



<b>Biology</b>	<b>(D)</b>	<b>L.K.No. 1073</b>	<b>Paper Code No. 8467</b>
Paper II	( Objective Type )	<b>1<sup>st</sup> - A - Exam 2023</b>	
Time :	20 Minutes	<b>Inter ( Part - II )</b>	
Marks :	17	Session (2019 - 2021) to (2021 - 2023)	

Note : Four possible choices A, B, C, D to each question are given. Which choice is correct fill that circle in front of that Question No. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

Bwp-12-23

Q.No.1	The Homeostatic Thermostat is present in :
(1)	(A) Thalamus (B) Kidneys (C) Liver (D) Hypothalamus
(2)	The Cytoplasmic Processes which carries nerve impulse towards the cell body is : (A) Dendrites (B) Axon (C) Axoplasm (D) Soma
(3)	Each Lighter Band is called : (A) H - Zone (B) A - Band (C) I - Band (D) M - Line
(4)	The Sclerenchyma cells found in seed coats and nut shells are : (A) Tracheids (B) Sclereids (C) Vessels (D) Trachea
(5)	The Structure which control hunger is : (A) Amygdala (B) Hippo Campus (C) Hypothalamus (D) Thalamus
(6)	Histones are positively charged due to abundance of basic Amino Acids Arginine and : (A) Lysine (B) Methionine (C) Glycine (D) Alanine
(7)	Gray Crescent is present in : (A) Nucleus (B) Cytoplasm (C) Cell Membrane (D) Ribosomes
(8)	The Endosperm in Angiosperms is : (A) Haploid (B) Diploid (C) Monoploid (D) Triploid
(9)	The Methyl containing Nitrogenous base is : (A) Cytosine (B) Thymine (C) Uracil (D) Adenine
(10)	F.C. Steward grew a complete Carrot Plant from a tiny piece of : (A) Pith (B) Cortex (C) Xylem (D) Phloem
(11)	The Gene for Albinism is located on Chromosome No. : (A) 11 (B) 09 (C) 19 (D) 22
(12)	S - Phase of Interphase is completed in : (A) 9 Hours (B) 4.5 Hours (C) 10 Hours (D) 30 Minutes
(13)	Antibody used for the treatment of Genital Herpes is obtained from : (A) Wheat (B) Rice (C) Soyabean (D) Sugarcane
(14)	Northern Coniferous forests are also called : (A) Prairies (B) Taiga (C) Savanna (D) Temperate Deciduous Forests
(15)	Which One Bacteria is responsible for the conversion of Ammonia into Nitrite : (A) Nitrosomonas (B) Nitrobacter (C) Clostridium (D) Rhizobium
(16)	Which of the following Scientist has studied the Order in the diversity of Life : (A) Cuvier (B) Lyell (C) Malthus (D) Linnaeus
(17)	The Hot water or stream that comes from Earth also contain harmful substances like : (A) Oxides of Nitrogen (B) Oxides of Sulphur (C) Lead (D) CO <sub>2</sub>



Roll No.	1073 - 24000	Inter (Part - II)	Session (2019 - 2021) to (2021 - 2023)
Biology ( Subjective )	1st - A - Exam 2023	Time 2 : 40 Hours	Marks : 68

Note: It is compulsory to attempt any (8 - 8) Parts each from Q.No. 2 and Q.No.3 and attempt any (6) Parts from Q.No.4. Attempt any (3) Questions from Part - II. Write same Question No. and its Part No. as given in the Question Paper.

Make Diagram where necessary.

Part - I

BWP-12-23

22 x 2 = 44

- Q.No.2
- What will happen if an animal cell is placed into a Hypertonic Solution?
  - Mention two desert adaptations of Xerophytes.
  - What are Pyrogens?
  - Why does water enter into the vacuole and hence create turgidity to the plant cell?
  - How does Epinasty lead to opening of Floral Buds?
  - How are Muscles arranged at hinge joint?
  - How is seed dormancy important for plant survival?
  - Give the method to produce Test Tube Babies.
  - Differentiate between Climate and Weather.
  - What is Tundra Ecosystem?
  - How Kinetic Energy of water is used to produce electricity?
  - How Oxides of Nitrogen and Sulphur can cause Acid Rain?

- Q.No.3
- Differentiate between Reflex Arc and Reflex Action.
  - What are Effectors?
  - Define Epilepsy.
  - A Single gene affects two or more traits. Give examples.
  - The blood group phenotype of a person can be changed. Comment on it.
  - The first Rh - Incompatible pregnancy may not face much problems. Discuss it.
  - How genetic library for a certain gene can be traced? Comment on it.
  - How gene of interest is inserted into a vector? Discuss it.
  - How health of plants can be promoted? Give examples.
  - What is Niche? Give its elements.
  - Differentiate Autecology from Syneecology by giving examples.
  - What is Predation? Give its significance.

- Q.No.4
- Define Regeneration. Write its two examples.
  - How Inhibitory effect is different from compensatory effect during growth correlation?
  - What are Chromosomes? Also write number of Chromosome in Mouse and Sugarcane.
  - Differentiate between Leading and Lagging Strand.
  - What are Purine? Give example.
  - What is Mitotic Apparatus? Write its function.
  - Define the term Synapsis and Crossing Over.
  - What are Hydrothermal Vents? How did they support life?
  - Write down any two points of Darwin Theory.

Part - II

3 x 8 = 24

- Q.No.5
- Describe the structure of Nephron with a labelled diagram. 3 + 1 = (4)
  - What is Interphase? Describe the details of Sub phases of Interphase. 1 + 3 = (4)
- Q.No.6
- How does Secondary Growth occurs? Give its significance. (4)
  - Define Succession. Discuss Xerosere in detail. (4)
- Q.No.7
- Explain the factors affecting Gene Frequency. (4)
  - Describe the Feedback Mechanism. Also draw the diagram. (4)
- Q.No.8
- Define and explain the process of Vernalization. (4)
  - Explain Erythroblastosis Foetalis and how it can be prevented? (4)
- Q.No.9
- How External and Internal Factors play their role in Plant Growth Rate? (4)
  - Write a detailed note on Gene Sequencing. (4)

