# **Plants – Form and Functions**

## **ORAL QUESTIONS**

#### A. Answer these questions orally.

- 1. Is radish a biennial or a perennial plant?
- Which of these are shrubs?
  Bougainvillea, Pansy, Paddy, Lemon, Coriander, Rose
- 3. Which of these are nonflowering plants? Ferns, Mango, Rose, Algae, Mustard
- 4. Which part of the plant holds the soil particles together?
- 5. What is the other name for
  - (a) Fibrous roots (b) Tap roots
- 6. Name two trees which have prop roots.
- 7. What is the part of the stem between two adjacent nodes called?
- 8. Name the part of the plant which connects the root system with the rest of the plant parts.
- 9. Name the part of the plant which develops from the plumule of the seed.
- 10. Name two plants which have climbing roots.

## B. Fill in the blanks.

- 1. The \_\_\_\_\_\_ present in rose plant protects it from grazing animals.
- 2. In a \_\_\_\_\_ leaf, the lamina is undivided whereas in a \_\_\_\_\_ leaf, the lamina is divided.
- 3. In cacti, leaves are modified into \_\_\_\_\_
- 4. After fertilisation, ovary of a flower grows, into \_\_\_\_\_ and ovules form
- 5. \_\_\_\_\_\_ are the reproductive organs of a flower.

## C. Select the odd-one out.

- 1. Petal, Sepal, Carpel, Stamen, Lamina
- 2. Potato, Ginger, Onion, Radish, Zimikand
- 3. Betal, Banyan, Black pepper, Money plant

9

#### **PUZZLE/QUIZ**

#### D. Solve the crossword puzzle with the help of the clues given.

- ACROSS: 1. Transfer of pollen from anther to stigma (11)
  - 2. Green, flat part of the leaf (6)
  - 3. A shrub (3)
  - 5. Additional pillar like roots (4)
  - 7. The point where a leaf or a branch attaches to stem (4)
  - 9. Modified stem in potato (5)
  - 10. Female gamete that matures into a seed (5)
  - 11. Lateral branches arising from the midrib of a leaf (5)
  - 12. Root system found in carrot (3)
- DOWN: 1. Male gamete found in anthers (6)
  - 4. Male reproductive organs of a flower (7)
  - 5. Leaf stalk (7)
  - 6. Coloured scented part of a flower (6)
  - 8. Swollen basal part of carpel grows from this (5)

<sup>1</sup> P		L							0	Ν
2	А	М					<sup>3</sup> R		<sup>4</sup> S	
			<sup>5</sup> P		0	<sup>6</sup> P				
<sup>7</sup> N	<sup>8</sup> 0									
						<sup>9</sup> T				R
			10	V	U					
	Y									
		11	E		N			<sup>12</sup> T		

- E. Given below are some jumbled words. Arrange them into meanigful words. Take help from the clues given in the brackets.
- 1. N I L P R E E N A

(Plants that live for more than two years)

2. N B A Y N A

(A tree which has prop roots)

3. I N G R G E

(A plant in which underground stem strores food)

# **CLASS TEST**

#### F. Short answer questions.

- 1. Differentiate between the following.
  - (a) Complete flower and Incomplete flower

COMPLETE FLOWER	INCOMPLETE FLOWER

## (b) Sepals and Petals

SEPALS	PETALS

- 2. How are plants classified on the basis of the following.
  - (a) Structure and size
  - (b) Life span

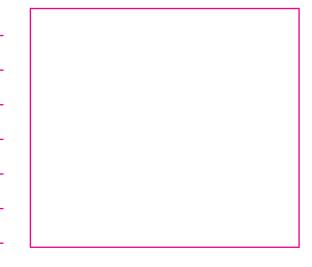
3. What do you understand by root system? What does it consist of?

4. List the characteristics of roots.

- 5. How do roots prevent soil erosion?
- 6. What are the functions of veins present in leaves?
- 7. What are the three parts of carpel?

#### G. Long answer questions.

 Explain the different parts of the root system. Draw the diagram also.



## **HOME ASSIGNMENT**

#### H. Think and answer.

1. Look at the prop roots of a banyan tree. These roots grow downwards and penetrate into the soil? What are the function of these roots?



- 2. Look at the climbing roots of a money plant. How are these roots useful for the plant?

# WORKSHEET

#### I. Give reasons for the following.

- 1. In cacti, leaves are modified into spines.
- 2. Stigma of a flower is sticky.
- 3. In prickly poppy, leaf margins bear spines.