#### **BOT – 106**

#### GOVERNMENT COLLEGE (AUTONOMOUS), RAJAMAHENDRAVARAM

#### II year B.Sc., Program Examinations at III Semester End

#### Botany Paper - 3: Plant Taxonomy and Embryology (TM & EM)

#### Model Question Paper (w.e.f. 2018-19)

Time: 3 Hrs.

Max. Marks: 50

## $\underline{Section - A} \qquad 4 \ge 5 = 20 \text{ M}$

### Answer any <u>Four</u> of the following questions. Draw diagrams wherever necessary.

- 1. ICBN
- 2. Merits and demerits of Hutchinson system of classification
- 3. Economic importance of Brassicaceae
- 4. Essential floral organs in Cucurbitaceae
- 5. Inflorescence in Poaceae
- 6. Economic importance of Asteraceae
- 7. Ovule structure
- 8. Adoxa type of embryo sac

### <u>Section – B</u> 3

 $3 \times 10 = 30 M$ 

# Answer any <u>Three</u> of the following questions. Draw neat and labeled diagrams

## wherever necessary.

- 9. Discuss the role of herbarium as an important taxonomic resource.
- 10. Write an essay on Bentham and Hooker's system of classification.
- 11. Describe the distinguishing characters of the family Cucurbitaceae and mention its economic importance.
- 12. Describe the chief characters of the family Asteraceae and add a note on its economic importance.
- 13. Write an essay on the development of Dicot embryo.

#### **BOT -106**

## GOVERNMENT COLLEGE (AUTONOMOUS), RAJAMAHENDRAVARAM II B.Sc., Botany Practical Examinations at the end of III Semester (Plant Taxonomy and Embryology) Botany Practical Paper - III model (w.e.f. 2018-19)

Time:	2	hours

Max.Marks: 50

- Describe the given specimen 'A' (Polypetalae plant) in technical terms, draw the labeled diagram of twig, L.S. of flower and floral diagram.
  10 M
  Scheme of valuation : Vegetative characters 2 marks+ Floral characters-3 marks+ Floral formula -1mark + Systematic position -1 mark + Diagrams- 3 marks (Twig -1+ L.S. of flower -1 + Floral diagram -1).
- Describe the given specimen 'A' (Gamopetalae/Monochlamydae/Monocot plant) in technical terms, draw the labeled diagram of twig, L.S. of flower and floral diagram.
   10 M

Scheme of valuation : Vegetative characters – 2 marks+ Floral characters-3 marks+ Floral formula -1mark + Systematic position -1 mark + Diagrams- 3 marks (Twig -1+ L.S. of flower -1 + Floral diagram -1).

3.	Pollen viability test	8 M
4.	Scientific observation of the given specimens	2 x 5 =10 M
	D. Embryology slide	
	E. Embryology slide	
	<b>Scheme of valuation :</b> Identification – 1 M + Reasons – 3 M + Diagram – 2M	

5. Record + Herbarium and Field note book + Viva voce 5+4+3 = 12 M