

TRIBHUVAN UNIVERSITY
GOKULESHWOR AGRICULTURE AND ANIMAL SCIENCE COLLEGE

B. Sc. Ag., Practical Examination

2076

Subject: Introductory Plant Breeding

FM: 15

Time: 45 Minutes

PM: 6

Select the correct choice from the options given, for the following statements.

1. Wheat is a _____ crop.
 - (a) Cross pollinated crop
 - (b) Self pollinated crop
 - (c) Often self pollinated crop
 - (d) Often cross pollinated crop
 - (e) Clonally propagated crop
2. Tomato is _____ crop.
 - (a) Monoploid
 - (b) Diploid
 - (c) Tetraploid
 - (d) Hexaploid
3. Crossing of crop plants is best done at _____ .
 - (a) Morning
 - (b) Noon
 - (c) Evening
 - (d) Night
4. Which method of breeding allows natural selection to take place?
 - (a) Mass selection
 - (b) Pedigree selection
 - (c) Bulk selection
 - (d) Backcross selection
5. In tagging of crossed flowers which information is missed ?
 - (a) Date of emasculation
 - (b) Name of female and male parent
 - (c) Name of breeder and institution
 - (d) Mode of pollination
6. Seed purity does not include
 - (a) Inert matter
 - (b) Other crop seeds
 - (c) Weed seeds
 - (d) Identifiable seeds of other varieties
 - (e) Half broken seeds
7. Breeding method for self pollinated crops relies on:
 - (a) Increasing yield
 - (b) Increasing homozygosity
 - (c) Increasing heterozygosity
 - (d) Increasing hybrid vigour
8. What is the trait of consideration for determining disease tolerance ?

- | | |
|-----------------------|--------------------|
| (a) Disease symptoms | (c) Yield |
| (b) Length of panicle | (d) Leaf greenness |
9. Which is a national hybrid of maize ?
- | | |
|----------------------|------------------|
| (a) Manakamana-1 | (c) Posilo makai |
| (b) Rampur composite | (d) Gaurav |
10. Which is not a research organization related to plant breeding ?
- | | |
|---------------------|---------------|
| (a) ICARDA, Lebanon | (c) IEEU, US |
| (b) CIMMYT, Mexico | (d) CIP, Peru |
11. How do you determine the germination percentage of a seed sample in lab ? Determine for the given quality of seed the actual amount of seed required to plant 2 hectare of rice. (1+2)
- | | |
|--------------------------------|---------------------------|
| • Seed rate of rice: 45 kg/ha | • Purity percentage: 98 % |
| • Germination percentage: 80 % | |
12. What are the different classes of seeds? What is CVT and PYT in varietal release program ? (1+1)