

M.Sc. (Ag.) Examination, 2017
Semester – II
Horticulture
Course: HOR-523
(Breeding of Vegetable Crops)

Time: 3 Hours

Full Marks: 50

Questions are of value as indicated in the margin
*Answer **any five** questions*

1. Give a brief account on history of vegetable breeding in India. Discuss its importance. 7 + 3 = 10
 2. a) Enlist the different genus of cucurbits. 2 + 8 = 10
b) Briefly discuss breeding objectives of cucumber and its varietal improvement.
 3. a) What is inbreeding depression and heterosis? 3 + 7 = 10
b) Mention their importance in development of hybrid varieties with examples.
 4. a) Justify the popularity of hybrid cabbage in India. 2+3+5=10
b) Write down the breeding objectives of cabbage
c) Enumerate the methods followed in development of hybrid cabbage.
 5. a) What is male sterility and incompatibility? 4 + 6 = 10
b) Write down their importance and use in vegetable breeding. Give examples.
 6. Briefly mention about the following aspects (**any two**): 5 + 5 = 10
a) Varietal improvement in pumpkin or onion
b) Synthetic and composite variety
c) Resistance breeding in vegetable crops
 7. Discuss about breeding objectives and achievements in tomato or bottlegourd. 10
 8. Write short notes on (any four): 2.5x4=10
a) Botany of egg plant
b) Seedless watermelon
c) Marker assisted breeding
d) Thermo-classification of cauliflower
e) Breeding for quality improvement in vegetables
f) Importance of bio-technology in breeding of vegetables
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