FBD-41-21

Objective
Paper Code
6467

Intermediate Part First

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	A flower is a modified:	Shoot	Leaf	Root	Petal
2	Example of free living fresh water flat worm is:	Dugesia	Fasciola	Taenia	Hydra
3	Pseudocoelom body cavity is found in:	Ascaris	Earthworm	Neries	Mosquito
4	Photosystem I has chlorophyll 'a', which absorbs maximum light of:	400nm	500nm	600nm	700nm
5	Glycolysis is the breakdown of glucose upto the formation of:	Lactic acid	Alcohol	Pyruvic acid	Acetic acid
6	Which has parasitic nutrition?	Cuscuta	Mycorrhiza	Nitrogen fixing bacteria	Lichens
7	When an oxygen tension is 115mm mercury, how much haemoglobin is saturated in percentage?	92%	94%	96%	98%
8	Pressure flow theory was proposed by:	Ernst Munch	Sacks	Dixon	Hook
9	Leucaemia is the result of uncontrolled production of:	Leucocytes	Thrombocytes	Erythrocytes	Platelets
10	In deductive reasoning we move from:	General to general	General to specific	Specific to specific	Specific to general
11	Which is not carbohydrate?	Wood	Cotton	Paper	Wax
12	An enzyme with its co-enzyme or prosthetic group removed is designated as:	Holo enzyme	Co-enzyme	Apoenzyme	Activator
13	Which is not found in secondary wall?	Salts	Silica	Chitin	Cellulose
14	Which is an insect?	Cray fish	Silver fish	Jelly fish	Star fish
15	Bacteria without any flagella is called:	Atrichous	Lophotrichous	Monotrichous	Peritrichous
16	Entamoeba histolytica causes in humans:	Sleeping sickness	Amoebic dysentery	Malaria	Cholera
17	It is non-hyphal unicellular fungi:	Bacteria	Rust	Yeast	Smut

Intermediate Part First

BIOLOGY (Subjective) GROUP - I

Roll No. _____

Time: 02:40 Hours Marks: 68 FBD-41-21

SECTION – I

2. **Write short answers to any EIGHT parts.** 16
   (i) Define peptide and polypeptide bond.
   (ii) Define apoenzyme and holoenzyme.
   (iii) Differentiate between binding and catalytic site of enzyme.
   (iv) What do you mean by induce fit model? Who proposed it?
   (v) Write the ecological importance of fungi.
   (vi) Define spore and conidia.
   (vii) Write about Hookworm and pinworm.
   (viii) Differentiate between acoelomate and coelomate.
   (ix) Write about some affinities which echinoderms show with hemichordata.
   (x) Differentiate between ostia and osculum.
   (xi) What is the source of oxygen during photosynthesis?
   (xii) Define carotenoids. How they are helpful in photosynthesis?
3. **Write short answers to any EIGHT parts.** 16
   (i) Differentiate between physiology and morphology.
   (ii) Differentiate between freshwater Biology and marine Biology briefly.
   (iii) What are Golgi apparatus? Give its function.
   (iv) What are cristae and polysome?
   (v) Write two differences between fungi and oomycotes.
   (vi) What are kelps? Give their importance.
   (vii) Write the importance of algae.
   (viii) Give two examples of unicellular green algae.
   (ix) Differentiate between microphyll and megaphyll.
   (x) What is alternation of generations? How it is important for plant life?
   (xi) Differentiate between diffusion and osmosis.
   (xii) What are lymph nodes? What is their function?
4. **Write short answers to any SIX parts.** 12
   (i) Differentiate between mumps and measles.
   (ii) Define Pilli. Also give its function.
   (iii) What is trypsin?
   (iv) What is saprophytic nutrition?
   (v) Differentiate between villi and microvilli.
   (vi) Define lung capacities.
   (vii) What is myoglobin?
   (viii) Define tuberculosis.
   (ix) How pH affects haemoglobin to combine with oxygen?

SECTION – II

Attempt any THREE questions. Each question carries 08 marks.

5. (a) Write a note on biological method. 04
   (b) Discuss any eight functions of blood. 04
6. (a) Discuss in detail primary structure of proteins. 04
   (b) Write a note on animal diseases caused by fungi. 04
7. (a) Discuss growth and reproduction in bacteria. 04
   (b) Describe evolution of seed in plant. 04
8. (a) Describe the life cycle of bacteriophage. 04
   (b) Make a sketch of non-cyclic phosphorylation. 04
9. (a) What are lysosomes? Give their importance with special emphasis on Tay-Sach's disease. 04
   (b) Give the role of stomach in digestion of food. 04

FBD-G2-21

Roll No. : _____

Objective
Paper Code
6468

Intermediate Part First

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	The body cavity of Nematoda is called as:	Blastocoel	Haemocoel	Pseudocoel	Coelom
2	The phylum which is exclusively marine is:	Echinodermata	Pisces	Porifera	Amphibia
3	In respiratory chain, the coenzyme Q is oxidized by cytochrome:	Cyt-b	Cyt-a	Cyt-ab	Cyt-c
4	The end product of glucose breakdown in glycolysis is:	Acetate	Pyruvate	Oxalate	Fumarate
5	The inactive pepsinogen is secreted by cells:	Oxyntic	Zymogenic	Mucous	Gastric
6	The lungs are covered by double-layered thin membranous sacs called:	Pleura	Alveoli	Air sacs	Pericardium
7	Types of blood cells which stay from 10 - 20 hours in the blood are called:	Monocytes	Lymphocytes	Neutrophils	Leukocytes
8	The substance which inhibit blood clotting is:	Histamine	Heparin	Disprin	Fibrin
9	Pasteurization is widely used for preservation of:	Vegetable	Fruit	Meat products	Milk products
10	The branch of biology which deals with the study of chemical component and chemical process in living organism is called:	Biochemistry	Biogenetic	Bioecology	Biology
11	The competitive inhibitor of succinic acid is:	Succinic acid	Fumaric acid	Citric acid	Malonic acid
12	Which is not found in primary wall?	Cellulose	Hemicellulose	Lignin	Pectic
13	A disease, which is highly contagious is:	Measles	Mumps	Herpes	AIDS
14	Grape-like cluster of cocci-bacteria is called as:	Diplococcus	Streptococcus	Staphylococcus	Diplobacillus
15	Which is not a ciliate?	Paramecium	Vorticella	Stentor	Trypanosoma
16	Which is used to give flavour, aroma and colour to cheese?	Yeast	Puccinia	Penicillium	Agaricus
17	All seed producing plants are called:	Bryophytes	Tracheophytes	Pteridophytes	Spermatophytes

C

F60-G2-21

Intermediate Part First Roll No. _____

BIOLOGY (Subjective) GROUP - II

Time: 02:40 Hours Marks: 68

SECTION – I

2. **Write short answers to any EIGHT parts.** 16
   (i) Write briefly the protective function of water.
   (ii) Differentiate between coenzyme and prosthetic group.
   (iii) Define inhibitors. Give an example.
   (iv) What is induce fit model of enzyme action?
   (v) Differentiate between spore and conidia.
   (vi) What are predator fungi? Give an example.
   (vii) Differentiate between radial and bilateral symmetry.
   (viii) What are parabronchi? Write their function.
   (ix) What are nematocysts? Give their function.
   (x) What is placenta and its role?
   (xi) Why Calvin cycle is also called as C_3 pathway.
   (xii) Define chemiosmosis.
3. **Write short answers to any EIGHT parts.** 16
   (i) Define embryology.
   (ii) What is biotechnology?
   (iii) What is unit membrane model of cell membrane?
   (iv) What is primary cell wall? Give its chemical composition.
   (v) Define kingdom Protista.
   (vi) How zooflagellates obtain their food?
   (vii) Give two examples of brown algae.
   (viii) What is chlorella? Where it is found?
   (ix) What is alternation of generation?
   (x) What is double fertilization?
   (xi) What are plasmodesmata?
   (xii) Define transpiration.
4. **Write short answers to any SIX parts.** 12
   (i) Give biological classification of corn.
   (ii) Write four phases in bacterial growth curve.
   (iii) Distinguish between saprophytic and parasitic nutrition.
   (iv) Name various types of salivary glands and give ingredients of saliva.
   (v) Differentiate between Diarrhoea and Constipation.
   (vi) What is Asthma? Give its effects.
   (vii) Differentiate between haemoglobin and myoglobin.
   (viii) Give composition of inhaled and exhaled air.
   (ix) Give two factors which affect capacity of haemoglobin to combine with oxygen.

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

5. (a) Write note on protection and conservation of environment. 04
   (b) Write any eight functions of blood. 04
6. (a) Write a note on carbohydrates. 04
   (b) Discuss two mutualistic symbiotic associations of fungi. 04
7. (a) Describe physical and chemical methods to control micro-organisms. 04
   (b) Describe different adaptations of bryophytes to land habitat. 04
8. (a) Write a note on life cycle of AIDS. 04
   (b) Write non-cyclic phosphorylation. 04
9. (a) Write a note on plastids. 04
   (b) Discuss nutrition in insectivorous plants. 04

F