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## FOURTH SEMESTER M.Sc. DEGREE EXAMINATION JUNE 2016

(CUCSS)

Zoology

## ZO 4C T11—MICROBIOLOGY AND BIOTECHNOLOGY

(2010 Admissions)

Time: Three Hours

Maximum: 36 Weightage

- I. Answer all fourteen questions:
  - 1 Briefly state the contributions of Louis Pasteur.
  - 2 What is numerical Taxonomy?
  - 3 What are sex pili?
  - 4 Explain a growth curve.
  - 5 Write on SARS.
  - 6 State the nature of biogas plants.
  - 7 Outline the clinics of tetanus.
  - 8 What is Y A C vector?
  - 9 Explain transfection.
  - 10 What is Western blot?
  - 11 What is DNA finger printing?
  - 12 Explain IVF.
  - 13 Outline biomonitoring.
  - 14 Write on BT cotton.

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

- II. Answer any seven of the following:
  - 15 Comment on ethics in biotechnology.
  - 16 Write on toxic site reclamation.

Turn over

- 17 Explain gene therapy.
- 18 Discuss cDNA library.
- 19 Explain any two molecular markers.
- 20 Write a brief note on bacterial diseases man.
- 21 Describe bacterial cell wall.
- 22 Discuss enveloped viruses.
- 23 Provide the epidemiology of swine flue.
- 24 Explain waste water treatment.

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

## III. Answer any two of the following:-

- 25 Provide the process and applications of microbial fermentation.
- 26 Describe various nutritional types of microbes and their culture media.
- 27 Narrate the sequences involved in in-vivo cloning.
- 28 Explain gene sequencing by Maxam and Gilbert's method.

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

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Participation biometrically

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