

ACADEMIC HEIGHTS PUBLIC SCHOOL

Jungle Dhusar, Gorakhpur

Session 2017-18

Syllabus of Class - X, Subject - Biology

Month	W. Days	Chapter	Activity
April +	22	Life Process	
May	17	Nutrition - Modes of nutrition, Nutrition in plants, Photosynthesis, structure of a leaf (cellular), Opening & closing of stomata, Factors affecting photosynthesis. Nutrition in lower Nutrition in human beings- Human digestive system, animals(Amoeba, Paramicium etc), absorption and assimilation. Dental caries. absorption and assimilation. Dental caries.	1. To prepare a temporary mount of leaf peel to show stomata. 2.To show experimentally that light is necessary for photosynthesis.
		Respiration – Introduction : Respiration - Types of respiration(aerobic & anaerobic) Concept of ATP breakdown; Exchange of gases in plants, lower animals, aquatic & terrestrial organism;	3. To show experimentally that Carbondioxide is given out during respiration.
		Human respiratory system- structure & mechanism.	
		Transportation	
		Transportation in human beings – Blood, Our pump - the heart (Introduction)	
		Transportation (continued...)	
		Human heart(structure and function);	
		Exchange and transport of gases by blood, structure and function of blood vessels, Maintenance by platelets(blood clotting) , lymph	
		Transportation in plants –	
		Transport of water, Transport of food and other substances , Role of xylem and phloem.	
		Excretion :-	
		Excretion in human beings - Excretory system in human beings, Structure of a nephron,	
		Excretion (continued...)	
		Osmoregulation, Artificial kidney(Hemodialysis), excretion in plants.	
Periodic Test - I			
Jun +	9	Heredity & Evolution	
July	20	Heredity,Transmission of charactors, Variation, Chromosomes, Genes, Mendel's laws, Blood groups and its inheritance, Sex Chromosome, Inheritance of Sex (Sex determination), Evolution, Evidence of Evolution, Homologous organ, Analagous organ, Lamarck Theory, Darwin theory (Natural selection), Speciation, Human Evoluton, Origin of life on earth.	
		Control & Coordination	
		Animals - Nervous system	Movement of plant towards light
		Parts of nervous system(structure of neuron &	

		neuromuscular junction) ; reflex action(path, functions & examples) ; human brain(structure & functions of main components) ; Protection of brain.	Show a plant which climbup with a support of tendrils
		Role of nervous tissue in causing action.	
		Coordination in Plants -	
		Immediate response to stimulus, movement due to growth, plant hormones	Jermination of seeds
		Hormones in animals – Endocrine glands in human beings(position and function in both male & female)	
Half Yearly			
Aug +	24	How do organisms Reproduction	
Sept	24	Reproduction, Types of Reproduction, Asexual reproduction, Sexual Reproduction, Sexual reproduction in flowereing plants, Pollination and its types, Fertilization, Sexeul reproduction in animal, Male gametes, Female gametes, fertilazation , Sexual cycle in female, Birth control method, Sexually transmitted disease.	
		Our Environment	
		Biodegradable and Non biodegradable waste, Ecosystem and its types , Function of an Ecosystem, Producer, Consumer and Decomposer, Food chain and Food web, tropic levels, Lindemans laws, Biological magnification, Ozone depletion, Method of disposal the garbage,	
Periodic Test - II			
Oct	18	Management of Natural Resources	
		Natural resources, our natural resources, Conservation of Biodiversity, Deforestation, Conservation of wild life, Pollution of water, Acid rain and its effects	
Annual Exam			