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**Paper Code :DSC-208**

**Roll No.**

**B.Sc. (ZBC)-11**

**2<sup>nd</sup> Year Examination, Academic Batch 2016-17**

**Zoology-IV (Cytogenetics and Molecular Biology)**

*Time : 3 Hours ]*

*[ Max. Marks : 100*

*Note. Attempt any **five** questions. Each questions carry equal marks.*

**Q.1** What is Endoplasmic Reticulum? Describe the functions and types of endoplasmic Reticulum.

**Q.2** Describe the structure of plasma membrane with its chemical composition.

**Q.3** Write an account of the structure and functions of Chromosomes with diagram.

**Q.4** What is Lysosomes? Explain their structure and functions.

**Q.5.**What is replication ? Why it is called as semi conservative in case of E. coli. Describe Meselson and Stahl 's experiment showing semi conservative replication of DNA in E. coli

**Q.6.**Briefly describe the following

- (i) Transcription in prokaryotes
- (ii) Functions of Golgi complex

**Q.7.**Describe different stages of cell cycle.

**Q.8.** Write short notes on

- (i) Protoplasm theory
- (ii) Active transport
- (iii) DNA structure
- (iv) Laws of inheritance