

Roll No. _____ (to be filled in by the candidate)

(For all sessions)

Biology (Essay Type)

Time: 2:40 Hours

Total Marks:68

Section - I

2. Write short answers of any eight parts from the following.

2x8=16

- | | |
|---|---|
| i. What are enzymes? Give one example. | ii. Differentiate between Anabolic and catabolic reactions. |
| iii. Define irreversible inhibitors. | iv. Give two properties of Enzymes. |
| v. Define lichens and give one example. | vi. What is parosexuality? |
| vii. Define kingdom Animalia. | vi. How asexual reproduction takes place in poriferans? |
| ix. What are prototheria? Give one example. | x. Which types of Muscles are found in the body wall of Annelids? |
| xi. What is Bioenergetics? | xii. Write complete equation of Lactic acid fermentation. |

3. Write short answers of any eight parts from the following.

2x8=16

- | | |
|---|---|
| i. Differentiate between deductive and inductive reasoning with examples. | |
| ii. Give three basic components of human circulatory system. | |
| iii. Give importance of mitochondria. | iv. Define Parasitology. |
| v. Write a note on euglenoids. | vi. What do you know about water molds? |
| vii. How brown algae differ from red algae? | viii. Write down two functions of Golgi complex. |
| ix. Write a note on parasitic flagellates. | x. Why tracheophytes are successful group of land plants? |
| xi. Give four functions of blood. | xii. Differentiate between microphyll and megaphyll leaves. |

4. Write short answers of any six parts from the following.

2x6=12

- | | |
|---|---|
| i. Which changes cause inspiration? | ii. What are Bacilli? Give their types. |
| iii. How Venus flytrap catches insect? | iv. Give structure and position of lungs in chest cavity. |
| v. How oral cavity helps in selection of food? | vi. Mention three ways of gaseous exchange in plants. |
| vii. Write roles of ventilation and capillary network in respiratory surface. | |
| viii. Draw labelled diagram of human immunodeficiency virus(HIV). | |
| ix. What is meant by absorption and assimilation of food? | |

Section - II

NOTE: Answer any three questions from the following.

8x3=24

- | | |
|---|-----|
| 5. (a) Discuss how the science of Biology is helping mankind in different ways. | 4 |
| (b) Discuss the composition of blood Plasma. | 4 |
| 6. (a) What are proteins? Describe primary structure of proteins. | 4 |
| (b) Describe different methods of asexual reproduction in fungi. | 4 |
| 7. (a) Write a note on nutrition in bacteria. (b) Write in detail the life cycle of Angiospermic plant. | 4+4 |
| 8. (a) Describe any four viral diseases. (b) Write a note on noncyclic phosphorylation with diagram. | 4+4 |
| 9. (a) Describe the structure and function of Golgi apparatus. | 4 |
| (b) Give an account of nutrition in insectivores plants. | 4 |