

Roll No.

CHR-012-12-19

(To be filled in by the candidate)

(Academic Sessions 2015 – 2017 to 2017 – 2019)

BIOLOGY

219-(INTER PART – II)

Time Allowed : 20 Minutes

Q.PAPER – II (Objective Type)

GROUP – II

Maximum Marks : 17

PAPER CODE = 8464

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	The disease caused due to destruction of adrenal cortex is : (A) Cushing (B) Diabetes (C) Alzheimer (D) Addison
2	Walther Fleming first observed chromosomes in the dividing cells in the Larvae of : (A) Frog (B) Insect (C) Sea Urchin (D) Salamander
3	Principles of geology was published by : (A) Darwin (B) Lyell (C) Linnaeus (D) Lamarck
4	Agriculture was started some years ago : (A) 40,000 (B) 30,000 (C) 20,000 (D) 10,000
5	Among vertebrates uric acid is the chief nitrogenous waste in birds and : (A) Fishes (B) Amphibians (C) Reptiles (D) Mammals
6	If there is 40% recombination frequency between two genes, then distance between them in unit map is : (A) 30 (B) 40 (C) 50 (D) 60
7	The stabbing pain in leg is : (A) Arthritis (B) Herniation (C) Sciatica (D) Spondylosis
8	The most critical phase of mitosis is : (A) Prophase (B) Metaphase (C) Anaphase (D) Telophase
9	Grassland ecosystem in Pakistan is found in : (A) Chilas (B) Chitral (C) Dir (D) Swat
10	The hormone which suppress ovulation is : (A) Testosterone (B) Estrogen (C) Progesterone (D) Gastrin
11	The absorption of sodium in the ascending limb of the loop of Henle is controlled by a hormone known as : (A) Antidiuretic (B) Aldosterone (C) Progesterone (D) Testosterone
12	A blue light sensitive protein pigment found in plants is : (A) Cytochrome (B) Phytochrome (C) Photochrome (D) Florigen
13	Photoperiod affects flowering when shoot meristem start producing : (A) Floral buds (B) Leaves (C) Lateral buds (D) Both B and C
14	The phase of meiosis during which nuclei disappear in the cell is called : (A) Leptotene (B) Pachytene (C) Diplotene (D) Diakinesis
15	The internal hydrostatic pressure in plants is : (A) Osmotic (B) Root (C) Turgor (D) Solute
16	Patients of cystic fibrosis often die due to numerous infection of the : (A) Digestive tract (B) Respiratory tract (C) Reproductive tract (D) Excretory tract
17	In root nodules, the organisms present are : (A) Bacteria (B) Cyanobacteria (C) Algae (D) Fungi

229-219-II-(Objective Type)- 3125 (8464)

Roll No CHR-G12-12-19 (To be filled in by the candidate)
(Academic Sessions 2015 – 2017 to 2017 – 2019)

BIOLOGY

219-(INTER PART – II)

Time Allowed : 2.40 hours

PAPER – II (Essay Type)

GROUP – II

Maximum Marks : 68

SECTION – I

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

16

- (i) Differentiate between ectotherms and endotherms.
- (ii) Why the leaves are said to be excretophore?
- (iii) Differentiate between protonephridia and metanephridia.
- (iv) Write two characteristics of collenchyma tissue.
- (v) Define phototactic movements with example.
- (vi) How callus is formed?
- (vii) What are palindromic sequences?
- (viii) Compare ex-vivo and in-vivo gene therapy.
- (ix) Write two adaptations for terrestrial ecosystem.
- (x) Differentiate between alpine and boreal forests.
- (xi) What is the importance of ozone layer?
- (xii) Differentiate between deforestation and reforestation.

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

16

- (i) Write down two uses of auxins.
- (ii) How communication across the synapse occurs?
- (iii) Define habituation. Give one example.
- (iv) Write down the mechanism of pollen tube evolution in spermatophytes.
- (v) What do you know about diploid parthenogenesis?
- (vi) What is oestrous cycle?
- (vii) Define gene and allele.
- (viii) Differentiate between autosomes and sex-chromosomes.
- (ix) What is a multifactorial trait? Give an example.
- (x) Define the term ecosystem.
- (xi) What is the difference between ectoparasite and endoparasite?
- (xii) Define grazing. What is the result of over grazing?

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

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- (i) What is the difference between primary and secondary growth?
- (ii) What is discoidal cleavage?
- (iii) What is mitotic apparatus?
- (iv) Differentiate between necrosis and apoptosis.
- (v) Define Hardy-Weinberg theorem.
- (vi) What are analogous organs? Give an example.
- (vii) What is the difference between template strand and sense strand?
- (viii) What is point mutation? Give an example.
- (ix) What is membrane invagination hypothesis?

SECTION – II

Note : Attempt any THREE questions.

5. (a) Describe adaptations for thermoregulation in plants. 4
(b) Describe nitrogen cycle in detail. 4
6. (a) Describe sliding filament model of muscle contraction. 4
(b) Describe the process of translation in prokaryotes. 4
7. (a) Differentiate between instinctive and learning behaviour. 4
(b) Write a note on ozone layer depletion. 4
8. (a) Write a note on vernalisation. 4
(b) Define and explain test cross. 4
9. (a) Write a comprehensive note on aging. 4
(b) Give evidences in support of evolution from comparative embryology and molecular biology. 2,2

229-219-II-(Essay Type)-12500