

# **Janki Devi Bajaj Government Girls College, Kota**

## **Department of Botany**

### **M.Sc. Botany Semester – I**

#### **Paper-1.1 Biology and Diversity of Lower Plants**

Maximum Marks 15

#### **Very short questions (1 marks each)**

1. Which algae is known as “Water net”?
2. Write an example of symbiotic algae?
3. What is algal bloom?
4. What is Heterothallism?
5. What do you understand by Mycorrhiza?

#### **Short answered question (2.5 marks each)**

6. Describe parasexuality.
7. Write economic importance of algae.

#### **Long answered questions (5 marks each)**

8. Write down the morphology, structure, reproduction and life history of *Morchella*.

# Janki Devi Bajaj Government Girls College, Kota

## Department of Botany

### M.Sc. Botany Semester – I

#### Paper-1.2 Pteridophyta , Gymnosperms and Paleobotany

Maximum Marks 15

#### Very short questions (1 marks each)

1. What is siphonostele?
2. Name living members of subdivision Psilopsida.
3. What is nature of stele of *Psilotum*?
4. Mention the name of 4 heterosporous Pteridophytes.
5. Who proposed stellar theory in Pteridophytes?

#### Short answered question (2.5 marks each)

##### Write short notes on

6. Heterospory in *Selaginella*.
7. Seed habit in Pteridophytes.

#### Long answered questions (5 marks each)

8. Describe different types of stellar system found in Pteridophytes.

# **Janki Devi Bajaj Government Girls College, Kota**

## **Department of Botany**

**M.Sc. Botany Semester – I**

**Paper-1.3 Plant Physiology**

Maximum Marks 15

### **Very short questions (1 marks each)**

1. What is stomata?
2. What is Osmosis?
3. Define Diffusion.
4. Define Uniport and Symport.
5. Define photorespiration.

### **Short answered question (2.5 marks each)**

6. Explain physicochemical properties of Water.
7. Explain water potential.

### **Long answered questions (5 marks each)**

8. Explain stomatal regulation of transpiration.

# **Janki Devi Bajaj Government Girls College, Kota**

## **Department of Botany**

**M.Sc. Botany Semester – I**

**Paper-1.4 Microbiology and plant pathology**

Maximum Marks 15

### **Very short questions (1 marks each)**

1. When was bacteria discovered and by who?
2. Who discovered micoplasma?
3. What are prions?
4. Who discovered conjugation?
5. Who discovered transduction?

### **Short answered question (2.5 marks each)**

6. Explain structure and composition of bacteriophage.
7. What is bacterial transformation?

### **Long answered questions (5 marks each)**

8. Explain economic importance of bacteria.