**ST.JOSEPH’S COLLEGE (AUTONOMOUS) BENGALURU-27**

**M.Sc. BOTANY –I I SEMESTER**

**SEMESTER EXAMINATION - APRIL 2019**

**BO 8218: PLANT MORPHOGENESIS AND EMBROLOGY**

**Time: 2½hrs. Max. Marks: 70**

**This question paper has ONE printed page and THREE parts Instructions: Draw diagrams and write examples wherever necessary**

**A. Explain any TEN of the following in one or two sentences: 10 x 2=20**

1. Meristemoid

2. Mosaic endosperm

3. Self incompatibility

4. Parastichy

5. Sperm dimorphism

6. Amphitropous ovule

7. Aggressive micropylar haustorium

8. Transfer cell

9. Canal cell

10 Chimeral embryo.

11. Cap block

12. LFYgene

**B. Write Critical notes on any FIVE of the following: 5 x 6=30**

13**.** Experimental studies on differentiated organs

14. Phytonic and axial theories of shoot

15. Ultra structure of an embryo sac

16. Differentiation of anther wall and their role

17. Formation of leaves

18. a) Pollen development in Cyperaceae b) Nemec phenomenon

19. Embryogeny of *Capsella bursa-pastoris*

**C. Give a comprehensive account of any TWO of the following: 2 x10=20**

20. Types of polyembryony and its significance

21. Patterns of vascular differentiation

22. Ultra structure and physiology of megasporogenesis -BO.8218-B