Paper Code Number: 4461

2019 (A)

Roll No. ________

INTERMEDIATE PART-II (12th CLASS)

BIOLOGY PAPER-II (NEW SCHEME) GROUP-I

TIME ALLOWED: 20 Minutes **OBJECTIVE** MAXIMUM MARKS: 17

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 bubble in front of that question number. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve questions on this sheet of OBJECTIVE PAPER.

Q.No.1

(1) Bats and humming birds are example of:
(A) Ectotherms (B) Endotherms (C) Heterotherms (D) Poikilotherms

(2) Trimethylamine oxide is produced in fishes which are:
(A) Cartilaginous (B) Bony (C) Fresh water (D) Marine water

(3) The inflammatory degenerative disease of joint is:
(A) Arthritis (B) Sciatica (C) Herniation (D) Spondylosis

(4) The cells found in seed coats and nut shells are:
(A) Fibres (B) Sclereides (C) Vessels (D) Trachea

(5) Pavlov performed experiments on dog to prove:
(A) Conditional reflex I (B) Habituation (C) Conditional reflex II (D) Imprinting

(6) Photoperiodism was first studied by Garner and Allard in:
(A) 1918 (B) 1920 (C) 1922 (D) 1924

(7) The increase of level of estrogen stimulates secretion of:
(A) ACTH (B) FSH (C) Progesterone (D) LH

(8) Gray equatorial cytoplasm gives rise to:
(A) Neural tube (B) Gut (C) Muscle cells (D) Larval epidermis

(9) Genetic code for the amino acid methionine is:
(A) AUC (B) UGC (C) CGC (D) AUG

(10) The chromatin material gets condensed by folding and chromosomes appear as thin thread in mitosis at the beginning of:
(A) Interphase (B) Prophase (C) Metaphase (D) Anaphase

(11) The chromatids repel each other during:
(A) Zygotene (B) Pachytene (C) Diplotene (D) Diakinesis

(12) The type of inheritance with same phenotypic and genotypic ratio, in F2:
(A) Dominance (B) Incomplete dominance (C) Epistasis (D) Co-dominance

(13) An antibody made by soybeans can be used for treatment of:
(A) AIDS (B) Hepatitis (C) Herpes simplex (D) Genital herpes

(14) The idea of endosymbiont was purposed by:
(A) Cuvier (B) Lyell (C) Malthus (D) Margulis

(15) Which of the following is macronutrient?
(A) Zinc (B) Iron (C) Sulphur (D) Iodine

(16) Scum in eutriphication is formed by:
(A) Fungi (B) Algae (C) Bacteria (D) Cyanobacteria

(17) Oxides of Nitrogen cause:
(A) Lung Cancer (B) Cough (C) Brain damage (D) Cholera

2019 (A) Roll No: _____

INTERMEDIATE PART-II (12th CLASS)

LOGY PAPER-II (NEW SCHEME) GROUP-I

E ALLOWED: 2.40 Hours **SUBJECTIVE** MAXIMUM MARKS: 68

'E: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I

8 × 2 = 16

Attempt any eight parts.

(i) Write two adaptations of hydrophytes.
(ii) What are heat shock proteins?
(iii) Why temperature of the body increases during fever?
(iv) How muscle fatigue is produced?
(v) Differentiate between tendons and ligaments.
(vi) What is herniation of disc?
(vii) Write two primary goals of human genome project.
(viii) What is Probe? Give its use.
(ix) Differentiate between weather and climate.
(x) Define productivity of an ecosystem.
(xi) Write two effects of acid rain.
(xii) Define soil and write its constituents.

8 × 2 = 16

3. **Attempt any eight parts.**

(i) Write down two commercial applications of Gibberellins.
(ii) Write down two major functions of mid brain.
(iii) What are the abnormalities caused by the destruction of the adrenal cortex?
(iv) Write down few words on Genital Herpes.
(v) Write down the name of interstitial hormone. What are its functions?
(vi) Define Parthenocarpy. Write down the names of two fruits in which it occurs.
(vii) Define Jumping Genes.
(viii) Differentiate qualitative traits from quantitative traits.
(ix) What are compound sex chromosomes? Give an example.
(x) What is Biome? Write down the names of two terrestrial biomes.
(xi) Define autecology and synecology.
(xii) What are root modules? Give an example.

6 × 2 = 12

4. **Attempt any six parts.**

(i) What is the difference between inhibitory effect and compensatory effect?
(ii) Differentiate between growth and development.
(iii) What is metastasis?
(iv) What happens during metaphase I?
(v) Give two measures to protect the endangered species.
(vi) Define homologous organs with an example.
(vii) Define central dogma.
(viii) What are Okazaki fragments?
(ix) Define karyotype.

SECTION-II

3 x 8 = 24

NOTE: - Attempt any three questions.

5.(a) Give an account of Excretion in Planaria. 4

(b) Write a note on Grazing. 4

6.(a) Define paratonic movements in plants. Describe Nastic movements in detail. 4

(b) How did Meselson and Stahl show that DNA replication is semi-conservative? 4

7.(a) Discuss hormones of anterior lobe of pituitary gland. 4

(b) Explain the terms deforestation and afforestation. 4

8.(a) Write a note on Birth. 4

(b) Define and explain incomplete dominance in plants. 4

9.(a) Write comprehensive note on growth correlations. 4

(b) State and explain the Hardy-Weinberg theorem. 4