

Roll No. : \_\_\_\_\_

Objective  
Paper Code  
**6463**

**Intermediate Part First**  
**BIOLOGY ( Objective ) GROUP - I**  
Time: 20 Minutes      Marks: 17



Q.No.1 You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill the relevant circle in front of that question number on computerized answer sheet. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero marks in that question. Attempt as many questions as given in objective type question paper and leave other circles blank.

S.#	Questions	A	B	C	D
1	Production of glucose is most closely associated with:	Aerobic respiration	Anaerobic respiration	Krebs cycle	Calvin cycle
2	Which group would you assign to a plant which produces spores and embryo but lack seed and vascular tissue?	Angiosperm	Bryophyte	Algae	Gymnosperm
3	Normal pH of human blood is:	6.4	7.4	8.4	4.7
4	The systolic pressure of normal human is:	70 mm Hg	90 mm Hg	100 mm Hg	120 mm Hg
5	Spiracles are found in:	Fishes	Cockroach	Frog	Birds
6	Dipeptides are broken down into amino acid by an enzyme called:	Erypsin	Trypsin	Lactase	Maltose
7	Pyruvic acid is produced as result of:	Calvin cycle	Glycolysis	Electron transport chain	Krebs cycle
8	Syrinx is organ of voice of:	Goat	Crow	Toad	Snake
9	Commercially shark-liver oil is extracted and used as source of vitamin:	B	C	B <sub>12</sub>	A & D
10	Loose smut of wheat is caused by:	Phytophthora	Rhizopus	Puccinia	Ustilago
11	Kelps are largest of known algae which belongs to:	Diatoms	Red algae	Brown algae	Green algae
12	When tuft of flagella is present at one pole of bacteria, which term we will use?	Lophotrichous	Amphitrichous	Peritrichous	Atrichous
13	Pigs are source of hepatitis type:	B	C	D	E
14	The attachment of two subunits of ribosomes is controlled by:	Fe <sup>2+</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Fe <sup>3+</sup>
15	If non-protein part of an enzyme is loosely attached to the protein part, it is known as:	Coenzyme	Holoenzyme	Activator	Prosthetic group
16	How many hydrogen bonds are present in adenine and thymine pair in DNA?	Two	Three	One	Six
17	Which one of these is percentage of oxygen by mass of human being?	10%	65%	18%	1%

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**BIOLOGY ( Subjective ) GROUP - I**

Time: 02:40 Hours Marks: 68

**SECTION – I****2. Write short answers to any EIGHT parts.**

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- (i) Define specific heat capacity of water.
- (ii) Differentiate between cofactor and activator.
- (iii) What is feedback inhibition of enzymes?
- (iv) How substrate concentration affects enzyme activity?
- (v) What is nuclear mitosis? In which organisms it is found?
- (vi) Differentiate between ectomycorrhizae and endomycorrhizae.
- (vii) Differentiate between Radiata and Bilateria.
- (viii) What is mantle? Write its function.
- (ix) Differentiate the spiral and determinate cleavage.
- (x) What is Archaeopteryx? Write its reptilian and avian characters, (one each)
- (xi) What is compensation point?
- (xii) Define action spectrum and absorption spectrum.

**3. Write short answers to any EIGHT parts.**

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- (i) How organelle is different from organ?
- (ii) What is the biological control? Give an example.
- (iii) Write first two salient features of cell theory.
- (iv) Define endocytosis and exocytosis.
- (v) How kingdom protista was created?
- (vi) Differentiate micronucleus and meganucleus in ciliates.
- (vii) Compare slime molds with fungi.
- (viii) Why brown algae are important?
- (ix) What is the importance of photorespiration?
- (x) It is said that "smokers invite Cancer". How?
- (xi) How artificial pace maker works?
- (xii) Differentiate antigen and antibody.

**4. Write short answers to any SIX parts.**

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- (i) Write the scientific name of brinjal and onion.
- (ii) What are super blue green algae? Give their importance.
- (iii) What is meant by phylogenetic system of classification?
- (iv) Why seed is considered a crucial adaptations for terrestrial life of plants?
- (v) Why bryophytes are called amphibious plants?
- (vi) What is meant by heterogamy?
- (vii) What is botulism? Give its cause.
- (viii) Can we live without large intestine? Comment.
- (ix) What do you know about detritivores? Give an example.

**SECTION – II** Attempt any THREE questions. Each question carries 08 marks.

5. (a) Explain the biological method for solving biological problems. 04  
(b) Discuss mechanical aspects of breathing in man. 04
6. (a) Write an account on acylglycerol. 04  
(b) Write characteristics of Basidiomycota. 04
7. (a) Write structure and function of cell wall. 03,01  
(b) Write notes on (i) Food Poisoning (ii) Ulcer. 02,02
8. (a) Explain four viral diseases common in Pakistan. 04  
(b) Describe the characteristics and functions of white blood cells. 02,02
9. (a) Discuss the habitat, structure and reproduction of nostoc. 01,01,02  
(b) What is respiration? Explain the anaerobic respiration in detail. 01,03

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