

Objective
Paper Code
6465

Intermediate Part First - 903
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.oi

FBD-CA-22

S.#	Questions	A	B	C	D
1	Yeasts are unicellular:	Algae	Protozoans	Fungi	Bacteria
2	Entamoeba histolytica causes:	Dysentery	Fever	Cholera	Hepatitis
3	Bacterial pathogenicity is due to:	Capsule	Cell wall	Cyst	Slime
4	Bacteriophage replicates only in cells:	Animal	Plant	Bacteria	Fungi
5	The number of chromosomes in drosophila melanogaster is:	8	14	16	26
6	Enzymes lower down the energy of:	Kinetic	Activation	Potential	Ionic
7	Cotton is the pure form of:	Glycogen	Waxes	Cellulose	Amino acids
8	In human body the amount of iron is:	4%	0.4%	0.04%	0.004%
9	Which is not granulocytes?	Monocytes	Neutrophils	Eosinophils	Basophils
10	The right atrium receives deoxygenated blood from these parts of the body except:	Brain	Liver	Lungs	Kidneys
11	The respiratory system is the most efficient in:	Man	Birds	Reptiles	Fish
12	Which animal has no need for a gall bladder?	Cat	Dog	Lion	Goat
13	Functional group of chlorophyll 'a' is:	CH ₃	CHO	COOH	OH
14	Lactic acid is formed in these except during extreme physical activities:	Man	Fish	Horse	Cat
15	These are arachnids except:	Scorpion	Beetles	Ticks	Mites
16	Which one is not a pseudocoelomate?	Ascaris	Earthworm	Ancylostoma	Round worms
17	An ovule is an Integumented indehiscent:	Micro-sporangium	Seed	Sporogonium	Mega-sporangium

13-XI132029-30000

BIOLOGY (Subjective) GROUP - I

Time: 02:40 Hours

Marks: 68

SECTION – I**2. Write short answers to any EIGHT parts.****FBD-91-22**

16

- (i) How basic proteins play their role in combined form with nucleic acids?
- (ii) Why enzymes need optimum pH for their proper functioning? Give one example.
- (iii) Why some enzymatic reactions occur in series to form the final products? Explain briefly.
- (iv) Which model for enzyme substrate interaction is more supported? Discuss briefly that model.
- (v) Name four diseases caused by fungi.
- (vi) How karyogamy is different from plasmogamy?
- (vii) Write four characteristics of mammals.
- (viii) Give economic importance of mollusca.
- (ix) Define the term regeneration and name animal which exhibit it.
- (x) What are coral reefs and where they are found?
- (xi) Differentiate between chlorophyll-a and chlorophyll-b.
- (xii) What are the differences between alcoholic and lactic acid fermentation?

3. Write short answers to any EIGHT parts.

16

- (i) Why organ system is less complex in plants as compared to animals?
- (ii) What are adverse effects of use of chemicals during its use to control pests?
- (iii) What is difference between cisternae and cristae?
- (iv) Why mitochondria are called self-replicating organelle?
- (v) From where the Giant Amoeba obtain energy?
- (vi) How ciliates differ from protozoans?
- (vii) Name the parasitic flagellates and disease caused by it and how it is transmitted?
- (viii) Why fungus like protists are not fungi?
- (ix) Differentiate between antheridiophore and archegoniophore.
- (x) Write names of two extinct and two living members of psilopsida.
- (xi) Define guttation. What factors affect it?
- (xii) Write role of lymphatic system in defense of body.

4. Write short answers to any SIX parts.

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- (i) Write short note on polio.
- (ii) Define plasmids. What is its use?
- (iii) Write any two digestive functions of liver.
- (iv) What is ulcer? Write few lines on it.
- (v) Differentiate ectoparasites and endoparasites with examples.
- (vi) What is the function of parabronchi in birds?
- (vii) Define photorespiration. Give its consequences.
- (viii) Define Calvin Benson Cycle.
- (ix) What the role spiracles play in cockroach respiration?

SECTION – II

Attempt any THREE questions. Each question carries 08 marks.

5. (a) Why is some diseases vaccination is used while for others preventive measures are adopted?
(b) Discuss major solutes and their role in blood plasma.

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6. (a) Explain the importance of carbon in living organisms.
(b) Describe different methods of asexual reproduction in fungi.

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7. (a) How does physical methods differ from chemical methods to control bacteria?
(b) How does evolution of microphyll differ from evolution of megaphyll?

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8. (a) Write a note on five kingdom classification system of Robert Whittaker.
(b) Sketch the process of glycolysis. (No description required)

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9. (a) What is endoplasmic reticulum? Write its types and functions.
(b) Describe digestion of food in small intestine.

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Objective
Paper Code
6462

Intermediate Part First - 004
BIOLOGY (Objective) GROUP - II
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. **FBD-92-22**

S.#	Questions	A	B	C	D
1	Branch of biology which deals with the study of distribution of animals in nature is called:	Biogeography	Zoogeography	Phytogeography	Palaeontology
2	Lipoproteins are structural framework of:	Chromosomes	Nucleoid	Membranes	Chromatin
3	During metabolic reactions, these substances can be used again and again:	Co-factor	Enzymes	Enzymes and coenzymes	Prosthetic group
4	A lipoprotein membrane (crista) contains F1-Particles and different:	Nucleotides	RNA	Electron carriers	Nucleoli
5	CD ₄ -receptor is present on:	Plasma cells	Helper T-cells	B-Lymphocytes	Natural killer cells
6	When a bacterium posses a single flagellum at one pole is termed as:	Atrichous	Lophotrichous	Amphitrichous	Monotrichous
7	Entamoeba histolytica causes:	Intestinal parasite	Lung parasite	Brain parasite	Blood parasite
8	Reindeer moss is a:	Moss	Animal	Lichen	Plant
9	All seed producing plants are called:	Arthrophytes	Angiosperms	Pteridophytes	Spermatophytes
10	Sponges are protandrous hermaphrodite because:	Female sex cells develop first	Ovaries develop first	Sperms cells develop first	Testes develop first
11	A solid double ventral nerve cord is present in earthworm, hence earthworm is dissected from:	Ventral side	Dorsal side	Lateral side	Ventrolateral
12	Pyruvate decarboxylase activity is inhibited by; optimal concentration of:	ATP	NAD ⁺	NADH	Citrate
13	Two molecules of reduces NAD produces _____ molecules of ATP in respiratory chain.	3	6	4	2
14	A neurotic disorder in slightly older girls is called:	Anorexia nervosa	Dyspepsia	Obesity	Bulimia nervosa
15	Emphysema is the breakdown of:	Bronchi	Alveoli	Trachea	Bronchioles
16	Highest blood pressure is in aorta is generated by contraction of:	Right ventricle	Left atrium	Right atrium	Left ventricle
17	During filling of heart chambers, walls of chambers are relaxed indicate:	Atrial diastole	Cardiac diastole	Ventricular systole	Ventricular diastole

14-XI142020-5000

BIOLOGY (Subjective) GROUP - II

Time: 02:40 Hours

Marks: 68 **FBD-G2-22****SECTION - I****2. Write short answers to any EIGHT parts.**

16

- (i) Why cellulose is digested in herbivores but not in humans?
- (ii) Why pepsin is secreted in form of pepsinogen?
- (iii) Name an enzyme which act in acidic medium and also give its pH.
- (iv) Why inorganic ions cannot be used as co-enzyme?
- (v) Differentiate between ectomycorrhizae and endomycorrhizae.
- (vi) What are predator fungi? Give an example.
- (vii) Differentiate between diploblastic and triploblastic organisms.
- (viii) How coral reefs are formed?
- (ix) Write two adaptations of parasites for parasitic mode of life.
- (x) Write two harmful effects of insects.
- (xi) Write the molecular formulas of chlorophyll a and b.
- (xii) What is lactic acid fermentation? Also write its equation.

16

3. Write short answers to any EIGHT parts.

- (i) What is hydroponic culture technique? Give its uses.
- (ii) How and when a hypothesis becomes a theory?
- (iii) Do you know about the body in the nucleus which is stained dark?
- (iv) Can you compare the process of pinocytosis with phagocytosis?
- (v) How the pathogen of malaria completes its life cycle?
- (vi) Can you give economic importance of algae?
- (vii) Which type of pigments are present in algae?
- (viii) Give two characteristics of red algae.
- (ix) What is protonema? In which group of bryophyte it is produced?
- (x) Give four examples of ferns.
- (xi) What is pressure potential?
- (xii) Define active immunity.

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4. Write short answers to any SIX parts.

- (i) What is provirus?
- (ii) Differentiate between prokaryotic and eukaryotic cytoplasm.
- (iii) What is dyspepsia? Give its two symptoms.
- (iv) What is appendicitis?
- (v) Define peristalsis.
- (vi) What are vocal cords?
- (vii) Why is respiration important to living organisms?
- (viii) Why myoglobin is termed as muscle haemoglobin?
- (ix) Why most of the cetaceans have high concentration of myoglobin in muscles?

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

5. (a) How can we protect ourselves from the incurable diseases? 04
- (b) What is transpiration? Explain the stomatal transpiration. 04
6. (a) Write a note on primary and secondary structure of proteins. 04
- (b) Give economic losses due to fungi. 04
7. (a) There is diversity in respiration of bacteria. Prove it. Give examples. 02,02
- (b) To, what does alternation of generations refer in plants (Bryophytes)? How it is significant? 02,02
8. (a) Define viruses and describe their characteristics. 01,03
- (b) Discuss Krebs cycle with sketch in detail. 04
9. (a) Differentiate between prokaryotic and eukaryotic cells. 04
- (b) Write a note on absorption of food in ileum of human. 04