

2 0 1 4

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/Answer the following :

1×7=7

- (a) The stimulative effect of tea is due to the presence of —.
- (b) The aromatic resin 'lal dhuna' is obtained from — tree.
- (c) The major alkaloid extracted from catheranthus plant is —.
- (d) Hevea or Para rubber is obtained from the plant —.
- (e) Name the agency of the United Nations established for the Intellectual Property Rights.

- (f) The term 'pharmacognosy' was introduced by —.
- (g) From which part of the Bixa plant, the dye is extracted?

2. Answer the following : 2×4=8

- (a) Mention the parts used and uses of the economically important plants (i) cinnamon and (ii) turmeric.
- (b) From which part of the plant clove, oil is extracted? What are the uses of clove oil?
- (c) Mention the economic uses of mustard oil.
- (d) Mention some sources of traditional knowledge of ethnomedicinal plant uses.

3. Answer any *three* of the following : 5×3=15

- (a) Mention the purposes of plant introduction.
- (b) What is 'crop domestication'? Mention the process of domestication of crop plant.
- (c) Write the definition of ethnobotany. Mention the sub-disciplines of ethnobotany.
- (d) What are various methods of cocoa? Mention their uses.

4. (a) Write about botany, plant parts used and various uses of any *two* of the following : 10

- (i) Rauwolfia
- (ii) Catheranthus
- (iii) Azadirachta

Or

Write notes on products and by-products obtained and their uses of the following plants :

- (i) Sugarcane
 - (ii) Sugar beet
- (b) Describe with examples the classification of plant resources on the basis of their uses. 10

Or

Write about sources, products and their uses of any *two* of the following :

- (i) Castor
 - (ii) Tea
 - (iii) Black pepper
- (c) What do you mean by 'organoleptic evaluation of drugs'? Mention various aspects of organoleptic evaluation of drugs. 10

(4)

Or

What is IPR (Intellectual Property Rights)? What are different types of IPR? Mention how IPR is helpful in safeguarding large diversity of traditional products with reference to some Indian contexts.

★ ★ ★