

**Register Number:** 

DATE: 25-10-2019

## ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU END SEMESTER EXAMINATION- OCTOBER 2019 B.Sc.-V SEMESTER

**BO 5215- Molecular Biology and Plant Biotechnology** 

Time- 2<sup>1/2</sup> hrs

Max. Marks: 70

This paper contains **ONE** printed page and **THREE** parts Draw labeled diagrams wherever necessary with examples.

## A. Answer any <u>TEN</u> of the following

10X2 = 20

- 1. Conservative replication
- 2. Non genetic RNA
- 3. Ribozymes
- 4. Cos sites
- 5. *dfr* gene
- 6. Annealing
- 7. Nitrogen fixation in non-legumes
- 8. Molecular farming
- 9. Polygalacturonase
- 10. T-DNA
- 11. IPR
- 12. Muton and Recon

## B. Write short notes on any <u>FIVE</u> of the following

5X6=30

- 13. Translation in Eukaryotes
- 14. Genetic code and its characteristics
- 15. Sanger's DNA sequencing
- 16. pUC18: structure and selection mechanism
- 17. Edible vaccines
- 18. Terminator gene technology
- 19. Three strategies for production of salinity resistant plants by genetic engineering

## C. Give a comprehensive account of any TWO of the following

2X10=20

- 20. DNA replication in Eukaryotes
- 21. Agrobacterium mediated biotransformation
- 22. Bt cotton: production and drawbacks

BO5215 A 19