/17 - 30/11/17				
No. of days-13	Chapter 16		CW-1	Study the presence of suspended particulate matter in air at
	Environmental issues Air pollution and its control; water pollution and its control; agrochemicals and their effects; solid waste management; radioactive waste management; greenhouse effect and climate change ; ozone layer depletion; deforestation; any one case study as success story addressing environmental issue		Assignment	the two widely different sites.
	Air pollution & its control Water Pollution & its control			
	Deforestation			
1/12/17 - 15/12/17 No. of days - 11	Discussion of CBSE sample papers & other sample papers	Assessment test	Sample papers, revision & problem solving.	

Examination Schedule

Unit Test I - 1,2 , 3 & 4(Half)

Unit test II - 4 , 5 and 6(Half)

Half Yearly- Ch 1 to 10

Assesment Test - Chap. 1 to 14

Preboard complete syllabus