

(L)

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

Semester : V (New)		B.Sc. (Hort.)	
Course No. : H /VS 353		Term : I	Academic Year : 2016-17
Credits : 3(2+1)		Title : Breeding of Vegetable Crops	
Day & Date : Saturday, 19.11.2016		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 Write importance and scope of vegetable breeding.
- Q.2 Enlist different components of genetic resources. Describe in short *in-situ* conservation.
- Q.3 Define pollination. Describe the various mechanisms which promote self and cross pollination.
- Q.4 Enlist different methods of vegetable breeding. Describe in detail the pedigree method.
- Q.5 Write short notes (Any two).
- 1) Plant introduction
  - 2) Mutation breeding
  - 3) Development of seedless watermelon
- Q.6 Define hybridization and explain in detail the steps involved in hybridization.
- Q.7 Write in detail crop improvement and achievements in pea through different breeding methods.
- Q.8 Define self incompatibility. Enlist different types of self-incompatibilities in vegetable crops with examples.
- Q.9 Explain various mechanisms of disease resistance in crops. Enlist methods of breeding for disease resistance in vegetable crops.
- Q.10 Give the objectives of breeding in following vegetable crops (Any two).
- 1) Tomato
  - 2) Cauliflower
  - 3) Carrot

**SECTION "B"**

- Q.11 Define the following terms.
- 1) Haploid
  - 2) Male sterility
  - 3) Multiple cross
  - 4) Backcross
  - 5) Synthetic variety
  - 6) Gynocious
  - 7) Homogamy
  - 8) Inbred line
- Q.12 Fill in the blanks.
- 1) Long form of AICVIP is \_\_\_\_\_.
  - 2) AVRDC is situated at \_\_\_\_\_.
  - 3) Okra is \_\_\_\_\_ pollinated crop.
  - 4) Head quarter of IPGRI is located at \_\_\_\_\_.
  - 5) Centre of origin of tomato is \_\_\_\_\_.
  - 6) The cross between different species of the same genus is known as \_\_\_\_\_.
  - 7) Mutation theory was put forward by \_\_\_\_\_.
  - 8) \_\_\_\_\_ is called father of plant genetic resource.

