

**MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD
SEMESTER END EXAMINATION**

B.Sc. (Hons.) Horticulture

Semester	: I (New)	Term	: I	Academic Year	: 2018-19
Course No.	: BIO 111	Title	: Introductory Biology		
Credits	: 2(1+1)	Time	: 09.00 to 11.00	Total Marks	: 40
Day & Date	: Tuesday, 18.12.2018				

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Define diversity. Give the objectives of systematics.
- Q.2 Define nomenclature. Explain the Binomial nomenclature.
- Q.3 Define cell. Give the difference between plant cell and animal cell.
- Q.4 Describe the structure of DNA as proposed by Watson and Crick.
- Q.5 Define mitosis. Explain the different stages of mitosis. Give the significance of meiosis.
- Q.6 State Mendel's Law of inheritance. Explain any one of them with suitable example. Why did Mendel select garden pea for his experiment?
- Q.7 Give characteristics of meristematic tissue and enlist the classification of meristematic tissue.
- Q.8 Define seed. Explain the structure of monocotyledonous seed (Maize).
- Q.9 Define photosynthesis. Explain in brief Calvin cycle.
- Q.10 Define Respiration. Explain the factors affecting respiration.

SECTION "B"

- Q.11 Fill in the blanks.
- 1) The term classification was coined by _____.
 - 2) The first vascular plants are _____.
 - 3) Exchange of genetic material takes place during _____.
 - 4) The end product of glycolysis is _____.
- Q.12 Define the following terms.
- 1) Embryo
 - 2) Seed Germination
 - 3) Biotechnology
 - 4) Somatic cell

