

T.Y.B.SC. SEM – VI (2014 COURSE) : SUMMER - 2018
SUBJECT: BOTANY: PALYNOLOGY & PLANT BREEDING (B-64)

Day: **Wednesday**
Date: **18/04/2018**

S-2018-0779

Time: **12.00 NOON TO 02.00 PM**
Max. Marks: 40

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks
 - 3) Draw neat and labeled diagram **WHEREVER** necessary.
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Q.1 Attempt any **TWO** of the following: **(10)**

- a) Give principles of aeropalynology with reference to microfossils.
- b) What is meltipalynology? Give its applications in crop productivity.
- c) Give morphological characters of pollen with reference to gymnosperms.

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

- a) Comment of pollen germination with their significance.
- b) Describe clonal selection and give their advantages and disadvantages in methods of plant improvement.
- c) What is polyploidy? Give their character and types.

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

- a) What is hybridization? Give various steps and its advantages.
- b) Comment on apomixes with their suitable examples.
- c) Describe genetic variation in crop improvement.

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

- a) Give difference between agropalynology and paleopalynology.
- b) Comment on oil exploration.
- c) Give importance of palynology.
- d) Enlist improved varieties of Rice and Tobacco.
- e) Comment on Soma cloning.
- f) Give significance of plant breeding.
- g) Explain in brief double cross method.

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