

ANNUAL EXAMINATION, 2018-19

BIOLOGY

Time : 3 hrs.

Class - XI

MM: 70

Name of the student _____ Section _____ Date-20.02.2019 (Wednesday)

General Instructions:

- This question paper consists of sections **A, B, C and D**.
- **Section A** contains **5** questions of **1 mark** each. **Section B** contains **7** questions of **2 marks** each. **Section C** contains **12** questions of **3 marks** each. **Section D** contains **3** questions of **5 marks**.
- An internal choice has been provided in one question of 2 marks, in one question of 3 marks and 3 questions of 5 marks.
- Wherever necessary the diagram drawn should be neat and properly labelled.

SECTION – A

- Q.1 Define Species. (1)
- Q.2 Why is xylem called complex tissue. (1)
- Q.3 What are Ciliated epithilium ? Where do you find them in animal body ? (1)
- Q.4 What is Chiasmata ? (1)
- Q.5 What is Mesosome in a prokaryotic cell ? Mention one function that it performs. (1)

SECTION – B

- Q.6 What is the role of '*Rhizobium*' ? (2)
- Q.7 By looking at a plant externally can we infer whether a plant is C₃ or C₄ ? Give reasons for your answer. (2)
- Q.8 Describe important properties of enzymes. (2)
- Q.9 What is hypoxia ? Explain in short. (2)
- Q.10 How is key helpful in the identification and classification of an organism ? (2)
- Q.11 What are the different types of movements exhibited by the cells of human body ? (Any two movements) (2)
- Q.12 Write the difference of function between Cerebrum and Cerebellum. (2)

OR

Which part of body helps in maintaining the body balance ? (Answer briefly)

SECTION – C

- Q.13 Write the steps in the formation of urine in man. (3)
- Q.14 Write the difference between Red and White muscles. (3)
- Q.15 Give the comparative account of classes of kingdom fungi on the basis of mode of reproduction. (3)

Q.16 Draw a labelled diagram of : **(3)**
Alimentary canal of Cockroach.

OR

Female reproductive system of Cockroach.

Q.17 Define the following terms : **(3)**

- a) Epipetalous stamen b) Superior ovary c) Aestivation

Q.18 Draw a standard ECG and explain different segments in it. **(3)**

Q.19 a) What are Nuclear Pores ? State their functions. **(3)**

b) What are centrosomes ?

Q.20 Define oxygen dissociation curve ? Suggest the reason for its sigmoidal pattern ? **(3)**

Q.21 Draw a well labelled diagram of digestive system of frog. **(3)**

Q.22 Explain the conduction of nerve impulse. (Generation and Conduction) **(3)**

Q.23 Write the role of S.A. node, A.V. node, bundle of HIS in human heart. **(3)**

Q.24 Differentiate between : **(3)**

- a) Racemose and Cymose inflorescence
b) Apocarpous and Syncarpous ovary
c) Fibrous root and Adventitious root

SECTION – D

Q.25 Give the diagrammatic sketch of ATP synthesis through chemiosmosis. Describe the Z scheme of light reaction. **(5)**

OR

Draw a diagram to explain Kreb's cycle and explain its mechanism.

Q.26 a) Explain pressure flow hypothesis of translocation of sugars in plants. **(5)**

b) Differentiate between the following :

- i) Osmotic pressure and Osmotic potential
ii) Imbibation and Diffusion

OR

a) Draw a well labelled diagram for digestive system in humans.

b) Mention three pairs of salivary gland. (Name and location)

Q.27 Draw a well labelled diagram showing parts of an eye also write about three layers of eye ball. **(5)**

OR

a) Describe the structure and function of Semicircular canals found in internal ear of human.

b) Draw a diagram of T.S. of Cochlea and label Reissner's membrane and Tectorial membrane.

