MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Hons.) Horticulture

Semester	: V (New)	Term	: I	Academic Year : 2019-20
Course No.	: H /VS 356	Title	: Breeding of Vegetables, Tuber and Spice Crops	
Credits	: 3 (2+1)			
Day & Date	: Wednesday, 06.11.2019	Time	: 14.00 to 17.00	Total Marks : 80

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 Describe in brief mode of reproduction. Explain mechanisms that facilitate self pollination in vegetable crops with suitable examples.

Q.2 Enlist breeding objectives in brinjal. Enlist the improved varieties of brinjal developed by selection and hybridization.

Q.3 Enlist various breeding methods used in vegetable crops and discuss the bulk method.

Q.4 Give the objectives of breeding in following vegetable crops (Any Two).

a) Onion   b) Cucumber

c) Tomato

Q.5 Define hybridization. Explain in brief the steps involved in it.

Q.6 Define genetic erosion. What are the causes of genetic erosion?

Q.7 Define male sterility. Enlist its different types and explain in brief genetic male sterility

Q.8 Give the biotechnological approaches and their importance in vegetable improvement.

Q.9 Write in brief types of mutation on the basis of origin, state example of mutagens and general characteristics of mutation.

Q.10 Write short notes (Any Two).

a) *In situ* conservation   b) Polyploidy

c) Heterosis

SECTION "B"

Q.11 Define the following terms.

1) Germplasm	2) Stability
3) Gynomonoecious	4) Apogamy
5) Backcross	6) Geitonogamy
7) Dichogamy	8) Self incompatibility

(P.T.O.)

Q.12 State True or False.

1) Arkel is an introduced variety of pea from England.

2) Rio de Janeiro is cultivar of ginger.

3) Spinach is cross pollinated vegetables.

4) Afghanistan is primary centre of genetic diversity of carrot.

5) Protandry is observed in cabbage.

6) Bottle gourd is dioecious annual vegetables.

7) Okra is self pollinated vegetable crop.

8) The head quarter of IIVR is located at New Delhi.

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