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UG/5th Sem/BOT(H)/Pr/19

2019

B.Sc. (Honours)

5th Semester Examination

**BOTANY**

Paper - DSE 2P

(Instructions to the Examiner)

Full Marks : 20

Time : 3 Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Plant Breeding**

1. For demonstration process locally available flowers to be used.
2. Seed lots will be supplied to the students [repetition should be avoided]

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[ Turn Over ]

( 2 )

## **Stress Biology**

### **Instructions to the Examiner**

#### **“A” General**

1. All answer scripts (including loose sheets) must bear the signature of all the examiners.
2. Evaluation should be done jointly by all the examiners and must always show part marking for each question in the following manner :  
  
Q. No. 1 : -  $1+1+2+1+1 = 6$ .
3. One separate loose sheet should be used for Q. No. 1 for requisition slip only.
4. The key to the specimen(s) containing the list of specimen(s) allotted to each batch should bear the date(s) of examination, the full name (in block letters), signature and official address of all the examiners.
5. Additional pages, if supplied must be endorsed by the concerned examinee(s).
6. Practical Answer-scripts to be evaluated immediately after examination and marks for the same to be submitted in time.

**“B” Questionwise**

1. At the start of the examination, the examinees shall draw two cards containing the names of experiments to be performed. The name of any one experiment selected by the examinee is to be written on the answer-scripts. A requisition slip along with the name of the selected experiment should be submitted in a separate loose sheet supplied to the candidate immediately after selection.

**List of Experiments**

- (a) Quantitative estimation of peroxidase activity in the seedlings in the absence and presence of salt stress.
- (b) Super oxide activity in seedlings in the absence and presence of salt stress.
- (c) Zymographic analysis of peroxidase.
- (d) Zymographic analysis of superoxide dismutase activity.
- (e) Quantitative estimation and zymographic analysis of catalase.

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- (f) Quantitative estimation and zymographic analysis of glutathione reductase.
  - (g) Estimation of superoxide anions.
2. Candidates should submit Laboratory Note Book duly signed by the teacher(s).
  3. Viva-voce on the subject covered in the practical syllabus to be made by the examiner(s).
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Total Pages - 2

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5th Semester Examination

**BOTANY**

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(Practical)

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Time : 3 Hours

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*in their own words as far as practicable.*

**Plant Breeding**

Answer *all* questions.

1. Demonstrate the emasculation process for hybridization in plants. 7
2. Determine the goodness of fit by X square process using the following seed lot. 8
3. Practical record submission. 2
4. Viva-voce. 3

( 2 )

**Stress Biology**

Answer *all* questions.

1. Draw a card from the lot and perform the work accordingly as written on the drawn card. 15

[Requisition - 2, Set up - 2, Procedure - 5, Result - 3, Comment - 3 = 15]

2. Submission of Laboratory Note Book. 2
  3. Viva-voce. 3
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