

[This question paper contains 4 printed pages.]

935

Your Roll No.

B.Sc. (Hons.) / II

C

BOTANY – Paper V

(Economic Botany and Crop Improvement)

(Admissions of 2004 and onwards)

Time : 3 Hours

Maximum Marks : 38

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

*Attempt six questions in all including
Q. No. 1 which is compulsory.*

Attempt all parts of a question together.

1. Give the botanical name and family of **any eight** of the following :

(i) Castor

(ii) Vanilla

(iii) Cluster bean

(iv) Sal

(v) Cardamom

(vi) Cassava

(vii) Bidi Leaf

(viii) Barley

(ix) Foxglove

(x) Coffee

(1×8=8)

P.T.O.

2. Differentiate between **any three** of the following :
- (i) Mass selection and Pure line selection
 - (ii) Indica Rice and Japonica Rice
 - (iii) Hard and soft wood
 - (iv) Primary and secondary centres of origin
(3×2=6)
3. Write short notes on **any three** of the following :
- (i) Retting
 - (ii) Nobilization
 - (iii) Nutritional importance of Potato
 - (iv) Properties of ring porous wood
 - (v) Processing of rubber
(3×2=6)
4. Draw well labeled diagrams of **any three** of the following :
- (i) T.S Citrus/Orange fruit
 - (ii) L.S Clove bud
 - (iii) V.S Tea leaf
 - (iv) L.S. Wheat grain
(3×2=6)

5. Define in brief **any six** of the following :

- (i) Heterosis
- (ii) Fodder crops
- (iii) Mixed cropping
- (iv) Biocides
- (v) Parboiling
- (vi) Mixed cropping
- (vii) Tetraploid cotton
- (viii) Plywood
- (ix) Masticatory substances (1×6=6)

6. (a) Name the research centres of India associated with the improvement of sugarcane, rice and fodder crops ? (1.5)

(b) Expand the acronyms (**any three**) :

- (i) NBRI
- (ii) IRRI
- (iii) CTRI
- (iv) ICRISAT
- (v) CAZRI (1×3=3)

(c) Why are poppy seeds considered good for consumption ? (1.5)

P.T.O.

7. (a) Green revolution brought a change in cultivation practices and improved the yield and quality of wheat crop. Justify the statement. (3)
- (b) What are megadiversity centres? Describe the 'Centres of Origin' of crop plants in light of Vavilov's concepts? (3)
8. (a) Mention the names of the principle states of India producing following :
- (i) Groundnut (ii) Teak
- (iii) Cotton (iv) Mango (0.5×4=2)
- (b) Discuss in brief the harmful effects of tobacco on human health. (2)
- (c) Discuss the processing methods of fatty oils. (2)