

39-XI-119
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 P.P.D-11 I-19

Objective
 Paper Code
6465

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

Roll No. : _____



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	Histamine is produced by:	Neutrophils	Eosinophils	Basophils	Monocytes
2	Single circuit heart is found in:	Amphibians	Fishes	Reptiles	Mammals
3	Spiracles are found in:	Hydra	Cockroach	Birds	Fishes
4	Which is fluid feeder?	Aphid	Earthworm	Sheep	Man
5	Most abundant protein on earth is:	Rubisco	Haemoglobin	Albumen	Fibrinogen
6	Haem portion of haemoglobin contains:	Mg ⁺⁺	Fe ⁺⁺	Ca ⁺⁺	N
7	Garden snail belongs to:	Gastropoda	Cephalopoda	Pelecypoda	Arthropoda
8	Fresh water sponge is:	Sycon	Leucosolenia	Spongilla	Euplectella
9	Polytrichum is a:	Club moss	Moss	Liverwort	Hornwort
10	They are ecologically important as bioindicators of air pollution:	Lichens	Mycorrhizae	Yeast	Viruses
11	Tests of actinopods are made up of:	Calcium	Silica	Sodium	Potassium
12	Bacteria without any flagella are called:	Peritrichous	Monotrichous	Lophotrichous	Atrichous
13	Organelle of symbiotic origin is:	Cell wall	Cell membrane	Mitochondria	Vacuole
14	Resolution of electron microscope ranges between:	1 - 2 μm	1 - 5 nm	1 - 3 Angstrom	2 - 4 Angstrom
15	Co-enzyme is closely related to:	Lipids	Minerals	Vitamins	Water
16	Human tissues have 85% water in cells of:	Blood	Liver	Bone	Brain
17	The number and variety of species in a place is called:	Population	Community	Diversity	Biodiversity

39-XI119-13000

BIOLOGY (Subjective) GROUP - I

Time: 02:40 Hours Marks: 68

SECTION – I

2. Write short answers to any EIGHT parts. 16
- (i) Define protective role of water.
 - (ii) What are inhibitors? Give one example.
 - (iii) Differentiate between pepsin and pepsinogen.
 - (iv) What are reversible inhibitors?
 - (v) Write resemblances of fungi with plants.
 - (vi) What are rust and smut diseases of plants?
 - (vii) Define protandrous animals.
 - (viii) Differentiate between parazoa and eumetazoa.
 - (ix) What is the commercial importance of sponges?
 - (x) Name three classes of phylum Annelida.
 - (xi) What is the role of antenna complex in photosynthesis?
 - (xii) Give the function of spectrophotometer.
3. Write short answers to any EIGHT parts. 16
- (i) What is hydroponic culture technique? Give its possible applications.
 - (ii) Define hypothesis.
 - (iii) Give salient features of cell theory.
 - (iv) Write four important functions of endoplasmic reticulum.
 - (v) What are kelps?
 - (vi) Give the importance of physarum polycephalum.
 - (vii) What are choanoflagellates? How are they related to sponges?
 - (viii) Give four general characters of algae.
 - (ix) What is meant by arthropods?
 - (x) What are paraphyses and protonema?
 - (xi) Define plasmolysis and deplasmolysis.
 - (xii) Define immunity.
4. Write short answers to any SIX parts. 12
- (i) What are prions?
 - (ii) What is mesosome?
 - (iii) What is assimilation?
 - (iv) Define nutrition.
 - (v) What is botulism?
 - (vi) Define photorespiration.
 - (vii) What is operculum?
 - (viii) What are parabronchi?
 - (ix) What is asthma?

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

5. (a) Give a detailed account of cloning. 04
 (b) Discuss cardiac cycle in detail. 04
6. (a) What are carbohydrates? Give details of monosaccharides with suitable structural illustrations. 04
 (b) Describe economic gains due to fungi. 04
7. (a) Give use and misuse of antibiotics. 04
 (b) Discuss the life cycle of an angiospermic plant. 04
8. (a) Give detail of life cycle of bacteriophage with diagram. 04
 (b) Explain non-cyclic phosphorylation along with diagram. 04
9. (a) Give structure and function of mitochondria. 04
 (b) Write notes on (i) Anorexia nervosa (ii) Bulimia nervosa 04

F B D - 11 - 19

Roll No. : _____

Objective
Paper Code
6464

Intermediate Part First (New Scheme)
BIOLOGY (Objective) GROUP - II
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	In birds, the organ of voice is called:	Syrinx	Larynx	Vocal card	Parabronchi
2	Marsupium is character of:	Opossum	Dolphin	Duck bill platypus	Bat
3	The number of chloroplast in each mesophyll cell is about:	20 - 100	20 - 120	20 - 200	20 - 220
4	The breaking of the terminal phosphate of ATP releases energy about:	2 K cal	3.7 K cal	17.3 K cal	7.3 K cal
5	pH of fresh saliva is nearly:	6	7	8	9
6	Number of spiracle in cockroach is:	7 pairs	6 pairs	10 pairs	8 pairs
7	Plasma proteins in the blood are about:	9%	9 - 11%	11 - 13%	0.9%
8	The rate of transpiration doubles by every rise of temperature about:	5°C	10°C	15°C	20°C
9	The number of plant species in biodiversity is:	53.1%	17.6%	19.9%	9.4%
10	Number of amino acids in each turn of α -helix is:	3	3.6	0.36	36
11	Salivary amylase work best at pH:	6.80	5.50	4.00	2.00
12	Attachment of two units of ribosomes is controlled by:	Ca ⁺⁺	Mg ⁺⁺	Fe ⁺⁺	Fe ⁺⁺⁺
13	Genus for corn plant is:	Zea	Cassia	Allium	Solanum
14	Pili are made of special protein called:	Flagellin	Tubulin	Fibrinogen	Pilin
15	Cell wall of oomycetes contain mostly:	Chitin	Cellulose	Glycan	Pectin
16	The species of mushroom which are edible are about:	100	1000	200	2000
17	In angiosperm, megaspore develop into female gametophyte which consists of:	3 cells	5 cells	7 cells	9 cells

40-XI119-12000

Intermediate Part First (New Scheme)
BIOLOGY (Subjective) GROUP - II
 Time: 02:40 Hours Marks: 68

Roll No. _____

SECTION – I

2. Write short answers to any EIGHT parts. 16

- (i) Define heat capacity.
- (ii) What is lock and key model?
- (iii) Define apoenzyme.
- (iv) What is prosthetic group?
- (v) What is nuclear mitosis?
- (vi) Write the scientific name of yeast.
- (vii) What are gemmules?
- (viii) What is radula?
- (ix) What is nymph?
- (x) What do you know about flame cells?
- (xi) What are accessory pigments?
- (xii) What is compensation point?

3. Write short answers to any EIGHT parts. 16

- (i) Differentiate between molecular biology and biotechnology.
- (ii) Define community.
- (iii) What is Tay-Sachs disease?
- (iv) Differentiate between chromoplast and leucoplast.
- (v) What are giant amoeba?
- (vi) How ciliates differ from protozoa?
- (vii) What are foraminiferans?
- (viii) What is kelp?
- (ix) Why bryophytes are called amphibians of plants?
- (x) Define alternation of generation.
- (xi) Define immunity.
- (xii) What is systemic circulation?

4. Write short answers to any SIX parts. 12

- (i) Compare prophage with provirus.
- (ii) What is ecological importance of bacteria?
- (iii) Differentiate between secretin and gastrin.
- (iv) Enlist the steps involved in holozoic nutrition.
- (v) Write only two functions of oral cavity.
- (vi) Define photorespiration.
- (vii) What are parabronchi? Give their function.
- (viii) Give a brief description of respiratory distress syndrome.
- (ix) Describe lung capacities.

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

- 5. (a) Write a note on cloning. 04
- (b) Describe the composition of blood plasma. 04
- 6. (a) Give composition and types of RNA in detail. 04
- (b) Describe loose smut of wheat in detail. 04
- 7. (a) Describe different shapes of bacteria. 04
- (b) Give adaptive characters of bryophytes to land habitat. 04
- 8. (a) Give lytic cycle of bacteriophage. 04
- (b) Describe the process of glycolysis. 04
- 9. (a) Give structure and function of endoplasmic reticulum. 04
- (b) Explain digestion in amoeba. 04