

**LITTLE FLOWER SCHOOL, RAPTINAGAR, GORAKHPUR**  
**FIRST SEMESTER EXAMINATION 2021-2022**

**Class: XI**  
**Biology**

**Time: 3 Hours**  
**Max Marks: 70**

*This paper comprises **TWO PARTS** – Part I and Part II. Answer **all** questions.*

*Part I consists of **one** question of 20 marks having five subparts.*

*Part II consists of Sections A, B and C.*

*Section A consists of **seven** questions of **two** marks each.*

*Section B consists of **seven** questions of **three** marks each, and Section C consists of **three** questions of **five** marks each.*

***Internal choices have been provided in two questions in Section A, two questions in Section B and in all three questions of Section C.***

*The intended marks for questions or parts of questions are given in brackets [ ].*

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**PART - I (20 Marks)**

*Answer **all** questions*

**Question 1**

**a) Answer the following questions briefly and to the point:** **[8×1]**

- 1) Name the fungi commonly known as Sac fungi.
- 2) What is Chemotaxonomy?
- 3) Write down a suitable definition of species.
- 4) What is nature of cell wall in diatoms?
- 5) What is the function of Pneumatophores?
- 6) What are capsomeres?
- 7) What are vascular plants with seeds and no fruits called?
- 8) Where was the first zoological museum founded?

**b) Each of the following sub-parts, (i) to (iv) has four choices. Choose the best option in each case:** **[4×1]**

- 1) Basic unit of classification is:  
i) Genus                      ii) Species                      iii) Order                      iv) Class
- 2) The thalloid body of a slime mould is known as:  
i) Protonema                      ii) Plasmodium                      iii) Fruiting body                      iv) Mycelium
- 3) The heart shaped form of prothallus represents:  
i) Dioecious                      ii) Monoecious sporophyte  
iii) Monoecious Gametophyte                      iv) None of the above.
- 4) Ginger is an underground stem. It is distinguished from roots because:  
i) it lacks chlorophyll                      ii) it stores food  
iii) it has xylem and vessels                      iv) it has nodes and internodes

**c) Give *one* significant contribution of each of the following scientists:** **[4×1]**

- 1) Carl Woes                      2) Ernst Mayr                      3) Ivanowsky                      4) T.O.Dienner

- d) **Define the following:** [2×1]  
1) Napi form roots                      2) Leaf tendrils
- e) **Give a reason for each of the following:** [2×1]  
1) Why class Deuteromycetes is considered as fungi imperfecti?  
2) Why viruses are considered as link between living and non-living?

## **PART - II**

### **SECTION - A (14 Marks)**

*(Answer all questions)*

**Question 2** [2]

a) What is cytotaxonomy?

**OR**

b) What is a bracteate flower?

**Question 3** [2]

Mention two general characteristics of chlorophyceae with two examples.

**Question 4** [2]

Explain leaf tendril modification for support along with diagram.

**Question 5** [2]

Give a brief idea of role of bacteria in sewage treatment.

**Question 6** [2]

Classify bacteria on the basis of mode of respiration.

**Question 7** [2]

What are slime moulds?

**Question 8** [2]

a) What is alternation of generations?

**OR**

b) What are viroids?

### **SECTION - B (21 Marks)**

*(Answer all questions)*

**Question 9** [3]

a) Explain haplontic life cycle pattern along with diagram and examples.

**OR**

b) Give a brief idea of Herbaria.

**Question 10** [3]

Write a short note on mycorrhiza.

**Question 11** [3]

Mention any three economic importance of algae.

**Question 12** [3]

State the major types of pigments found in algae along with examples.

**Question 13** [3]

Define oogamy and explain it with the help of diagram.

**Question 14** [3]

Explain the types of androecium cohesion with example.

**Question 15** [3]

a) Explain with the help of diagram the structure of TMV.

**OR**

b) Differentiate between gram +ve and gram-ve bacteria.

**SECTION - C (15 Marks)**

*(Answer all questions)*

**Question 16** [5]

a) State the general characteristics of angiosperms.

**OR**

b) Draw a graphical representation of life cycle of Pteridophyta.

**Question 17** [5]

a) Discuss the underground modifications of stem.

**OR**

b) What is inflorescence? State its different types with definition and examples.

**Question 18** [5]

a) Draw graphical representation of three domains of life.

**OR**

b) Explain and define phyllotaxy and its types.