

# HIGHER SECONDARY I<sup>ST</sup> YEAR

## BIOLOGY

Time : 2 ½ Hours

Max. Marks : 70

### MODEL QUESTION PAPER

#### Bio- Botany

Marks : 35

#### PART - I

Answer All the Questions

**Choose the Best Answer :-**

**1 x 8 = 8**

- The basic Unit of classification is  
a) Taxon                      b) Family                      c) Species                      d) All the above
- Which bacteria converts ammonia into nitrate salt  
a) Aceto bacteria                      b) Rizobium  
c) Lacto bacillus                      d) Nitrosomonas
- Senescence of detached leaves can be delayed by the use of  
a) Auxin                      b) Giberellien                      c) Cytokinin                      d) Ethylene
- The symbiotic association found between algae and fungi is  
a) Mycorrhizae                      b) Lichens                      c) Saprophytes                      d) Parasites
- Which one is called 'Power House of the Cell'  
a) Plastid                      b) Endoplasmic Reticulum  
c) Golgi apparatus                      d) Mitochondria
- The fruit seen in paddy  
a) Drupe                      b) Pepo                      c) Caryopsis                      d) Legume
- Inflorescence of Musa is  
a) racemose                      b) cyme                      c) spadix                      d) cyathium
- Which is the source of non – renewable energy  
a) water energy                      b) wind energy                      c) solar energy                      d) coal

## PART – II

**Write any four of the following:-**

4 x 2 = 8

9. Why bacteria is known as nature scavengers ?
10. Draw a diagram of prokaryotic cell and label the parts.
11. Write short notes on special type tissue in Vanda plant
12. Differentiate protogamy and protandry.
13. Why is incomplete dominance also called blending inheritance Give an example
14. What are the symptoms caused due to the deficiency of Nitrogen

## PART- III

**Write any three of the following in which question No.18 is compulsory:-**

3 x 3 = 9

15. Write notes on Economic importance of Gymnosperms.
16. Explain the Ultra structure of Chloroplast.
17. Define triple fusion. Name the product obtained by triple fusion.
18. Draw a structure of stoma and label the parts.
19. Write short notes on deforestation

## PART- IV

**Give the Answer for the following questions :-**

2 x 5 = 10

20. Write the difference between Prokaryotic and Eukaryotic Cell

(OR)

Explain the potato osmoscope. Experiment with diagram.

21. Explain Dihybrid cross with checker board.

(OR)

Explain different types of Placentation with diagram.

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## BIO-ZOOLOGY

**Time:** 1h 15 min.

Marks:35

**Answer all the questions:**

**8 X 1 = 8**

### PART -A

1. Animal which show fluctuation in their body temperature in accordance to environment are called
  - a) Poikilotherms
  - b) Homeotherms
  - c) Heterotherms
  - d) Holotherms
2. The microscope used for viewing suspensions of bacteria is
  - a) Phase contrast
  - b) Dark-field
  - c) oil-immersion
  - d) Compound
3. Name of the class of protozoa which produces spores
  - a) Rhizopoda
  - b) Ciliata
  - c) Flagellata
  - d) Sporozoa
4. The humerus bone which fits into the socket in pelvic girdle is
  - a) Acetabulum
  - b) Glenoid fossa
  - c) vertebral foramen
  - d) Vertebral arch
5. ABO Blood group in man is an example for
  - a) x – linked inheritance
  - b) multiple allelism
  - c) pleiotropism
  - d) y – linked inheritance
6. The significane of conserving coral reef is to prevent
  - a) Soil erosion
  - b) Beach erosion
  - c) siltation
  - d) De-siltation
7. The earliest ancestor of horses were
  - a) Eohippus
  - b) Equus
  - c) Seymouria
  - d) Dinosaurs

8. The cavity formed in a gastrula is called as

- a) Gastrocoel
- b) blastocoel
- c) blastopore
- d) cavity

**PART - B**

**Answer all the questions:**

**4 X 2 = 8**

- 9. Write the characters of Annalida
- 10. List out the functions of plasma membrane
- 11. What is frenulum?
- 12. What are the two types of Snake Venom?
- 13. What are the symptoms for Turner's syndrome?
- 14. The nature of egg is influenced by polarity-justify

**PART - C**

**Write any three of the following in which Question No. 18 is compulsory**

**3 X 3 = 9**

- 15. Draw the diagram of tooth and label the parts.
- 16. Write short notes on omega fatty acids.
- 17. What is erythroblastosis fetal is?
- 18. Illustrate the effect of modifying genes on man with example
- 19. Increase in magnification alone will not give clear image of the object-  
Justify your answer.

**PART - D**

**Answer all the questions:**

**2 X 5 = 10**

20. Lymphatic system provides Immunity-discuss.

(or)

Describe the process of sex determination in Bonellia.

21. How will you control Insect pests in an eco-friendly manner

(or)

Give a detailed account on the general characters of Chordates?

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