

# CD-314

**M. Sc. (First Semester)**

**EXAMINATION, Dec.-Jan., 2018-19**

**BOTANY**

**Paper First**

**(Cytology)**

*Time : Three Hours*

*Maximum Marks : 80*

*Note : Attempt all the four questions. One question from each Unit is compulsory. All questions carry equal marks.*

## **Unit—I**

Describe the functions of plasma membrane.

*Or*

Write short notes on any *two* of the following :

- (i) Specialized plant cell types
- (ii) Structure of plant cell wall
- (iii) Exergonic and endergonic reactions

## **Unit—II**

Write an account on structure and genome organisation of Chloroplast.

*Or*

Write short notes on any *two* of the following :

- (i) Biogenesis of mitochondria
- (ii) Plant vacuole
- (iii) RNA editing

## **Unit—III**

3. Give an account on nucleus and nucleosome organisation.

*Or*

Write short notes on any *two* of the following :

- (i) Cell cycle
- (ii) Structure of ribosome
- (iii) Programmed cell death

## **Unit—IV**

4. What are microfilaments and intermediate filaments? Describe their structure and functions.

*Or*

Write short notes on any *two* of the following :

- (i) Lysosome
- (ii) Micrometry
- (iii) Immunotechniques (any *two*)

**(B-46) P. T. O.**