

Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	1
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	The word biology has been derived from two _____ words:						
a	Italian	b	Greek	c	Latin	d	Dutch
ii	The animals which are included in invertebrates:						
a	Parrots	b	Humans	c	Insects	d	Snakes
iii	Basic unit of heredity is called:						
a	Embryo	b	Gene	c	Protein	d	Species
iv	The famous writings of Abdul Malik Asmai are:						
a	Alkhail	b	Al-wahoosh	c	Khalq-al-ansan	d	All of these
v	Choose the micromolecule among all of these:						
a	Starch	b	Glucose	c	Proteins	d	lipids
vi	The organism which have membrane bounded organelles are called:						
a	Prokaryotes	b	Unicellular	c	Eukaryotes	d	Multi-cellular
vii	A tissue made up of similar kinds of:						
a	Organelles	b	Cells	c	Organs	d	Organ system
viii	Which part of a plant does not take part in reproduction?						
a	Flower	b	Seed	c	Leaf	d	None of these
ix	How many bio-elements make 99% of protoplasm?						
a	92	b	16	c	6	d	10
x	Stomach is composed of :						
a	Epithelial tissues	b	Muscular tissues	c	Both a&b	d	Connective tissues
xi	Oxygen makes _____ of protoplasm:						
a	10%	b	18%	c	65%	d	21%
xii	The book which is known as canon of medicine in west:						
a	Al-Khalil	b	Al-Abil	c	Al-Qanun-fi al-tib	d	Al-Nabatat
xiii	Volvox is _____:						
a	Algae	b	Fungi	c	Plant	d	Protozoa
xiv	Which organism is prokaryote?						
a	Amoeba	b	Bacterium	c	Euglena	d	Paramecium
xv	Micro-sopic study of tissue is called:						



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a	Anatomy	b	Histology	c	Physicology	d	Ecology
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Name of Student	Class	Subject	Board	Chapter
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Section - B

Q. No.2:- Attempt all the following. All questions carry equal marks.

1. What do you know about contribution of Jaber Bin Hayan and Bu Ali Sina.
2. Discuss that mustard plant has multicellular organization. What type of organ are found in it.
3. What is meant by colonial organization?
4. What do you know about Biogeography and Bio-economics?
5. What is sociobiology and entomology? What are general characteristics of insects?
6. Define biology. What are major divisions of biology? Define each division.
7. Compare morphology and anatomy.
8. What is unicellular organization? How do they live? Give examples and draw diagrams of two Uni-cellular organism.
9. Define the following terms.

i. Taxonomy

ii. Biotechnology

iii. Pharmacology
10. What does the profession of medicine/surgery deals with?
11. What does agriculturists and horticulturist do?

Section – C

Note: Attempt all questions. All question carry equal marks.

Q. No.3:-Describe the levels of biological organization in detail.

Q. No.4:-Write a detailed note on careers in biology

Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	2
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	The scientist who observed micro-organism in the blood of malaria patients:						
a	Ronald ross	b	Laveran	c	A.F.A king	d	Robert hokee
ii	The observation made by A.F.A king were:						
a	10	b	20	c	30	d	40
iii	The period between entry of pathogen and appearance of symptoms is called:						
a	Infection	b	Incubation	c	Effection	d	None of these
iv	The female mosquito which causes malaria in birds is;						
a	Anopheles	b	Culex	c	Aedes	d	All of these
v	The bark of which tree was very suitable for curing malaria:						
a	Cedrus	b	Pinus	c	Cinchona	d	Cactus
vi	Dengue fever is transmitted by a mosquito.						
a	Culex	b	Anopheles	c	Aedes	d	All of these
vii	Plasmodium is cause of malaria. This statement is a:						
a	Hypothesis	b	Deduction	c	Theory	d	Law
viii	Theory of evolution was proposed by:						
a	Aristotle	b	Darwin	c	BU-Ali-Sina	d	Lamarck
ix	A constant fact of nature is called:						
a	Law	b	Hypothesis	c	Theory	d	Observation
x	Malaria means:						
a	Bad air	b	Fresh air	c	Marshy place	d	All of these
xi	Data is analyzed:						
a	Scientically	b	Statistically	c	Informatically	d	All of these
xii	Ronald Ross performed his experiments:						
a	1880's	b	1980's	c	1890's	d	1780's
xiii	A hypothesis must be:						



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a	Testable	b	Falsifiable	c	Based on observations	d	All of these
xiv	Laveran was _____ army physician:						
a	Italian	b	French	c	Greek	d	None of these
xv	A query about life that is asked by someone or comes in biologist’s mind by himself is called:						
a	Biological method	b	biological method	c	Experiment	d	Law



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Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	2
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Attempt all the following short questions. All questions carry equal marks.

- 1. How quinine was discovered?
- 2. Enlist observations made by A.F.A king?
- 3. What does scientific and biological method mean? Name steps involve in biological method?
- 4. Why experiments are performed? How experiments are performed by using control and experimental groups?
- 5. What is hypothesis? What characteristics should hypothesis have?
- 6. How deduction are drawn? Give an example?
- 7. How plasmodium was discovered?
- 8. In what way a hypothesis becomes theory and law?
- 9. Justify that mathematics is an integral part of scientific method?
- 10. Show with the help of an experiment that plasmodium is cause of malaria?
- 11. What were early observations made about malaria?

Section – C

Note: Attempt all long questions. All question carry equal marks.

Q. No.3:- (a) Discuss data organization and data analysis by using statistical methods?

(b) Draw detailed flow-sheet diagram to show biological method?

Q. No.4:- Explain how plasmodium gets into the blood of man?



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Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	3
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

I	P.Sativum is scientific name of:						
A	Onion	b	Pea plant	c	Mustard plant	d	Fungi
li	Taxon of “order” was introduced by:						
A	Carolous Linnaeus	b	John Ray	c	Augustin Rivinus	d	Aristotle
iii	Viruses are assigned to kingdom:						
A	Monera	b	Protista	c	Fungi	d	None of these
Iv	Scientific name of Orchid tree is:						
A	Bauhinia Variegata	b	Allium Cepa	c	Pisum Sativum	d	Brassica Campestris
V	Algae have:						
A	No chloroplast	b	No cell-wall	c	No-multicellular or sex- organs	d	thallus
vi	Cell wall of fungi is composed of:						
A	Chitin	b	Cellulose	c	Murien	d	Benzene
vii	In which kingdom you would classify unicellular eukaryotes?						
A	Fungi	b	Monera	c	Protista	D	Plantac
viii	The branch of biology which deals with classification and evolutionary history is called:						
A	Taxonomy	b	Systematics	c	Taxonomic Hierarchy	d	Genetics
Ix	Bio-diversity depends upon:						
A	Climate	b	Altitude	c	Soil	d	All of these
X	Human belongs to phylum?						
A	Magnoliphyta	B	Chordata	c	Mamalia	d	chrysophyta
xi	Who described 350 species in his book?						
A	Aristotle	b	Aljahiz	c	Rivinus	d	Linnaeus
xii	The terms “Procariotique” and “Eucariotique” were described by:						
a	Whittakar	b	Linnaeus	c	E-chatton	d	Margulis



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xiii	Moses and ferns have multicellular sex-organ and they belong to kngdom:						
a	Monera	b	Protista	c	Fungi	d	Plantae
xiv	Unicellular prokaryotic organism are only placed in kingdom:						
a	Monera	b	Protista	c	Fungi	d	Plantae
xv	Main causes of soil-erosion is:						
a	Hunting	b	Deforestation	c	Rainfall	d	Pollution



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Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	3
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Attempt the following short questions. All questions carry equal marks.

1. What are contributions of Whitakar, Margulis and shwarts in taxomnomy?
2. Why viruses are excluded from five kingdom classification system?
3. What is meant by binomial Numen Clature? Which rules adopted universally while suggesting scientific names of species?
4. What does extinct and endangered mean? Enlist extinct and endangered species in Pakistan?
5. Write down causes and effect of deforestation?
6. What are prions and viroids? How do they differ from viruses?
7. Classify and define differenttaxa for classification of organism?
8. Give significance of forests?
9. Write down drawbacks of three-kingdom classification?
- 10.What is two-kingdom classification system? Give its drawbacks?
- 11.What is biological classification? Give aims and basis?

Section – C

Note: Attempt all questions. All question carry equal marks.

Q. No.1:-Write down the general characteristics of five kingdoms in detail?

Q. No.2:- Describe impact of human beings and Bio diversity?

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Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	4
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	Cell walls are found in these organisms except:						
a	Plants	b	Animals	c	Bacteria	d	Fungi
ii	Measure of the clarity of an image is:						
a	Resolution	b	Magnification	c	Magnetic field	d	Microscopy
iii	Leukoplasts are:						
a	Green	b	Blue	c	Red	d	Colorless
iv	The first living cell was observed by:						
a	Robert Hooke	b	Leeuwen Hook	c	Robert Brown	d	Lamarck
v	Lysosomes were discovered by:						
a	De Duve	b	Robert Brown	c	Schwaan	d	Schleiden
vi	Which of the following plastids have chlorophyll?						
a	Chloroplast	b	Leucoplast	c	Chromoplast	d	All of these
vii	Which solution has equal concentration of solutes?						
a	Hypotonic	b	Hypertonic	c	Isotonic	d	Toxic
viii	Example of connective tissues:						
a	Blood	b	Cartilage	c	Adipose tissue	d	All of these
ix	The mitochondrion functions in:						
a	Lipid storage	b	Protein synthesis	c	Photosynthesis	d	Cellular respiration
x	The pores in cell walls of adjacent cell are called:						
a	Stomata	b	Guard cell	c	Plasmodesmata	d	protoplast
xi	Microtubules are made up of:						
a	Chitin	b	Myosin	c	Tublin	d	Actin
xii	Chromosomes in the form of thread like structure called:						
a	Chitin	b	Peptidoglycan	c	Chromatin	d	Cellulose
xiii	Xylem tissues are made up of:						
a	Vessel element	b	Tracheid's	c	Companions cells	d	Both a&b
xiv	The type of muscle tissues which are not involuntary?						
a	Skeletal muscles	b	Cardiac	c	Smooth	d	All of these
xv	The process of cellular ingestion of bulky materials by infolding of cell membrane is called:						
a	Exocytosis	b	Endocytosis	c	Kargokinesis	d	None of these



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Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	4
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Answer the following short questions. All questions carry equal marks.

- 1. Write down working principle of light and electron microscope?
- 2. Describe structure and function of cell-membrane?
- 3. Differentiate between micro-tubules and microfilaments?
- 4. Briefly describe structure of mitochondrion?
- 5. Why it is said that cell size and shape are related to cell-function and also give examples?
- 6. What is meant by filtration. Explain with example?
- 7. What is active transport? Explain it?
- 8. Discuss types of connective tissues?
- 9. Give types of muscle tissue?
- 10. What are phloem tissues? What type of cells they are made up of? Give examples their function?
- 11. Give functions of following:
 - (a) Ribosomes
 - (b) SER
 - (c) Centrioles

Section – C

Note: Attempt the following long questions. All question carry equal marks.

Q. No.1:-Write a detailed note on following:

- (a) Meristematic tissue
- (b) Nucleus

Q. No.2:- (a) Explain structure, types and function of plastids?

- (b) Write down main difference between prokaryotic and eukaryotic cells?



CLASSIC STUDY

Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	5
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	The cell duplicate its chromosomes during:						
a	G1-phase	b	S-phase	c	G2-phase	d	G0-phase
ii	In prokaryotes cell divides by:						
a	Mitosis	b	Meiosis	c	Binary fission	d	Interphase
iii	Nucleus is visible only during:						
a	Interphase	b	Mitotic phase	c	Metaphase	d	Anaphase
iv	Meiosis was discovered and described for the first time by a German biologist called:						
a	Oscar Hertwig	b	Walther Fleming	c	August Weismann	d	None of these
v	_____ enzymes break cellular components:						
a	Ribosomal	B	Vascular	c	Lysosomal	d	polysomal
vi	In interphase-II _____ of chromosomes does not occur:						
a	Condensation	b	Duplication	c	Doubling	d	Transformation
vii	In 1911 , the American geneticist Thomas Morgan observed the phenomenon of crossing over in:						
a	Mosquito	b	Fruit fly	c	Common fly	d	Mutant fly
viii	Meiosis-I generates:						
a	Recombination	b	Mutation	c	Genetic variations	d	Crossing over
ix	Meiosis is essential for _____ reproduction.						
a	Asexual	b	Sexual	c	Binary fission	d	Budding
x	In meiosis-I two kinetochore spindle fibers attached with as						
a	One chromosome	b	Pair of chromosomes	c	Haploid chromosome	D	Diploid chromosome
xi	Hydra reproduces asexually by						
a	Cutting	b	Grafting	c	Budding	d	Binary Fission
xii	Telophase is reversal of						
a	Anaphase	b	Interphase	c	Metaphase	d	Prophase
xiii	The phenomena of spread of tumor is called						
a	Malignant	b	Benign	c	Metasis	d	Mitosis
xiv	Which is not the function of mitosis						
a	Development	b	Growth	c	Asexual reproduction	d	Sexual reproduction
xv	Chiasmata is formed during						
a	Prophase – I	b	Anaphase – I	c	Prophase – II	d	Anaphase - II



CLASSIC STUDY



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Name of Student	Class	Subject	Board	Chapter
	10th	Biology	FB	5
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Attempt all the following. All questions carry equal marks

- 1. What event occurs during G1 and Go phase?
- 2. Define mitosis and its phases?
- 3. Enlist events that take place during Anaphase (Mitosis)?
- 4. How tumors are formed? Give its types?
- 5. In what way plant cytokinesis differ from animal cytokinesis?
- 6. How do mitosis helps in cell replacement and regeneration?
- 7. Enlist events take place during Apoptosis?
- 8. What is Necrosis? Give its major cause?
- 9. Define cell- site and differentiate b/w mitosis and interphase?
- 10.What type of errors may occur during meiosis?
- 11. Define phase of Meiosis – II?

Section – C

Note: Attempt all questions. All question carry equal marks.

Q # 1. Describe the significance of meiosis?

Q # 2. `Write the events take place in prophase of mitosis and prophase – I of meiosis – I?

Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	6
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

I	The bio-chemical reactions in which large molecules are synthesized is called						
a	Anabolism	b	Catabolism	c	Metabolism	d	None of these
II	Who used the term enzyme first time?						
a	Oscar Hertwig	b	Winhelm kuhne	c	Flemming	d	None of these
III	Almost all enzymes are						
a	Carbohydrates	b	Fatty Acids	c	Proteins	d	Lipids
IV	An enzyme which breaks down starch is						
a	Portease	b	Amylase	c	Trypsin	d	Lipase
V	What is the effect of change in pH?						
a	Ionization	B	Denaturation	c	Saturation	d	Degradation
VI	Enzymes are _____ during the reaction?						
a	Not changed	b	Changed	c	Destroyed	d	Inhibited
VII	Enzymes are proteins						
a	Tabular	b	Filamentous	c	Globular	d	Angular
VIII	Enzymes need non protein molecules called						
a	Prosthetic group	b	Co – enzyme	c	Co – factor	d	Activator
IX	Flavin and haem are cofactor						
a	Ionic	b	Zinc – containing	c	Inorganic	d	Organic
X	Biocatalysts are used to _____ the biochemical reactions						
a	Retard	b	Inhibit	c	Stop	D	Speed up
XI	All enzymes require energy						
a	Activation	b	Kinetic	c	Potential	d	Chemical
XII	Lock and key model was proposed by						
a	Emil Fischer	b	Winhelm Kuhne	c	Malvin Calvin	d	August Wiseman
XIII	Enzymes are made of long linear chains of						
a	Fatty acids	B	Amino acids	c	Nucleotides	d	Lipids
XIV	The concept of metabolism was given by						
a	Ibn – e – Sina	b	Ibn – e – Nafees	c	Al – Zahravi	d	Al – Jahiz
XV	Induced fit model was suggested by						
a	Emil Fischer	b	Winhelm Kuhne	c	Daniel Crosland	d	August Wiseman



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Name of Student	Class	Subject	Board	Chapter
	10th	Biology	FB	6
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Attempt all the following. All questions carry equal marks

1. What are enzymes and activation energy? How do enzymes lower their activation energy?
2. How would you say enzymes are specific in function?
3. What do you know effect of PH on rate of enzyme action?
4. How temperature effects enzymes action?
5. What happens when substrate concentration is changed?
6. Write and state two models to explain enzymes action?
7. What is metabolism? Give its types?
8. Define terms:
(a) Enzyme (b) Substract (c) Products
9. Define the following terms:
(a) Cofactor (b) Prosthetic group (c) Coenzyme
10. What was contribution of Ibn-e-Nafees and Wihelm kuhne?
11. What is meant by:
(a) Saturation (b) Ionization (c) Denaturation

Section – C

Note: Attempt all questions. All question carry equal marks.

Q # 1. Describe characteristics of enzymes?

Q # 2. (a) Discuss role of enzymes in different industries for fast chemical reaction?

(b) Describe mechanism of enzyme action?



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Name of Student	Class	Subject	Board	Chapter
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Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	From which bonds of ATP molecule energy is taken:						
a	P-P bonds	b	C-H bonds	c	C-N bonds	d	C-O bonds
ii	In which component of leaf cells and chlorophyll is present?						
a	Stroma	b	Thylakoids	c	Plasma membrane	d	Cytoplasm
iii	The whole series of light reaction is called:						
a	Y-scheme	b	Z-scheme	c	W-scheme	d	A-scheme
iv	Which of these enter into kreb's cycle:						
a	Glucose	b	Pyruvic acid	c	Citric acid	d	Acetyl Co-A
v	The study of energy relationship and energy transformation in living organism:						
a	Biotechnology	b	Bioenergy	c	Bioenergetics	d	None of these
vi	Acts as the hydrogen source for reduction in photosynthesis:						
a	Co ₂	b	H ₂ O	c	Co ₄	d	So ₄
vii	The most common fuel used by cell to get energy by cellular respiration is:						
a	Glycogen	b	Sucrose	c	Glucose	d	Starch
viii	Cell is:						
a	Open system	b	Close system	c	Unidirectional	d	Two directional
ix	Food contains in its bonds:						
a	Kinetic energy	b	Potential energy	c	Mechanical energy	d	Heat energy
x	When electrons are present in oxygen they make with oxygen:						
a	Unstable association	b	Stable association	c	Loose bonds	d	Covalent bonds
xi	A ribose sugar has carbon atoms:						
a	4	b	5	c	6	d	7
xii	ATP molecule was discovered by:						
a	Fritz lipmann	b	Calvin	c	Karl lohman	d	Hans krebs
xiii	The clusters of photosynthetic pigment are called:						
a	Thylakoids	b	Photosystem	c	Carotenoids	d	Chlorophyll
xiv	The co-enzyme which gets two hydrogen atoms and reduces:						
a	NAD ⁺	b	FAD ⁺	c	ATP	d	All of these



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xv	The chemical substance secreted b7y epidermal cells is called:						
a	Cutin	b	Lignin	c	Pectin	d	Albumen

Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	7
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Attempt all the following. All questions carry equal marks.

- 1. What is structure and function of ATP?
- 2. Differentiate between dark and light reaction?
- 3. How do plants intake water and carbon dioxide for photosynthesis?
- 4. What are pigments? What is their role in photosynthesis/
- 5. What is effect of temperature and light intensity on rate of photosynthesis?
- 6. Differentiate between aerobic and anaerobic respiration?
- 7. Discuss types of anaerobic respiration?
- 8. What is significance of anaerobic respiration or fermentation?
- 9. Differentiate between photosynthesis and respiration?
- 10. Define respiration and photosynthesis?
- 11. What do you know about redox reaction in living cells?

Section – C

Note: Attempt all questions. All question carry equal marks.

Q. No.3:-describe mechanism and energy budget of respiration?

Q. No.4:- (a) How does ATP provided energy?

(b) Write summary of light and dark reactions?



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Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	8
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	The example of micronutrient is:						
a	Phosphorous	b	Calcium	c	Sulphur	d	Iron
ii	It helps in blood clotting:						
a	Calcium	b	Phosphorous	c	Nitrogen	d	Sodium
iii	Butter contains _____ percent of saturated acids:						
a	50	b	60	c	70	d	80
iv	Which of the following is not fat soluble vitamin?						
a	Vitamin-A	b	Vitamin-B	c	Vitamin-c	d	Vitamin-E
v	The disease caused by deficiency of iodine is:						
a	Anemia	b	Marasmus	c	Kwashiorkor	d	Goiter
vi	Deficiency of vitamin-D causes:						
a	Rickets	b	Anemia	c	Goiter	d	Night blindness
vii	Which is called mother of disease?						
a	Hypertension	b	Diabetes	c	Obesity	d	Constipation
viii	The disease caused by deficiency of Vitamin-C:						
a	Scurvy	b	Rickets	c	Goiter	d	Malaria



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ix	Weight of liver in adult human is:						
a	2.5 kg	b	1.5 kg	c	3 kg	d	2 kg
x	In adult human, oesophagus length is about:						
a	20cm	b	25cm	c	30cm	d	35cm
xi	The first fat-soluble vitamin identified in 1913:						
a	Vitamin-A	b	Vitamin-B	c	Vitamin-C	d	Vitamin-D
xii	Increases in chemical nutrients in an ecosystem is called:						
a	Nutrition	b	Malnutrition	c	Eutrophication	d	Mass-nutrition
xiii	A pear shaped yellow sac is called:						
a	Caecum	b	Villi	c	Gall-bladder	d	Appendix
xiv	A non-function finger-like projection arise from blind end of caecum is called:						
a	Villi	b	Appendix	c	Lacteal	d	Fibrin
xv	Blood clotting protein is called:						
a	Pectin	b	Myosin	c	Fibrinogen	d	Albumen



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Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	8
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Attempt all the following. All questions carry equal marks.

1. What role does magnesium play in plants/
2. What are organic and inorganic fertilizer? Write their importance?
3. What are environmental hazards caused by use of inorganic fertilizer?
4. Briefly describe lipids?
5. What is role of calcium and iron in human being?
6. Classify dietary fibre. Also write its importance?
7. What are effects of protein-energy malnutrition?
8. What are problems produced by extended period of malnutrition?
9. Outline steps of nutrition in humans?
10. Define the following terms:
(a) Peristalsis (b) Chyme (c) Function of saliva
11. Discuss function of stomach?
12. What are causes and symptoms of ulcer?
13. What do you know about different part of large intestine?

Section – C

Note: Attempt all questions. All question carry equal marks.

Q. No.3:- How small intestine participate in digestion and absorption of food. Explain it?

Q. No.4:- (a) Describe structure and function of liver?

(b) What is famine? What are major cause of famine?

Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	9
Date :	Objective			Teacher Remarks

Section - A

Q. No.1:- Circle the correct option. Each part carries one mark.

i	The longest and strongest chamber in heart is:						
a	Right atrium	b	Left atrium	c	Right ventricle	d	Left ventricle
ii	In most plants food is transported in the form of:						
a	Glucose	b	Starch	c	Sucrose	d	Protein
iii	Transpiration depends upon:						
a	Leaf surface area	b	Water content	c	Temperature	d	All of these
iv	A healthy woman's hear beats per minute is:						
a	70	b	75	c	72	d	80
v	Which of tissue layer is found in all blood vessels?						
a	Nervous tissues	b	Endothelium	c	Skeletal muscles	d	Connective tissues
vi	"AB" blood group individuals are called:						
a	Sickle cells	b	Universal donors	c	Universal recipients	d	None of these
vii	In dengue fever which cells are shorten?						
a	RBC	b	Platelets	c	WBC	d	None of these
viii	What is normal pH of blood?						
a	6.8	b	7.0	c	7.2	d	7.4
ix	ABO blood group system was discovered by:						
a	T.H Morgan	b	Hans Krebs	c	Win helm Kuhne	d	Landsteiner
x	Valves to present the backflow of blood are found in:						
a	Arteries	b	Veins	c	Capillaries	d	All of these
xi	The narrow thin walled layer of cells present outside conducting tissues is called:						
a	Pericycle	b	Endodermis	c	Cortex	d	Epidoerms
xii	Water constitutes about _____ of plasma:						
a	90-91%	b	90-95%	c	80-82%	d	50-52%



CLASSIC STUDY

xiii	Accumulation of _____ is prime contributor to atherosclerosis:						
a	Calcium	b	Potassium	c	Cholesterol	d	Lignin
xiv	Root of beet is a _____ in first growing season.						
a	Source	b	Sink	c	Fruit	d	Vegetable
xv	In normal adults the mass of heart is:						
a	200-250g	b	250-300g	c	300-450g	d	450-500g



CLASSIC STUDY

Name of Student	Class	Subject	Board	Chapter
	9th	Biology	FB	9
Date :	Subjective			Teacher Remarks

Section - B

Q. No.2:- Attempt all the following. All questions carry equal marks.

1. What is meant by systole and diastole?
2. How myocardial infraction is caused and treated?
3. Enlist major veins along with their function?
4. Write four main difference between arteries?
5. What do you know about pulmonary and systemic circulation?
6. How blood can be transferred on the basis of R.H blood system?
7. What are causes and treatment of leukemia and thalassemia?
8. Discuss types and function of different types of WBC’S?
9. Briefly describe composition of plasma?
10. Define transpirational pull? Give reasons for creation of transpirational pull?
11. What are harmful effects and benefits of transpiration in plant?
12. What is mechanism of opening and closing of stomata?
13. What is ABO blood group systems? How different blood groups are cross matched? Show it in tabular form?
14. What is pressure flow hypothesis?

Section – C

Note: Attempt all questions. All question carry equal marks.

- Q. No.3:- (a) Describe structure and function of root?
- (b) Compare properties of different type of blood cells?

Q. No.4:- Explain the structure and function of human heart?



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