**ST. JOSEPH’S UNIVERSITY, BENGALURU - 27**

**M.Sc. BOTANY – II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2023**

**(Examination conducted in May 2023)**

**BO 8222 – PLANT MORPHOGENESIS AND EMBRYOLOGY**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 50**

**This paper contains ONE printed page and THREE parts**

**Draw diagrams wherever necessary**

**A. Answer any FIVE questions in few sentences 5X2=10**

1. Tristichous phyllotaxy

2. Polarity in *Fucus* zygote

3. Periplasmodium

4. Repulsion theory

5. Heterofertilization

6. Polar nucleus

7. Nucellar beak

**B. Write short notes on any FIVE questions 5X6=30**

8. Secondary wall thickening in tracheary elements differentiation

9. Genetic basis of self incompatibility

10. Morphogenetic studies using root apex

11. Role of callose in microsporogenesis

12. Haustorial behavior of embryo sac and nutrition

13. Axial theories of nature of shoot

14. Embryo sac development in *Chrysanthemum cinerariaefolium*

**C. Explain any ONE question in detail 1X10=10**

15. Serial evocation of genes and flower development

16. Early embryogenesis in *Capsella*