

Sig. of Supdt.

KT-XII-14(A)
BIOLOGY - (Part-II)

Roll No.

Fic. No.....

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Time Allowed : 3 Hrs.

Total Marks : 85

Note: There are three sections of this paper, A, B, & C. Carefully read the instructions for each section and attempt accordingly.

Time Allowed : 20 Mins.

SECTION - A

Total Marks : 18

Note: Use this sheet for this section. No. mark will be awarded for cutting, erasing or over writing.

Q. 1 Insert the correct option (a, b, c, d) in the empty box opposite to each part. Each part carries one mark. Any kind of Mark Left / Written is strictly prohibited. Mobile Phone is strictly prohibited in Examination Hall.

- i) The "O" blood group person has normally.....
(a) Antibody A (b) Antibody B (c) Antibody A & B (d) No-antibody
- ii) The succession when begins in an area where adequate moisture is present is called.....
(a) Hydroceres (b) Mesoceres (c) Xeroceres (d) Secondary succession
- iii) Microscopic gaps between the neurons endings are called.....
(a) Synapse (b) Synapsis (c) Nodes of Ranvier (d) pores
- iv) During foetus development formation of germ layer occurs in
(a) Cleavage (b) Gastrulation (c) Organogenesis (d) Tissue specialization
- v) Hugo-de-vries worked on
(a) Petunia alba (b) Pisum sativum (c) Lathyrus odoratus (d) Oenothera lamarckiana
- vi) Scurvy is caused due to deficiency of the
(a) Vitamin-A (b) Vitamin-B (c) Vitamin-C (d) Vitamin-D
- vii) Potamogeton is an example of
(a) Hydrophytes (b) Mesophytes (c) Xerophytes (d) halophytes
- viii) Best growth of plants occur at a temperature between.....
(a) 5 – 10 C° (b) 10 – 20 C° (c) 10 – 35 C° (d) 40 – 45 C°
- ix) Cloning is a technique of
(a) Asexual reproduction (b) Sexual reproduction
Apomixis (d) Parthenogenesis genesis
- x) Cucumber and sunflower are the examples of
(a) Long day plants (b) Short day plants
(c) Day-neutral plants (d) Sun-loving plants
- xi) The open water of the sea with rich flora and fauna is
(a) Pelagic zone (b) Benthic zone (c) Neritic zone (d) None of them
- xii) Enzymes used to break DNA molecule at a specific site are called
(a) Oxidative enzymes (b) Restriction enzymes
(c) Synthetic enzymes (d) Respirative enzymes
- xiii) The chromosome with centromere located closer to one end with unequal arms is called.....
(a) Metacentric (b) Telocentric (c) Acrocentric (d) Sub-metacentric
- xiv) Female with this syndrome has only (2n – 1) chromosomes.....
(a) Klinefelter syndrome (b) Down's syndrome
(c) Cushing's syndrome (d) Turner's syndrome
- xv) The cartilage present in external ear & Epi-glottis is the
(a) Elastic cartilage (b) Hyaline cartilage
(c) Fibrous cartilage (d) Bony cartilage
- xvi) Calcium in the muscle cells are stored in
(a) T-Tubules (b) Sarcoplasmic reticulum
(c) Actin Filament (d) Cross bridges of myosin
- xvii) The characteristics which enable animals to tolerate a period of dehydration is called.....
(a) Osmoregulation (b) Osmoconformation (c) Excretion (d) anhydrobiosis
- xviii) Which of the following Hormone is secreted by Adrenal medulla
(a) Calcitonin (b) Oxytocin (c) Epi-nephrin (d) Parathormone

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BIOLOGY - (Part-II)

Time Allowed : 2:40 Hrs.

Total Marks : 67

Section – B

Marks : 40

Note : Mobile Phone is strictly banned in Examination Hall.

Q. 2 Write a short answer of any TEN of the following parts. Each part carries equal marks.

- (i) State Hardy-weinberg law.
- (ii) What are Ectothermic and Endothermic animals?
- (iii) What are antagonistic muscles? Give example.
- (iv) What is polymerase chain reaction?
- (v) What is Parkinson disease?
- (vi) What are day-neutral plants?
- (vii) Describe nitrogen cycle.
- (viii) What are the different steps of Gel-Electrophoresis?
- (ix) Write short note on apomixes.
- (x) What is Transcription and Translation?
- (xi) What are the major characteristics of Grassland Ecosystem?
- (xii) Write a note on colour blindness.
- (xiii) Write a note on Overgrazing.

Section – C

Marks : 27

NOTE : Attempt any three questions. Each question carries equal marks.

- Q. 3** What is Gland? Discuss thyroid glands and parathyroid gland in detail.
- Q. 4** What is meant by DNA mismatch repair? Discuss DNA replication in detail.
- Q. 5** Discuss plant movements in detail.
- Q. 6** Write a detail note on Osmoregulation in plants.