SNL

Roll No._____ Annual 2019

Biology (New Scheme)

Paper : II

(INTER PART II CLASS 12th)(II)
Objective

Time : 20 Minutes
Marks : 17

Code : 8163

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number with marker or pen. Cutting or filling two or more circles will result in zero mark in that question.

1. A single _____ atom can react with ultraviolet rays and destroy as many as one million ozone molecules.
   (A) oxygen (B) fluorine (C) chlorine (D) iodine

2. Which one is the most fragile ecosystem?
   (A) grassland (B) woodland (C) tundra (D) savanna

3. Actual location of place where an organism lives is called its
   (A) ecosystem (B) habitat (C) niche (D) biome

4. Archaeobacteria tolerate temperature upto
   (A) $60^{\circ}c$ (B) $90^{\circ}c$ (C) $120^{\circ}c$ (D) $150^{\circ}c$

5. Antithrombin III is a biotechnological product produced in :
   (A) sheep (B) goat (C) mice (D) cow

6. The blood serum containing antibodies is called;
   (A) lymph (B) plasma (C) antiserum (D) antigen

7. During this phase the condensation of chromosomes reaches to its maximum:
   (A) leptotene (B) zygotene (C) pachytene (D) diakinesis

8. Which of the following is a "start" codon?
   (A) AUG (B) UAA (C) UAG (D) UGA

9. The particular array of chromosomes that an individual possesses is called:
   (A) kinesis (B) kinetosome (C) karyotype (D) kinetochore

10. The cavity formed between somatic and splanchnic mesoderm is
    (A) archanteron (B) Hensen's node (C) neurocoel (D) coelom

11. Reproduction is very important for the survival of
    (A) individual (B) population (C) species (D) community

12. In honey bee male sperms are produced by
    (A) meiosis (B) mitosis (C) apomixis (D) parthenogenesis

13. The hormones which promote bolting of some rossete plants is known as;
    (A) auxins (B) gibberellins (C) cytokinin (D) ethene

14. Which of the following is a bone of axial skeleton?
    (A) humerus (B) femur (C) rib (D) tibia

15. Which of the following is plantigrade?
    (A) dog (B) horse (C) rabbit (D) monkey

16. Excretory system of planaria is called:
    (A) protonephridium (B) metanephridium (C) malpighian tubules (D) renal tubules

17. The category of plants that has adaptations of small and thick leaves to limit water loss is
    (A) hydrophyte (B) xerophyte (C) mesophyte (D) hygrophyte

Roll No._____ Annual 2019

Biology (New Scheme)

(INTER PART II – CLASS 12th)

SUBJECTIVE

Time : 2 . 40 Hours

Marks : 68

Paper : II

Note:- Section I is compulsory. Attempt any 3 questions from Section II .

(SECTION – I)

2. Write short answers to any Eight parts: (8 x 2 = 16)

i. Define the given terms: (i) Hypertonic environment (ii) hypotonic environment
ii. Sketch urea cycle.
iii. Describe physiological adaptations of animals for thermoregulation.
iv. Discuss the structure and functions of collenchyma cells in plants.
v. Name the bones of pectoral and pelvic girdle.
vi. What is CRAMP?
vii. Describe various steps involved in Ex-vivo gene therapy.
viii. Discuss any two benefits of transgenic bacteria to promote health of plants.
ix. How did plants and animals adapt land habitat?
x. How will you differentiate ALPINE and BOREAL forests?
xi. Define Wild Life.
xii. Give reasons for world population explosion.

3. Write short answers to any Eight parts: (8 x 2 = 16)

i. What is synapse?
ii. Write two commercial applications of Ethene.
iii. What is conditioning in learning behaviour?
iv. Differentiate between phenotype and genotype.
v. State the law of independent assortment.
vi. What is diabetes, name its types?
vii. What are palindromic sequences?
viii. Write at least two methods to get a gene of interest.
ix. What is cell suspension culture?
x. Differentiate between primary and secondary succession.
xi. Define autecology and synecology.
xii. What is commensalism? Give example.

4. Write short answers to any Six parts: (6 x 2 = 12)

i. Write the names of four types of cytoplasm contain in the fertilized egg of ascidian.
ii. What is growth correlation?
iii. Differentiate between primary and secondary growth.
iv. What is phenyleketonuria?
v. Why mRNA is modified with cap and tail after its formation?
vi. Define cell cycle. Write its phases.
vii. Differentiate between benign and malignant tumor.
viii. What is Genetic drift?
ix. What is the concept of inheritance of acquired characteristics?

Section-II

(3 × 8 = 24)

Note:- Attempt any three (3) questions:

5. (a) Give the structure and function of Nephron in human kidneys. 4
   (b) Write a note on xerosere succession. 4
6. (a) Explain the phenomenon of turgor movements in plants. 4
   (b) Write down the Beadle and Tatum experiments on neurospora. 4
7. (a) Give an account of innate behaviour. 4
   (b) Write a note on Green House Effect. 4
8. (a) Describe menstrual cycle in human female. 4
   (b) Describe genetics of colour blindness. 4
9. (a) Define teratology. Discuss various types of abnormalities in development. 4
   (b) Define Hardy –Weinberg Theorem. Discuss the various factors affecting gene frequency.