

**AE-787**

**M.Sc. (Final)**

Term End Examination, 2016-17

# ZOOLOGY

Special Paper : Cytology and Cytogenetics

### Paper - III

# Cell Biology and General and Microbial Genetics

*Time : Three Hours]                      [Maximum Marks : 100*  
*[Minimum Pass Marks : 36*

**Note** : Answer any **four** questions. All questions carry equal marks.

1. Why lysosome is known as suicidal bag? Explain in detail the structure and functioning of Lysosome.
2. Describe the types of Ribosomes. Explain the ultrastructure of ribosome and its role in biosynthesis of protein.

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***(Turn Over)***

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3. Explain, in detail, along with well labelled diagram of all the phases of Mitosis and Meiosis.
  4. Explain in detail the structural classification of protein.
  5. Describe in detail about the various syndromes that arises due to the structural and numerical abnormalities of Chromosomes.
  6. Write notes on the following :
    - (a) Linkage Map
    - (b) Human Karyotype
  7. Describe in detail the modes of recombination in bacteria.
  8. Describe in detail the role of extra-chromosomal DNA in adaptation of bacteria.
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