

PAKISTAN INTERNATIONAL SCHOOL BURAIDAH,
AL-QASSIM. SAUDI ARABIA.



BIOLOGY

SYLLABUS

CLASS VIII

(Federal)

PAKISTAN INTERNATIONAL SCHOOL, BURAIDAH
SYLLABUS BREAKUP

Class: 8TH D Subject: Biology

Number of Teaching Weeks in First Term: (1 - 14)

Number of Teaching Weeks in Second Term: (15 - 28)

Name of Text Book:

Week No.	Chapter No.	Day	Topic	Book Page Numbers
1	1st	Day 1	Introduction to Biology	6
		Day 2	Quranic instruction about life	6.7
		Day 3	Major fields of biology	7.8
		Day 4	Sub fields of biology	8
2		Day 1	relationship of biology with other fields	9
		Day 2	careers in biology	10
		Day 3	science as collaborative field	10.11
		Day 4	biological method and its steps	11.12
3		Day 1	hypothesis ,theory and law	12
		Day 2	malaria as biological problem	13
		Day 3	causes of malaria	13
		Day 4	spread of malaria by anopheles	14,15
4	2nd	Day 1	exercise MCQS, short questions	17,18
		Day 2	exercise long questions	19
		Day 3	introduction to Biodiversity	21
		Day 4	classification of organism and its advantages	22
5		Day 1	history of classification	22,23
		Day 2	three domain system	23
		Day 3	domain archea and domain bacteria	24
		Day 4	domain eukarya	24,25

Week No.	Chapter No.	Day	Topic	Book Page Numbers
6		Day 1	taxonomic ranks of classification	25
		Day 2	simple classification of human and pea	25
		Day 3	species and binomial nomenclature	26
		Day 4	importance of binomial nomenclature	
7	3rd	Day 1	classification of viruses	27
		Day 2	exercise MCQS, short questions	29
		Day 3	extensive questions	30
		Day 4	introduction to cell	32
8		Day 1	structure of plant and animal cell	32
		Day 2	cell wall composition, structure and function	33
		Day 3	cell membrane and fluid mosaic model	33
		Day 4	cytoplasm, endoplasmic reticulum	
9		Day 1	types of endoplasmic reticulum and ribosome	34
		Day 2	function of ribosome and golgi apparatus	35
		Day 3	lysosomes and mitochondria	35
		Day 4	plastids and its types	36
10		Day 1	vacuole and centrioles	37
		Day 2	cytoskeleton	
		Day 3	cilia and flagella	38
		Day 4	nucleus	39
11		Day 1	structural advantage of plant and animal cells	
		Day 2	cell specialization	40
		Day 3	rbc, neuron, liver and muscles	41
		Day 4	division of labour	

Week No.	Chapter No.	Day	Topic	Book Page Numbers
12		Day 1	stem cells	42
		Day 2	exercise MCQS, short questions	46
		Day 3	extensive questions	47
		Day 4		
13	4th	Day 1	recalling cell theory and cell cycle	49
		Day 2	phases of cell cycle	
		Day 3	spindle apparatus	50
		Day 4	introduction to mitosis	
14		Day 1	steps of karyokinesis	51
		Day 2	cytokinesis	52
		Day 3	significance of mitosis	
		Day 4	cloning and tissue culture	53
15		Day 1	meiosis	
		Day 2	steps of meiosis 1st	54
		Day 3	steps of meiosis 2nd	55
		Day 4	significance of meiosis	56
16		Day 1	genetic variation	57
		Day 2	comparison of mitosis and meiosis	
		Day 3	exercise MCQS, short questions	60,61,62
		Day 4	extensive questions	
17	5th	Day 1	introduction to levels of organization	65
		Day 2	types of tissues in human	
		Day 3	levels of organization and explanation	65,66
		Day 4	organs	

Week No.	Chapter No.	Day	Topic	Book Page Numbers
18		Day 1	organs system and how it works	67
		Day 2	homeostasis	
		Day 3	thermoregulation	68
		Day 4	major organ systems of human	69
19		Day 1	organs system and homeostasis	70
		Day 2	plant tissue and organ system	71
		Day 3	internal structure of leaf	
		Day 4	exercise MCQS, short questions	75
20	6th	Day 1	extensive questions	76
		Day 2	biochemistry and molecular biology	78
		Day 3	biological molecules	
		Day 4	protien composition and amino acids	79
21		Day 1	structural level of protein	80
		Day 2	functions of protien	
		Day 3	animal and plant sources of protien	81
		Day 4	lipids and its different classes	82
22		Day 1	structure of lipids	
		Day 2	functions and sources of lipids	83
		Day 3	introduction to carbohydrates	
		Day 4	structure of carbohydrates	84
23		Day 1	function and sources of carbohydrates	
		Day 2	classification of carbohydrates	85
		Day 3	common diasacharides	
		Day 4	polysacharides and its uses	86

Week No.	Chapter No.	Day	Topic	Book Page Numbers
24		Day 1	introduction to nucleic acid	87
		Day 2	structure of nucleotidemodel of DNA and RNA	88
		Day 3	Structure of DNA	
		Day 4	DNA as data bank	
25		Day 1	Genes and heriditary information	89
		Day 2	structure and tyoes of RNA	
		Day 3	flow of genitic information	90
		Day 4	exercise MCQS, short questions	91
26	7th	Day 1	extensive questions	92
		Day 2	metabolism and its types	94
		Day 3	enzymes and their characteristics	
		Day 4	features of enzymes	95
27		Day 1	activation energy	96
		Day 2	mechanism of enzyme action	
		Day 3	factors affectinng enzyme activity	97
		Day 4	substrate concentration ,activator	
28		Day 1	enzyme inhibition	
		Day 2	diagramtic sketch of enzyme inhibition	100
		Day 3	role of ATP	
		Day 4	ATP ADP cycle	101