

2022

**BOTANY — HONOURS**

**Paper : CC-9**

**Full Marks : 50**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

1. Answer **any five** of the following : 2×5
- (a) Name two crop species of Indian Centre of origin of cultivated plants.
  - (b) Name the alkaloids obtained from tea and tobacco.
  - (c) What is 'plucking round'?
  - (d) What is introgression of wheat?
  - (e) What is the utility of fractional distillation?
  - (f) Write scientific names and families of two timber yielding plants.
  - (g) Write differences between spices and condiments.
  - (h) Write two cotton producing species of *Gossypium* in India.
2. Answer **any two** of the following :
- (a) Describe in brief the processing of CTC tea. 5
  - (b) Discuss in brief the significance of legumes in human nutrition and ecosystem. 2½+2½
  - (c) Write the family name, active compounds and therapeutic uses of *Digitalis* sp. 1+2+2
  - (d) Write scientific name, fruit morphology and health hazards of poppy plant. 1+3+1
3. Answer **any three** questions from the following :
- (a) Comment on the origin of wheat. Schematically represent the development of 'Triticale'. Mention the uses of different parts of rice plant. 4+3+3
  - (b) Write the scientific names of two cultivable Indian species of jute. Give a brief account of the separation of jute fibre by retting. Comment on ginning and baling process for marketing of cotton. 2+4+(2+2)
  - (c) Write the scientific name, family and uses of the following timber yielding plants :  
Sal and Teak.  
Mention the forest types in which these plants are found in West Bengal. [(1+1+2)×2]+2
  - (d) Define crop domestication and diversification. Write the different steps involved in the evolution of new crops/variety. 2+2+6
  - (e) Give a comparative account on the physicochemical properties of Mustard, Soybean and Coconut oils. Mention their health implications. Define 'PUFA'. 6+2+2
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