

2019

BOTANY

(Major)

Paper : 6.4

(Plant Resource Utilization)

Full Marks : 60

Time : 3 hours

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

1. Fill in the blanks : 1×7=7

(a) _____ is the most important drug
obtained from *Cinchona officinalis*
which is used in the cure of malaria.

(b) _____ is known as pioneer of Green
Revolution.

(c) Pineapple belongs to the family _____.

(d) Major alkaloid of periwinkle plant is
_____.

(e) Scientific name of Cocoa is _____.



(2)

- (f) Lint and fuzz fibres are found in ____ seeds.
- (g) 'Taxol' is obtained from the plant ____.

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

- (a) What is 'Traditional Knowledge'?
- (b) Mention the scientific name and economically important parts of
(i) turmeric and (ii) clove.
- (c) Write the chemical composition of castor seed.
- (d) Define 'Ethnobotany' and write its importance.

3. Answer any *three* of the following questions :

$5 \times 3 = 15$

- (a) Discuss the economic importance of
(i) Andrographis and (ii) Rauvolfia plant.
- (b) Mention the botanical names, parts used and importance of (i) Bixa and
(ii) Henna plant.
- (c) Write about the processing of tea.

(3)

- (d) Give an account of centre of origin of crop plants as proposed by N. I. Vavilov.
- (e) Write a note on crop domestication.

4. Answer in detail the following : $10 \times 3 = 30$

- (a) Elucidate the term 'crop improvement'. Describe how crop improvement brings out 'Green Revolution' in India.

Or

Write scientific name, botanical description, products and uses of the following economically important plants :

- (i) Mustard
- (ii) Sugar beet

- (b) What is pharmacognosy? Give an account of pharmacognosy with respect to the importance of uses of medicinal plants.

Or

What are non-timber plant resources? Write a note on the non-timber plant resources of North-East India.

- (c) What do you mean by 'leguminous plant resources'? Give an account of soya bean and pea.

Or

What are fibres? Discuss the details of botanical characters, method of extraction and economic importance of cotton.
