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MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION

B.Sc. (Hort.)

Semester : V (New)	Term : I	Academic Year : 2017-18
Course No. : H /VS 353	Title : Breeding of Vegetable Crops	
Credits : 3(2+1)	Time : 14.00 to 17.00	Total Marks : 80
Day & Date : Wednesday, 15.11.2017		

- 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.

Shri Shivali College of Horticulture
Library Department

SECTION "A"

- Q.1 Enlist different breeding methods in vegetable crops and write about plant introduction with its advantages and disadvantages.
- Q.2 What do you mean by mutation? Write advantages and disadvantages of mutation breeding.
- Q.3 What do you mean by self incompatibility? Write classification of self incompatibility.
- Q.4 Write methods of reproduction. Describe types of apomixis and write advantages and disadvantages of apomixes.
- Q.5 What do you mean by mass selection? Write advantages and disadvantages of mass selection.
- Q.6 Write about objectives of breeding in cucumber and write floral biology of cucumber.
- Q.7 Write short notes (Any Two).
- a) Pollination and pollinating agencies
 - b) Germplasm collection
 - c) Centres of Origin
- Q.8 Write about breeding techniques in tomato considering the following points.
- a) Objectives
 - b) Emasculation
 - c) Selfing technique
 - d) Crossing technique
- Q.9 Write about breeding techniques in okra considering the following points.
- a) Objectives
 - b) Emasculation
 - c) Artificial Pollination
 - d) Varieties with their desirable characteristics
- Q.10 Write the importance and scope of vegetable breeding in India.

(P.T.O.)

SECTION "B"

Q.11 State True or False.

- 1) Godavari is a variety of onion.
- 2) Release of pollens from anthersac is known as dehiscence.
- 3) Konkan Jwala is a variety of chilli.
- 4) Sudden change in characters of plant is known as mutation.
- 5) Monoceousness is observed in brinjal.
- 6) Orthodox type of seed remains viable below 10 per cent moisture.
- 7) Unisexual flowers are observed in watermelon.
- 8) In cucumber, pollen viability is only four days.

Q.12 Match the following pairs.

"A"

"B"

- | | |
|------------------------|--|
| 1) Diachogamy | a) Yellow vein mosaic resistant variety of Okra |
| 2) Germplasm | b) Hybrid of same genome |
| 3) Pureline | c) Dormant embryo |
| 4) Arka anamika | d) Collection of promising types |
| 5) Interspecific cross | e) Record of progenies |
| 6) Seed | f) Dehiscence and stigma receptivity is not at same time |
| 7) Cole crops | g) Progeny of single self sterilized homozygous plant |
| 8) Pedigree | h) Anthesis between 9.00 a.m to 3.00 p.m |

