16P330	(Pages:2)	Name
		Reg. No

#### THIRD SEMESTER M.Sc. DEGREE EXAMINATION, OCTOBER 2017

(Regular/Supplementary/Improvement)

(CUCSS - PG)

#### CC15P BO3 C11 - BIOTECHNOLOGY AND BIOINFORMATICS

(Botany)

(2015 Admission Onwards)

Time: Three Hours Maximum: 36 Weightage

## **I.** Answer *all* questions very briefly:

- 1. Explain FISH
- 2. What is cDNA library?
- 3. Full form of CATH and SCOPE?
- 4. What are biodegradable plastics?
- 5. What are vectors?
- 6. DNA chips
- 7. Comment on suspension culture?
- 8. Briefly explain PLOS?
- 9. Comment on Gene piracy?
- 10. What is open archive?
- 11. Comment on Micro salts?
- 12. What is cryopreservation? What is its significance?
- 13. What is RAPD and RFLP?
- 14. Briefly explain chromosome walking and jumping?

 $(14 \times 1 = 14 \text{ Weightage})$ 

## **II.** Answer *any seven* questions not more than **100** words.

- 15. Discuss large scale cultivation of cell using bioreactors for secondary metabolites?
- 16. Write an account on direct and indirect organogenesis and factors affecting it.
- 17. Briefly explain DNA sequencing methods.
- 18. Differentiate Biomed central and Pub med Central.
- 19. Describe southern and western blotting technique.
- 20. Explain Chou- Fasman method of secondary structure prediction.
- 21. Discuss on media for in vitro culture and their compositions.
- 22. What is e-access? Explain types of online access methods.
- 23. Write an account on antisense RNA technology.
- 24. What is free software movement? Explain the contributions of FSF (free software foundation)

 $(7 \times 2 = 14 \text{ Weightage})$ 

# III. Answer *any two* questions in 300 words each

- 25. General account of laboratory facilities of Tissue culture
- 26. Discuss objectives and achievements of genetic engineering.
- 27. Give an account of Protein sequence database.
- 28. Enumerate the essential steps of recombinant DNA technology. Discuss the various types of vectors used as cloning vehicles

 $(2 \times 4 = 8 \text{ Weightage})$ 

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