C 82408	(Pages : 2)	Name Reg. No
FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2015		
	(CUCSS)	
	Microbiology	

MB 4C 11—BIOSTATISTICS AND BIOINFORMATICS

Maximum: 36 Weightage

Time: Three Hours

Part A

Answer all questions. Each question carries 1 weightage.

- 1. Null hypothesis.
- 2. Mean.
- 3. Standard error.
- 4. Mega BLAST.
- 5. E value.
- 6. UPGMA.
- 7. Molecular docking.
- 8. Product rule of probability.
- 9. RASMOL.
- 10. Bankit.
- 11. Expasy.
- 12. Mean sum of square.
- 13. Maximum parsimony.
- 14. paralogues.

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

Part B

Write short notes on any seven. Each question carries 2 weightage.

- 15. Z distribution.
- 16. Search engines.
- 17 Measures of dispersion.
- 18. Nonparametric statistical tests.

Turn over

- 19. Composite data bases.
- 20. Clustal.
- 21. Molecular clock hypothesis.
- 22. Local alignment $_{\text{V/S}}$ global alignment.
- 23. Coefficient of dispersion.
- 24. PUBMED.

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

Part C

Answer any **two** questions. Each question carries 4 weightage.

- 25. What are the main public databases of nucleic acids 2
- 26. What is meant by sampling? What are the factors to be taken care while sampling?
- 27. Briefly explain the significance of statistics and hypothesis testing in biological studies.

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