2024

Time :As in Programme

Full Marks : 100

The figures in the right-hand margin indicate marks.

*Answer **all** questions.*

Draw labelled diagram wherever necessary.

PART-I

1. Answer all the following Questions. 1x10

   a. _____ virus was created in the form of nonliving crystals for the first time marking a significant milestone in science.

   b. The cycle which is completed quickly in the infection by a phage is _____.

   c. _____ is known as father of Microbiology.

   d. The approximate size of bacterial cell is _____.

   e. The respiratory chain of bacteria is associated with the _____.

   f. Holdfast, stipe and frond constitute the plant body in the case of _____.

   g. The pyrenoids are made up of _____.

   h. Chlorella, a very good source of protein, belongs to _____.

   i. Chlorophyta is also known as _____.

   j. Mannital is a stored food in _____.

PART-II

2. Answer the following questions in 50 words each. 2x9

   a. What is priors ?

   b. Define Vaccine.

(Turn Over)

c. Sphero plasts.

d. Prochloron

e. Flagella

f. Cell structure of *Volvox*.

g. Write economic uses of cyanobacteria.

h. Occurrance of *Ectocarpous*.

i. Use of algae in agriculture.

PART-III

3. Answer any eight questions of the followings in 250 words each. 5x8

a. Microbial nutrition.

b. RNA virus.

c. Mycoplasma

d. Conjugation in bacteria.

e. Evolutionary significance of prochloron.

f. Economic Importance of algae.

g. Morphology and occurance of *Coleochaete*.

h. Evolutionary significance of *chara*.

i. General characteristics and Morphology of *polysiphonia*.

j. Characteristics and occurrance of *Vaucheria*.

PART-IV

Answer any four of the following questions in 800 words each.8x4

4. Describe the replication of bacteriophage and its economic importance.

5. Discuss the genetic recombination in bacteria.

6. Discuss the range of thallus organization in algae.

7. Describe the life cycle of *chara*.

8. Describe the life cycle of *Ectocarpous*.