

LHR-01-11.19

No. (To be filled in by the candidate) (Academic Sessions 2015 – 2017 to 2018 – 2020)

LOGY 219-(INTER PART – I)

Time Allowed : 20 Minutes

PAPER – I (Objective Type)

GROUP – I

Maximum Marks : 17

PAPER CODE = 6467

: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1	In cockroach partly digested food is temporarily stored in :		
(A) Rectum	(B) Gizzard	(C) Crop	(D) Colon
2	Most common smut fungi are :		
(A) Ustilago	(B) Puccinia	(C) Penicillium	(D) Yeast
3	AIDS is caused by :		
(A) Fungi	(B) Bacteria	(C) Virus	(D) Algae
4	Ascaris Lumbricoides is an intestinal parasite of :		
(A) Monkey	(B) Man	(C) Horse	(D) Camel
5	Lycopside are commonly called :		
(A) Whisk ferns	(B) Horse tails	(C) Club mosses	(D) Hornworts
6	Cotton is a pure form of :		
(A) Cellulose	(B) Glycogen	(C) Wax	(D) Starch
7	The casparian strips are present in :		
(A) Cortex cells of roots	(B) Cells of pericycle	(C) Endodermis cells of roots	(D) Cells of phloem
8	Which one of the following is aerobic bacteria :		
(A) Campylobacter	(B) E.Coli	(C) Pseudomonas	(D) Spirochaete
9	In respiratory chain NADH is oxidized by :		
(A) Cytochrome b	(B) Co-enzyme Q	(C) Oxygen	(D) H ₂ O
10	Muscles of stomach are of which type :		
(A) Skeletal	(B) Smooth	(C) Cardiac	(D) Voluntary
11	Excretory system of flatworms is composed of :		
(A) Nephron	(B) Nephridia	(C) Flame cells	(D) Villi
12	Poisons, like cyanide are examples of :		
(A) Enzymes	(B) Co-enzymes	(C) Inhibitors	(D) Co-factors
13	The respiratory system is most efficient in :		
(A) Man	(B) Birds	(C) Fish	(D) Snake
14	Which metal atom is present in chlorophyll :		
(A) Cu	(B) Fe	(C) Mg	(D) K
15	The substance which inhibits blood clotting :		
(A) Heparin	(B) Histamine	(C) Fibrin	(D) Albumin
16	Common name for pyrrophyta is :		
(A) Euglenoids	(B) Diatoms	(C) Dinoflagellates	(D) Kelps
17	Cell membrane has 60 – 80 % :		
(A) Lipids	(B) Proteins	(C) Carbohydrates	(D) Vitamins

43-219-I-(Objective Type)- 8750 (6467)

SECTION – I

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2. Write short answers to any EIGHT (8) questions :

- (i) Define conjugated molecules.
- (ii) How enzyme concentration affects the rate of enzyme action?
- (iii) Define lock and key model of enzyme.
- (iv) What is enzyme to enzyme chain?
- (v) Differentiate between fragmentation and budding in fungi.
- (vi) What is mycorrhizae? Give its types.
- (vii) Differentiate between proterostomia and deuterostomia.
- (viii) Define polymorphism. Also give example.
- (ix) What do you know about class hirudinea?
- (x) Write down some general characteristics of class chondrichthyes.
- (xi) Define chemiosmosis.
- (xii) Write down the molecular formulae of chlorophyll " a " and " b ".

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3. Write short answers to any EIGHT (8) questions :

- (i) Differentiate between biocontrol and bioremediation.
- (ii) What is cloning? Write one method of cloning.
- (iii) How intermediate filaments support cell?
- (iv) Give role of vacuole in plant cell.
- (v) Why slime molds are included in kingdom protocista?
- (vi) Differentiate between zooflagellates and dinoflagellates.
- (vii) Why euglena is difficult to classify?
- (viii) Write features of chrysophyta.
- (ix) Differentiate between monocots and dicots.
- (x) Which plant group is called arthropytes and why?
- (xi) What are lenticels? Write their use.
- (xii) Give blood route in fish circulatory system.

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4. Write short answers to any SIX (6) questions :

- (i) What is capsid and capsomeres?
- (ii) What is contribution of Louis Pasteur in microbiology?
- (iii) What are hunger pangs?
- (iv) What are hemorrhoids?
- (v) Define assimilation.
- (vi) What are spiracles?
- (vii) Why photorespiration occurs in plants?
- (viii) What are parabronchi?
- (ix) What is respiratory distress syndrome?

SECTION – II

Note : Attempt any THREE questions.

5. (a) Write in detail, drug treatment and gene therapy. 4
(b) Discuss functions of lymphatic system. 4
6. (a) Describe primary and secondary structure of protein. 4
(b) Discuss asexual reproduction in fungi. 4
7. (a) Discuss nutrition of bacteria. 4
(b) Describe economic importance of poaceae. 4
8. (a) Discuss life cycle of bacteriophage. 4
(b) Sketch two phases of glycolysis. 4
9. (a) Describe structure and functions of mitochondria. 4
(b) Discuss process of absorption in large intestine. 4

43-219-I-(Essay Type)-35000

Roll No _____ (To be filled in by the candidate) (Academic Sessions 2015 – 2017 to 2018 – 2020)

BIOLOGY

219-(INTER PART – I)

Time Allowed : 20 Minutes

Q.PAPER – I (Objective Type)

GROUP – II

Maximum Marks : 17

PAPER CODE = 6466

LHR-02-11-19

Note : Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1	Organ of voice in birds is called as : (A) Syrinx (B) Larynx (C) Tongue (D) Pharynx
2	Cell wall is only absent in : (A) E.Coli (B) Diplococcus pneumoniae (C) Hypomicrobium (D) Mycoplasma
3	Haem portion of haemoglobin is also a porphyrin ring but containing on iron instead of : (A) Magnesium (B) Potassium (C) Sodium (D) Chlorine
4	Total number of amino acid in insulin are : (A) 51 (B) 74 (C) 151 (D) 50
5	Basophils produce a substance that inhibits blood clotting. (A) Heparin (B) Platelets (C) Fibrinogen (D) Eosinophil
6	Loose smut of wheat is caused by : (A) Ustilago (B) Penicillium (C) Aspergillus (D) Alternaria
7	The factory of ribosome is the : (A) Nucleolus (B) Mitochondria (C) Chloroplast (D) Vacuole
8	Radiotherapy and chemotherapy are used in the treatment of : (A) Fever (B) Cancer (C) Dengue (D) Arthritis
9	Mammals become dominant in the : (A) Ordovician period (B) Silurian period (C) Cenozoic period (D) Devonian period
10	Most elaborate and efficient respiratory system is present in : (A) Man (B) Fish (C) Birds (D) Reptiles
11	The earliest group of vascular plants is : (A) Lycopsida (B) Sphenopsida (C) Psilopsida (D) Pteropsida
12	Pig could be the source of infection of hepatitis : (A) A (B) B (C) E (D) C
13	The left systemic arch disappears in : (A) Mammals (B) Fish (C) Reptiles (D) Birds
14	Trypanosoma is an example of : (A) Amoebae (B) Zooflagellates (C) Ciliates (D) Foraminiferan
15	The enzyme with optimum pH 5.50 is : (A) Arginase (B) Sucrase (C) Pepsin (D) Enterokinase
16	In the first step of the citric acid cycle, acetyl-CoA reacts with oxaloacetate to form : (A) Succinate (B) Rubisco (C) Malate (D) Citrate
17	In human stomach HCl is secreted by : (A) Mucous cells (B) Oxyntic / parietal cells (C) Zymogen cells (D) Chief cells

133-219-II-(Objective Type)- 4500 (6466)

Roll No _____ (To be filled in by the candidate) (Academic Sessions 2015 – 2017 to 2018 – 2020)

BIOLOGY

219-(INTER PART – I)

Time Allowed : 2.40 hours

PAPER – I (Essay Type)

GROUP – II

Maximum Marks : 68 ✓

SECTION – I

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Write short answers to any EIGHT (8) questions :

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- (i) What are conjugated compounds?
- (ii) Differentiate between prosthetic group and coenzyme.
- (iii) How enzyme substrate complex is formed?
- (iv) If more enzymes are added in a system its rate of reaction remain unchanged, why?
- (v) Define rust. Give example.
- (vi) What are symptoms of ergotism?
- (vii) Differentiate between enterocoelous and schizocoelous feature.
- (viii) What is blastostyle?
- (ix) How madrepora is important?
- (x) Write similarities of birds and reptiles.
- (xi) Draw action spectrum showing photosynthesis rate at various light colours.
- (xii) Differentiate between chlorophyll – a and chlorophyll – b.

Write short answers to any EIGHT (8) questions :

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- (i) Define biotechnology.
- (ii) What is deductive reasoning?
- (iii) What is magnification?
- (iv) Describe salient features of cell theory.
- (v) What is thromboembolism?
- (vi) What is systemic circulation?
- (vii) How green algae and plants are identical?
- (viii) What are trichonymphas?
- (ix) Write two characteristics of dinoflagellates.
- (x) What are the basis of diversity in protista?
- (xi) What is protonema?
- (xii) What are integuments?

Write short answers to any SIX (6) questions :

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- (i) Give disadvantages of common names.
- (ii) Name different types of bacteria on the basis of flagella presence.
- (iii) Enlist various functions of oral cavity.
- (iv) What is peristalsis and antiperistalsis?
- (v) Tubular digestive system is more efficient than sac like digestive system. Give reasons.
- (vi) Why ventilation in water is far more difficult than air?
- (vii) Write down the causes of asthma.
- (viii) What happens when diving reflex is activated?
- (ix) Briefly describe tuberculosis.

SECTION – II

Note : Attempt any THREE questions.

- (a) Write a note on protection and conservation of environment. 4
- (b) Give any eight functions of blood. 4
- (a) What are polysaccharides? Discuss starch and glycogen in detail. 4
- (b) Describe, giving examples, different ways in which fungi are useful to human. 4
- (a) Describe characteristics of cyanobacteria. 4
- (b) What adaptation made bryophytes able to live on land? 4
- (a) Describe lytic cycle of bacteriophage. 4
- (b) Write note on Calvin Cycle. 4
- (a) Define plastids. Discuss structure and function of chloroplast. 4
- (b) Discuss the process of absorption of food in small intestine. 4

133-219-II-(Essay Type)-18000