

HSM

HALF YEARLY EXAMINATION - 2017

11 - STD

BIOLOGY

Time : 2.30 hrs.

BIO - BOTANY

Marks : 70

PART - I

I Choose the correct answer.

1 X 8 = 8

1. The basic unit of classification is
a) genus b) species c) family d) taxon
2. The infective nature of virus is due to
a) protein coat b) nucleic acid c) envelope d) tail fibres
3. The extra - chromosomal DNA found in the bacterium E. coli is called
a) mesosome b) nucleoid c) incipient nucleon d) plasmid
4. Phagocytosis is also known as
a) cell eating b) cell death c) cell drinking d) cell lysis
5. *Dorstenia* an example for
a) raceme b) panicle c) spadix d) coenanthium
6. Coconut belongs to
a) Drupe b) Syconus c) Baccate d) Aggregate
7. Inheritance of flower colour in *Lathyrus odoratus* was studied by
a) Morgan & Bridges b) Bateson & Punnett c) Sutton & Boveri
d) Schleiden & Schwann
8. The theory explaining passive absorption of mineral salt is
a) Ion exchange b) carrier concept
c) cytochrome pump theory d) none of the above

PART - II

Answer any four questions.

4 X 2 = 8

9. What are oncogenic viruses?
10. What is middle lamella?
11. What are monoecious plants?
12. What are pneumatophores?
13. Why is intermediate dominance also called blending inheritance?
14. What is water potential?

PART - III

Answer any three questions. (Q.No. 18 is Compulsory question)

3 X 3 = 9

15. Discuss the role of bacteria in soil fertility.
16. Draw the structure of prokaryotic cell.
17. Differentiate phyllode / phylloclade.
18. Explain the hydroponics.
19. Give an account of the postulates of the chromosome theory of inheritance.

PART - IV

Answer the following questions.

2 X 5 = 10

20. Describe mitosis cell division. (OR)
Explain : Potato osmoscope - experiment.
21. Explain inheritance of fruit colour in *Cucurbita pepo*. (OR)
Give an account of different types of aestivation with example.

BIO - ZOOLOGY
PART - A

Answer all the questions.

8 X 1 = 8

1. The smallest vertebrates is
a) amphioxus **(b)** phillipine goby c) balanoglossus d) lepisma
2. In the cytological technique, embedding material is cut into thin sections by an instrument
a) electrophoresis **(b)** microtome c) knife d) edge cutter
3. The ribosomes are meant for
a) phsphorylation **(b)** protein synthesis c) respiration d) oxidation
4. The synapses are formed between
(a) nerves and muscles b) nerve tissue c) capillaries d) organs
5. The 3rd and 4th ventricles of brain communicates through
a) foramen of manro **(b)** sylvius canal c) choroid plexuses d) expendymal cell
6. X/A ratio of super male is
a) 1.5 b) 0.67 c) 0.5 **(d)** 0.33
7. Egg of sea urchin belongs to on the basis of amount of yolk.
a) oligo lecithal **(b)** micro lecithal c) macro lecithal d) A lecithal
8. The predatory insects are said to be
(a) entomophagous b) larvivorous c) parasitic d) pests

PART - B

Answer any four of the following.

4 X 2 = 8

9. What is a Ookinete? **32**
10. Write the cancer caused by @ BRCA1 and Rb genes. **71**
11. What is Coxa? **87**
12. Write the Zonation of Adrenal Cortex? **116**
13. What is Arrhenotoky? **137**
14. What is Bee wax? **158**

PART - C

Write any three of the following including question No. 17 which is compulsory.

15. What is autolysis? **66**
16. Write about the endocrine part of Pancreas? **117**
17. Write about haemolytic Anaemia? **133**
18. Write the laws of cleavage. **147**
19. What is Atoll? **155**

PART - D

Answer all the questions.

2 X 5 = 10

20. Describe plasma membrane? (OR) **60**
Provide the structure of Nephron with diagram. **118**
21. Give an account of ABO blood group. (OR) **131**
Explain Gametogenesis. **143**