

HAPPYDAYSSCHOOL,SHIVPURI(M.P.)

DEPARTMENTOFSCIENCE CLASS-XI (Biology)



MONTHCHAPTEREXPECTED LEARNING OUTCOMESPEDAGOGICAL APPROACH APPROACH METHODS/ STRATEGIES)ASSESSMENT TOOLSRUBRICSART INTEGRATION INTEGRATIONCh.1The living worldBiodiversity; Needs for classification; taxonomy andsystematic/binomian omenclatureConstructivist approach ReflectiveapproachClassroom discussions opustionanswer session PortfolioContent, neatness, completenessHerbariumfileCh.2 Biological classificationFive kingdom classification; of plants into major of plants into major of plants into major of animals (non-chordates upto phyla level and chordates upto class levelConstructivist approach Reflective approach Reflective approach Reflective approach Reflective approach Reflective approach Reflective session perintiol.ab activity.Constructivist approach Reflective approach Reflective approach Reflective approach Reflective approach Reflective session perintiol.ab activity.Concept, Presentation Presentation Presentation Presentation Presentation Presentation, perintiophyla, perintiophyla level and chordates upto class levelConstructivist approach Reflective approach Reflective approach Reflective approach Reflective session PortfolioConcept, Presentation Presentation Presentation Presentation, Pres	CLASS-XI (Biology)							
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Portfolio analysis				approach				
			chordates upto class level			▲ ·		
			1.1			analysis		
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		F	PREMID TERMEXAM	IINATION			
L	Ch.5Morphology of Flowering Plants	Morphology of different parts of flowering plants: root, stem,leaf,inflorescence, flower, fruit and seed, Description of family Solanaceae	Constructivist approachReflective approach ,Inquiry based	Classroom discussion, explainationth roughliving specimens of plant(nature walk),project Lab activity	Content, Research, data collection Presentation performance, analysis		
AUGUST	Ch.6Anatomyof flowering plants	Anatomy and functions of tissuessystemofdicotsand monocots.	Reflective approach ,Inquiry based	Classroom discussion, Question answer session Portfolio Lab activity	Concept, Procedure, Presentation, performance, analysis	Floral diagrams and formulae of different families	
	Ch.7Structural organizationin animals	Morphology, anatomy and functions of different systems of Frog	Constructivist approach Reflective approach	Classroom discussion, Question answer session Portfolio	Concept, Procedure, Presentation		
SEPTEMBER	Ch.8Cell-The unit of life	Cell theory, structure of prokaryotic and eukaryotic cells; Plant cell and animal cell; cell envelope; cell membrane, cell wall cell organelles-structure and function; endomembrane system, endoplasmic reticulum, golgi bodies, lyosomes, vacuoles; mitrochodria, ribosomes, plastids, microbodies; cytoskeleton, cilia, flagella, centrioles, nucleus.	Constructivist approachReflective approach	Classroom discussions ,Questionanswer session PortfolioLab Activity	Content, neatness ,completenes s performance, data collection, analysis		Modules on structure and functioning of cell organelles





	Ch.9	Biomolecules, structure and	Constructivist	Classroom	Concept,		
	Biomolecules	function of proteins	approachReflective	discussions	Procedure,		
		carbohydrates, lipids,	approach	,Questionanswer	Presentation,		
		nucleic acids; Enzymes-		session	performance,		
		types,properties,enzyme action.		PortfolioLab Activity	analysis		
	Ch.10CellCycle	Cellcycle, mitosis, meiosis	Constructivist	Classroom	Concept,	Stages of cell cycles	
	andCell Division	and their significance	approachReflective	discussions	Procedure,	stages of cell cycles	
		and their significance	approach	,Questionanswer	Presentation		
			upprouen	session	Tresentation		
		MI	DTERM EXAMINATI		and -	1	<u> </u>
	Ch.11	Site of photosynthesis,	Constructivist	Classroom	Content,		Modules on
	Pho <mark>tosynthesis</mark> in	pigments involved in	approachReflective	discussions,	neatness		photo phosphor
	higher plants	photosynthesis, cyclic and	approach	Questionanswer	,completeness		elation
		non-cyclic photo-		sessionPortfolio			
		phosphorylation,	N N N				
ER		chemiosmotic hypothesis;					
OCTOBER		photorespiration;C3					
DL		andC4 path ways; factors affecting			217 10		
00		Photosynthesis.	V C.I				
	Ch.12	Cellular respiration- glycol	Constructivist	Classroom	Content,		
	Respirationin	sis, fermentation, TCA	approachReflective	discussions,	neatness		
	plants	cycle and electron transport	approach	Questionanswer	,completeness		
		system,		sessionPortfolio	-		
		Amphibolic, pathways,					
	Ch.13Plant-	respiratory quotient. Phages of plant growth,	Constructivist	Classroom	Contort		
~	Growth and	conditions of growth,	approachReflective	discussions,	Content, neatness		
NOVEMBER	development	differentiation,	approach	Questionanswer	,completeness		
Į Ą	development	dedifferentiation and	upprouen	sessionPortfolio	,compreteness		
E		redifferentiation, sequence			1.1		
20	1100	of developmental	n Ch	000	0	11100	
ž	LLC	processesing a plant cell;				Nes	and the care
		growthregulators.		0			





Ch.14 Breathing	Respiratory system,	Constructivist	Classroom	Content,	
and Exchange of	mechanism of breathing,	approachReflective	discussions,	neatness	
gases	exchangeofgases, transport of	approach	Questionanswer	,completenes	
	gases ®ulation of		sessionPortfolio	S	
	respirationrespiratory				
	disorders				
Ch.15	Composition of blood,	Constructivist	Classroom	Content,	Module on
Body fluid and	blood group, human	approachReflective	discussion,	neatness	functioningof
circulation	circulatory system,	approach	Question –	,completenes	blood
	regulation of cardiac		Answersession	S	circulation
	activity, cardiac disorders.		,portfolio	- Charles -	



Education to Change Lives...





			POSTMIDTERMEX	AMINATION			
DECEMBER	Ch.16 Excretory productsandtheir Elimination	Modes of excretion human excretorysystem–structure and functioning, role of other organs in excretion, disorders, Dialysis, Artificialkidney,kidney transplant	Constructivist approachReflective approach	Classroom discussion, Question – Answersession ,Sketch Lab activity	Content, neatness completeness performance, analysis	Chartofdisorders of different organ systems	
DEC	Ch.17 Locomotionand movement	Types of movement's skeletal muscle- its functioning, skeleton system –structure and function, Disorders of muscularandskeletal System.	Constructivist approachReflective approach	Classroom discussion, Question – Answersession ,Sketch	Concept, Procedure, Presentation,		
KY26	Ch.18 Neural Control andCoordination	Nervoussysteminhumans, generation and conduction of nerve impulse.	Constructivist approachReflective approach	Classroom discussion, Question – Answersession ,Sketch	Concept, Procedure, Presentation,		Moduleon generation and conduction ofanerve impulse
JANUARY26	Ch.19 Chemical coordinationand integration	Endocrine glands and hormones, mechanismof hormone action, role of hormones as messengers andregulators, hypo-and hyperactivity and related disorders.	Constructivist approachReflective approach, Inquiry based	Classroom discussion, Question – Answersession ,Sketch, assignment	Content, neatness completeness	chart on mechanism ,role and regulation of hormones(endocrin e glands)	
FEB. & MAR CH	icat	ion to	REVISION & FINA	LE XAMINATION	n li	ves.	

SIGNATURE OFHOD (NEELAM BHARDWAJ)

SIGNATURE OF PRINCIPAL

(ANJU SHARMA)



HAPPYDAYSSCHOOL,SHIVPURI(M.P.)

DEPARTMENTOFSCIENCE CLASS-XII BIOLOGY(044)



MONTH CHAPTER EXPECTED RUBRICS ART PEDAGOGICAL ASSESSMENT ICT **INTEGRATION LEARNINGOUTCOMES APPROACH** TOOLS **INTEGRATION** (TEACHING METHODS/ STRATEGIES) Structure of flower, Modulesonpre 1. Sexual Classroom Content, Constructivist. reproduction in development of male and neatness. and post ,Inquirybased, discussion. performance floweringplants female gametophytes, fertilization Questionanswer Integrative pollination-types ,agencies, , completion eventsin plant session. pollen-pistil, interaction; assignment,Lab double fertilization, post activities. fertilization events. special modes-apomixes, parthenocarpy, polyembriony. Maleandfemalereproductive 2. Human Constructivist, Inq Classroom Content, Flow charts on reproduction system, anatomyof testesand hormonalcontro presentation, uiry based, discussion, APRIL ovary, gametogenesis, performance linhuman Integrative Question menstrual cycle, fertilization, completion beings answersession, embryogenesis, implantation; ,Labactivities, pregnancy and placenta assignment formation, parturition. 3.Reproductive reproductive health Constructivist,Ing and Classroom Content, health prevention from STDs, birth uiry based, discussion, neatness control: need and methods. Integrative Ouestion completion contraception and MTP answersession. amniocentesis and assisted Curriculum reproductive technologies. activities. assignment

Education to Change Lives...





	4.Heredityand variation	Mendelian inheritance, deviation from Mendelism, pleiotropy, chromosome theory of inheritance, sex determination-in human, bird sand honey bee, linkage and	Constructivist,Inquiry based, Integrative	Classroom discussion, Question answersession, ,Labactivities,	Content, neatness, , data collection, analysis	Pedigreecharts	Modules on Mendalian disorders
K		crossing over, sex linked inheritance, mendelian disorders.		assignment			
AJUL	5.Molecularbasis of inheritance	Structure of DNA and RNA, DNA packaging, replication Lac Operon, genom project, DNA fingerprinting	Constructivist, Inquiry based, Integrative	Classroom discussion, Question answersession, Curriculum activities, assignment	Content, neatness, completion performance , data collection, analysis		Modules on chromosomal disorders in humanbeings
	10.10		V CT	Lab activity	76		
		APP	PREMIDTERM EX	XAMINATION			
AUGUST	6. Evolution		based, Integrative	Classroom discussion, Question answersession, Curriculum activities, assignment	Content, neatness, completion		Module on historyofHuman Evolution
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	7.Humanhealth	Pathogens; parasites causing	Constructivist, Inquiry	Classroom	Content neatness	Chart on parasites	
	and diseases		based, Integrative	discussion,		causing human	
	and discuses	control, basicconceptsof	based, miegrative		*	diseases and their	
		immunology-vaccines-cancer		Question		control	
		HIV and AIDS, adolescence-		answersession,		control	
		drug and alcohol abuse.		Curriculum			
		didg und diconor douse.		activities,	6.5.7 ····		
				assignment	N. C.		
	8. Microbesin		Constructivist, Inquiry	Classroom	Content,		
	humanwelfare		based, Integrative	discussion,	neatness,		
	and the second s	production, sewage treatment,		Question answer	completion		
		energy generation and		session, Lab			
		microbesasbio-controlagents		activities,			
		andbio-fertilizers, antibiotics-	0 0 0	assignment			
		production and judicious use.					
			Constructivist, Inquiry	Classroom	Content,		
R			based, Integrative	discussion,	neatness,		
SEPTEMBER		technology)		Question answer	completion		
W	Processes			session,			
ITE				Curriculum			
EP				activities,			
S				assignment			
	10.Biotechnology	Application of biotechnology	Constructivist,	Classroom	Content, neatness,		Modules on
	anditsapplication	inhealthandagriculture, gene	Inquiry based,	discussion,	completion		Application of
	-	therapy, genetically modified	Integrative	Question answer			biotechnology
		organisms-Btcottontrangenic		session,			
		animals bio safty issues,	0	Curriculum			
		biopiracy and patents.		activities,			
-			-	assignment			
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1	MIDTERM EXAMINATION						
OCTOBER	11.Organismsand populations	-	based, Integrative	discussion, Question answer session, assignment, lab	Content, neatness, completion performance , data collection, analysis	Draw different types of population pyramids	
~	12. Ecosystem	Ecosystem;patterns, components, productivity and decoposition; energy flow, pyramids of number, biomass, energy	Constructivist, Inquiry based, Integrative	Classroom discussion, Question answer session, Curriculum activities, assignment	Content, neatness, completion		
NOVEMBER	13. Biodiversity and its conservation(contin ue)	patterns, importance, loss of		Classroom discussion, Question answersession, Curriculum activities, assignment	Content, neatness, completion		
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