

Day: Monday
Date: 30/10/2017

Time 12.00 NOON TO 02.00 PM
Max. Marks: 40

W-2017-0687

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks
- 3) Draw neat and labeled diagram **WHEREVER** necessary.

Q.1 Attempt any **TWO** of the following: (10)

- a) Give names of plants causing pollen allergy and explain allergenic properties of pollen.
- b) Comment on pollen viability and germination with their significance.
- c) What is palynology? Give its significance.

Q.2 Attempt any **TWO** of the following: (10)

- a) Define Palynotaxonomy. Give morphological characters of pollen with reference to angiosperms.
- b) What is polyploidy? Explain their role in evolution of new species.
- c) Explain application of mutation in plant improvement.

Q.3 Attempt any **TWO** of the following: (10)

- a) Define hybridization and describe various steps in hybridization techniques.
- b) Comment on genetic variation of crop improvement in plant tissue culture.
- c) Explain various methods of vegetative reproduction in plants.

Q.4 Attempt any **FIVE** of the following: (10)

- a) Give role of pollen calendar.
- b) What is apomixis?
- c) Write in brief microfossils and oil explanation.
- d) Give applications in plant breeding.
- e) What is clonal selection?
- f) Enlist names of varieties of Wheat.
- g) Distinguish between single cross and double cross method.

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