

T.Y.B.SC. SEM – VI (CBCS - 2016 Course) : SUMMER - 2019
SUBJECT: BOTANY (PALYNOLOGY AND PLANT BREEDING)

Day : Monday
Date : 15/04/2019

S-2019-0912

Time : 03.00 P.M. To 06.00 P.M
Max Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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- Q.1** Attempt **ANY TWO** of the following: (12)
- a) Application of palynology in coal and oil exploration.
 - b) Comment on pollen storage.
 - c) Give morphological characters of pollen with reference to size and shape.
- Q.2** Attempt **ANY TWO** of the following: (12)
- a) Describe the germination and growth of the pollen tube.
 - b) Describe the methods of mass selection.
 - c) Give general aspects of soma clonal variant selection.
- Q.3** Attempt **ANY TWO** of the following: (12)
- a) What is hybridization? Describe the methods of hybridization.
 - b) Write note on the sexual reproduction.
 - c) Role of polyploidy in evaluation of new species.
- Q.4** Attempt **ANY THREE** of the following: (12)
- a) Comment on NPC (apertures).
 - b) Explain aero palynology and give its importance.
 - c) Comment on pollen storage.
 - d) Write note on apomixes.
- Q.5** Attempt **ANY FOUR** of the following: (12)
- a) Enlist improved varieties of Tobacco and Wheat.
 - b) Write note on single cross method.
 - c) Give any two applications of plant tissue culture.
 - d) Comment on soma cloning.
 - e) What is multi palynology? Give its applications.

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