

2025

5th Semester Examination
4-Years B.Sc. (Hons.) in Agriculture

Paper : AGS - 505

[Crop Improvement-I (Kharif Crops)]

Full Marks : 50

Time : Two Hours

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

Group - A

Answer any *five* questions : $2 \times 5 = 10$

1. What is Xenia Effect?
2. What is Bartlett's Index?
3. Name any four wild relatives of rice.
4. Mention the origin of allotetraploid cotton.
5. What is cleistogamy? Give example.
6. Define shuttle breeding.
7. Define primary and secondary introduction.
8. Mention three sources of gene pool of sorghum.

P.T.O.





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Group - B

Answer any *four* questions : $5 \times 4 = 20$

9. Discuss about ideotypes of maize and rice.
10. Mention the origin of groundnut and sesame. Explain the breeding objectives of sesame. $2+3$
11. Briefly explain genomic composition of cotton.
12. Differentiate between *Indica*, *Japonica* and *Javanica* types of rice.
13. Briefly explain about quality protein maize.
14. Briefly explain about any two hybrids of pigeon pea.

Group - C

Answer any *two* questions : $10 \times 2 = 20$

15. Write down the botanical name, chromosome no., centre of origin of any three kharif pulses. Briefly explain about breeding of pulses based on Indian scenario. $6+4$
 16. Differentiate between different cultivated species of cotton. Write down the breeding objectives of cotton. $5+5$
 17. Explain the breeding objectives and breeding methods of pearl millet. $5+5$
 18. Define Plant Growth Regulators (PGR). Mention the main features of PGR. Briefly explain different types of germplasm. $1+4+5$
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