Answer Sheet No. **BIOLOGY** (OBJECTIVE PART) Smart Syllabus Roll No.

PART – I 21/01 (✿)

(INTERMEDIATE)

AJK-21

Sign. Dy. Supdnt.   Fictitious Roll No. (For Office Use)   Sign. Candidate

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BIOLOGY (INTERMEDIATE) SMART SYLLABUS

(PART – I) 21/01 (✿) Marks : 17

(OBJECTIVE PART) Time : 20 Minutes

Note:- Write your Roll No. in space provided. Over writing, cutting, using of lead pencil
will result in loss of marks. All questions are to be attempted.

1- Each question has four possible answers, Tick (√) the correct answer. (17)

1	National environmental problem in Pakistan is;						
	A	Corruption	B	Pollution	C	Population	D	Tanneries

2	Lipids are not soluble in;						
	A	Chloroform	B	Ether	C	Alcohol	D	Sap

3	Some enzymes which are involved in the synthesis of proteins are integral part of;						
	A	Lysosome	B	Nucleolus	C	Vacuole	D	Ribosomes

4	The size of eukaryotic ribosome is;						
	A	40 S	B	70 S	C	80 S	D	60 S

5	Which one is the smallest known virus;						
	A	Polio virus	B	Influenza virus	C	Herpes virus	D	Pox virus

6	Reserve food material in cyanobacteria is;						
	A	Fat	B	Protein	C	Sterols	D	Glycogen

7	Giants of the protist kingdom are included in;						
	A	Red algae	B	Brown algae	C	Diatoms	D	Green algae

8	Histoplasmosis is a serious infection of;						
	A	Lungs	B	Skin	C	Kidney	D	Eyes & brain

9	Which of the following is a modified leaf;						
	A	Root	B	Fruit	C	Flower	D	Shoot

10	The excretory system of flatworms is composed of;						
	A	Nephridia	B	Nephron	C	Kidney	D	Flame cells

11	Earthworm belongs to phylum;						
	A	Echinodermata	B	Annelida	C	Mollusca	D	Porifera

12	The dark reaction occurs in;						
	A	Cytoplasm	B	Nucleus	C	Grana	D	Stroma

13	The most common fuel used by the cell to provide energy by cellular respiration is;						
	A	Maltose	B	Glucose	C	Fructose	D	Lipid

14	Carbohydrate digesting enzyme of pancreas is;						
	A	Amylopsin	B	Lipase	C	Trypsin	D	Pepsin

15	The air spaces in leaf may comprise up to _____ of the total volume of a leaf;						
	A	80 %	B	60 %	C	40 %	D	20 %

16	The normal pH of human blood is;						
	A	7.4	B	4.7	C	4.5	D	5.4

17	The cells which supply ATP and proteins to sieve tubes are;						
	A	Epidermal	B	Tracheids	C	Vessels	D	Companion

(The End)

BIOLOGY   21/01   Smart Syllabus

PAPER : PART – I

INTERMEDIATE

MARKS: 68

TIME : 2:40 Hours   (SUBJECTIVE PART)

AJK-21

SECTION – I

2-   Write short answers of any eight parts.   (2 x 8 = 16)

i	Write general formula of amino acid.	ii	What is cofactor? Also write its functions.
iii	What is active site of an enzyme? Name its parts.	iv	Differentiate between reversible and irreversible inhibitors.
v	What is dikaryotic hyphae? How it is formed.	vi	How endomycorhizae is different from ectomycorhizae?
vii	What are placental mammals?	viii	Why sub-phylum vertebrate is also called craniata?
ix	Write two reasons why Echinodermata is placed at top of list of invertebrates.	x	Mention two effects of harmful insects.
xi	What are light dependant reactions and their products?	xii	What is cyclic phosphorylation? How it is activated?

3-   Write short answers of any eight parts.   (2 x 8 = 16)

i	Define parasitology and biotechnology.	ii	What is hydroponic culture technique?
iii	Write down the functions of golgi complex.	iv	Define storage diseases.
v	What are trichonymphas? Give their role.	vi	Write down about evolutionary significance of Euglenoids.
vii	What is sleeping sickness?	viii	Name four phylum of photosynthetic protists.
ix	Give any four characteristics of vascular plants, which enable them to become predominant flora of land.	x	Why bryophytes are said to be amphibian of the plants?
xi	Define facilitated diffusion.	xii	What is thalassaemia?

4-   Write short answers of any six parts.   (2 x 6 = 12)

i	Write down botanical names of brinjal and potato.	ii	What are plasmids? Give their function.
iii	Differentiate between diarrhoea and constipation.	iv	Define chlorosis. Give its cause.
v	Write two functions of secretion.	vi	Give two properties of respiratory surface.
vii	What are alveoli? Give their function.	viii	Enlist functions of nasal cavity in man.
ix	What is myoglobin? Give its function.		

SECTION – II

Note:- Attempt any three questions.   (8 x 3 = 24)

5	(a)	How scientific problem of biology can be solved by using biological method? Explain.	(04)
	(b)	Write in detail how influx of K^+ ions help in opening and closing of stomata?	(04)
6	(a)	Discuss primary and secondary structure of proteins.	(04)
	(b)	Describe economic gains due to fungi.	(04)
7	(a)	Describe the process of nutrition in Bacteria.	(04)
	(b)	Discuss evolution of megaphyll leaf.	(04)
8	(a)	What is hepatitis? Give its types.	(04)
	(b)	Write a note on citric acid cycle.	(04)
9	(a)	Write a note on Lysosomes.	(04)
	(b)	Describe symbiotic nutrition in plants and nutrition in insectivorous plants.	(04)

(The End)