

BRIDGE COURSE
Class XI
COORDINATOR: SH. P.S. KOMBADE PRINCIPAL, KV KAMPTTEE
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SUBJECT: BIOLOGY

DAYS	TOPIC	CONTENT	TLO
DAY 1	DEFINATION AND HISTORY OF BIOLOGY	Study of living organisms. Interesting stories of Cell theory, circulatory system etc.	To appreciate the nature, natural & physiological process.
DAY 2	CAREER IN BIOLOGY	Doctor, Microbiologist, Forensic Scientists, Biotechnologist, Pharmacist, Medical Researcher, Biomedical Engineer Veterinarian Genetic Counsellor etc .	
DAY 3	CELL AN OVERVIEW	Types of cell . Cell theory . Differences between various types of cell. Cell organelles Nucleus	To understand various kinds of cell. To know the components of cell and its role.
DAY 4	ACTIVITY BASED ON CELL	To make a 3D model/diagram of cell, cell organelles, DNA etc	To understand the concept of cell and its organelles.
DAY 5	DIVERSITY IN PLANTS AN OVERVIEW	Introduction-Five kingdom classification by R.H. Whittaker.	To understand the characteristics and phylogeny of Plantae.

		The various division of plants- 1.Algae 2. Bryophytes 3. Pteridophytes 4. Gymnosperms 5. Angiosperms 6. Plant Life Cycles and Alternation of Generations.	
DAY 6	DIVERSITY IN ANIMALS AN OVERVIEW	1.Basis of Classification 2. Classification of Animal	To understand and appreciate the origin and evolution of animals.
DAY 7	MICROORGANISMS	Different groups of microbes -its uses and harmful effects.	To acquire knowledge about various microorganisms.
DAY 8	MORPHOLOGY OF PLANT	Morphology and modifications	To observe and identity the various types of venations, phyllotaxy, inflorescence etc.
DAY 9	PLANT HORMONES	Growth regulators - auxin, gibberellin, cytokinin, ethylene, ABA;	To study and recollect the functions of various plant hormones.
DAY 9	ANIMAL HORMONES	Endocrine glands and hormones; human endocrine system and related disorders; dwarfism, acromegaly, cretinism, goitre, exophthalmic, diabetes, Addison's disease.	To study and recollect the functions of various animal hormones
DAY 10	TISSUE AN OVER VIEW	Various types of plant and animal tissue.	To acquire knowledge about various types of plant and animal tissues.
DAY 11	CELL DIVISION AN OVERVIEW	Cell Cycle and Cell Division	To understand equational and reductional division.

DAY 12	BIOLOGY LAB VISIT	Display various animal and plant models, human skeleton, compound microscope etc.	To develop curiosity and interest in biology
DAY 13	AN INTRODUCTION OF NEET EXAM	NEET or National Eligibility cum Entrance Test is a national-level medical entrance test. It is conducted by the National Testing Agency (NTA) for admissions to medical courses in recognized and approved medical institutes across the country. ● Conducting Body: NTA (National Testing Agency) ● Expected number of Applicants: Around 16-17 lakhs ● Exam Name: NEET (National Eligibility cum Entrance Test) ● Mode of Exam: Pen-paper based	
DAY 14	ANIMAL PHYSIOLOGY INTRODUCTION	Major human physiological processes like digestion, exchange of gases, blood circulation, locomotion and movement.	To acquire knowledge and understand the significance about various human physiological processes.

DAY 15	INTRODUCTION OF PRACTICALS	Demonstration of various lab apparatus.	Develop practical skill for better understanding through first-hand experience.
DAY 16	DIGESTION INTRODUCTION	Alimentary canal and digestive glands, role of digestive enzymes and gastrointestinal hormones; nutritional and digestive disorders - PEM, indigestion, constipation, vomiting, jaundice, diarrhoea.	To understand the role of various organs of digestive system.
DAY 17	RESPIRATION INTRODUCTION	Exchange of gases; cellular respiration, fermentation & aerobic respiration. Respiratory system in humans; mechanism of breathing and disorders related to respiration - asthma, emphysema, occupational respiratory disorders.	To familiarise the process of respiration. To understand the role of various organs of respiratory system.
DAY 18	CIRCULATORY SYSTEM AN INTRODUCTION	Composition of blood, blood groups, coagulation of blood, ECG; double circulation; disorders of circulatory system - hypertension, coronary artery disease, angina pectoris, heart failure.	To understand the role of various organs of circulatory system. To appreciate the function of heart.
DAY 19	PHOTOSYNTHESIS AN INTRODUCTION	Photosynthesis as a mean of autotrophic nutrition; site of photosynthesis, pigments involved in photosynthesis	To understand the role of photosynthetic pigments.

		factors affecting photosynthesis.	
DAY 20	SKELETON SYSTEM	Skeletal system and its functions; joints; disorders of muscular and skeletal system - myasthenia gravis, tetany, muscular dystrophy, arthritis, osteoporosis, gout.	To acquire the knowledge about bones and their movements.
DAY 21	FEED BACK AND OPEN SESSION	Answering the queries & doubts Discussion	To inculcate interest in Biology.