

Total number of printed pages-7

3 (Sem-3/CBCS) BOT HC 2

2022

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 : **(any seven)** 1×7=7
- (a) Write the full form of NBPGR.
 - (b) Write the botanical name of wheat.
 - (c) What type of soil is suitable for cotton cultivation ?
 - (d) Name a drug yielding plant where drug is obtained from root.

Contd.

(e) From which part of the plant *Papaver somniferum* 'opium' is extracted ?

(f) Choose the correct answer :

Botanical name of the plant that yields pararubber :

(i) *Ficus elastica*

(ii) *Hevea brasiliensis*

(iii) *Manihot glaziovii*

(iv) *Ficus religiosa*

(g) Choose the correct answer :

Cinchona officinalis belongs to the family :

(i) Acanthaceae

(ii) Verbenaceae

(iii) Rubiaceae

(iv) Asteraceae

(h) What is the source of 'Congo Coffee' ?

(i) Linseed oil is obtained from which plant ?

(j) Name the family of *Tectona grandis*.

(k) What is the advantage of eating ground nuts ?

(l) Define 'loss of crop genetic diversity'.

2. Answer the following very briefly : (**any four**)

2×4=8

(a) What is 'Orange Fannings' ?

(b) What is the nature of chief food reserve in —

(i) Soybean

(ii) Rice

(iii) Potato and

(iv) Sugarcane ?

(c) Mention the importance of leguminous plants to the ecosystem.

(d) How potato plant is propagated ?

(e) What do you understand by domestication ?

(f) State the uses of Coir.

(g) What is the greatest advantage of plant introduction ?

(h) What are germplasm banks ?

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

(a) Mention the uses of tobacco.

(b) Mention the importance of germplasm diversity.

(c) Write briefly about *two* spices (mention scientific name) that are used in Indian cuisine.

(d) Mention the uses of timber obtained from Pine.

(e) Write short note on habit-forming drugs.

(f) Write a brief account on millets.

(g) Give the scientific name, family and parts used of the following :

(i) Cardamom

(ii) Cumin

(h) 'Cannabis' is obtained from which plant ? Point out the therapeutic effects of cannabis.

4. Answer **any three** of the following :

$10 \times 3 = 30$

(a) Describe the method of processing of sugarcane. Mention the products and by-products of sugarcane industry.

$4 + 6 = 10$

(b) Write an essay on drug yielding plants studied by you.

(c) What is plant introduction ? What are the different types of plant introduction ? Mention the steps involved in plant introduction.

$3 + 2 + 5 = 10$

(d) What are essential oils? Write briefly about various methods of extraction of essential oils. How essential oils differ from fatty oils? $2+6+2=10$

(e) Define fibres from anatomical point of view. How fibres can be classified on the basis of their origin? $4+6=10$

(f) What is tapping? Describe the processing and uses of rubber. $3+4+3=10$

(g) Write the scientific name, family, part used and economic importance of the following spices — $2\frac{1}{2}\times 4=10$

(i) Fennel

(ii) Saffron

(iii) Clove

(iv) Black pepper

(h) Discuss briefly the cultivation practices of tea. Describe various steps of processing of black tea. $4+6=10$