

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.

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(Continued)

(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.

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(Turn Over)

(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.

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