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3 (Sem-3/CBCS) BOT HC 2

2025

BOTANY

(Honours)

Paper : BOT-HC-3026

(Economic Botany)

Full Marks : 60

Time : Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions/Choose the correct one/Fill in the blanks : $1 \times 7 = 7$
 - (i) Coir is extracted from _____ .
 - (ii) What types of soil is suitable for cotton cultivation ?
 - (iii) Scientific name of potato is :
 - (a) *Solanum indicum*
 - (b) *Solanum melongena*

- (c) *Solanum tuberosum*
- (d) *Solanum torvum*
- (iv) Name the types of fruit found in Rice plant.
- (v) What is the scientific name of 'Soybean'?
- (vi) Which part of the plant *Crocus sativus* is used as "saffron"?
- (vii) *Digitalis purpurea* belongs to the family :
 - (a) Acanthaceae
 - (b) Solanaceae
 - (c) Degeneriaceae
 - (d) Serophulariaceae

2. Answer the following questions : $2 \times 4 = 8$

- (a) Mention the importance of legumes.
- (b) Mention the part used and uses of the following economically important plants :
 - (i) Potato
 - (ii) Clove
- (c) How 'Opium' is obtained from its source ?

(d) Write the botanical name of 'Black pepper' along with the name of the family. Mention the name of the alkaloid obtained from 'Black pepper'.

3. Answer the following : **(any three)** $5 \times 3 = 15$

(a) Mention the family name, part used and use of : $2\frac{1}{2} \times 2 = 5$

(i) Cinchona

(ii) Tobacco

(b) Describe briefly the process of milling of Rice.

(c) From which part of the plant cotton fibres are obtained? Write briefly about the method of preparation of cotton threads. $1 + 4 = 5$

(d) What are the by-products of sugarcane industry? Mention their uses. $3 + 2 = 5$

(e) How many centres of origin of species was proposed by N. I. Vavilov and what are these? What was Vavilov's postulation? $1 + 2 + 2 = 5$

4. Answer the following questions :

(a) Mention *two* species of 'Jute'. From which part of the plant the jute fibre is extracted? Describe briefly the method of extraction of jute fibre. Mention uses of jute. $2 + 1 + 5 + 2 = 10$

Or

Write an account on two timber yielding plants known to you. 10

- (b) Define 'essential oil'. Give example of *two* aromatic plants mentioning the part from which oil is obtained. Mention briefly the use of essential oil. How does essential oil differ from fatty oil?

2+4+2+2=10

Or

Write short notes on : 5×2=10

- (i) Plant Extrodution
(ii) Loss a genetic diversity

- (c) Write the botanical name with family of sugarcane. Mention briefly the morphology of sugarcane. Describe various steps involved in the extraction and manufacture of sugar.

2+2+6=10

Or

Name the different kinds of tea prepared commercially. Mention the ecological factors required for tea cultivation. Describe various steps of tea preparation.

2+2+6=10