

GURUDAS COLLEGE

**B. Sc. SEMESTER IV (Honours) Examination
Online Internal Examination, 2020**

Subject: BOTA

Subject Category: Honours

Course: CC 9

Course Name: Economic Botany

Full Marks: 50

Date of Examination: 8th December, 2020

The figures in the margin indicate full marks

Candidates are required to give their answers in their own words as far as practicable

Answer each group in a new page

GROUP-A: (THEORY) Economic Botany

(BOT-A-CC-4-9-TH) FM=25

1. Answer any 10 (ten) question from the following. 2 X10
 - a. What is a centre of origin with respect to crops?
 - b. Name two Vavilov's centre of origin.
 - c. Name four economically important plants that had their centre of origin in India.
 - d. Name four crop plants that originated in the Chinese centre of origin.

- e. What is retting in the extraction process of Jute fiber?
- f. Which parts are used for production of narcotic products from *Cannabis* sp (Indian hemp)?
- g. Mention some morphological characters of *Digitalis* sp leaves.
- h. What is opium? Give the scientific name of the plant from which opium is obtained.
- i. Give scientific name of 2 (two) spices obtained from seed.
- j. Mention two medicinal use of Mustard oil.
- k. Give scientific names of 2 (two) fatty acid oil yielding plants in India.
- l. Name two rice species used for human consumption.
- m. Give two health benefits of mung bean.
- n. Name two legumes used extensively in India.
- o. Give the scientific name of sugarcane. Name the morphological part used economically.
- p. State the importance of germplasm diversity.
- q. Name four crop plants that had their centre of origin in South America.

2. Write a short note on the one from the following

1X5

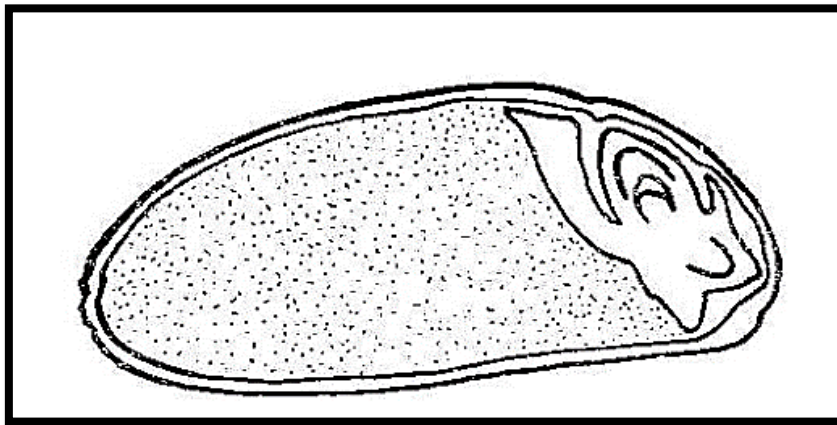
- a. Vavilov's Centre of origin
- b. Morphology of the rice plant (in brief)
- c. Origin of rice crop
- d. Health benefits of legume consumption

Group B: (Practical): Economic Botany

(BOT-A-CC-4-9-P) FM-15

Answer all questions

1. Write the experiment and observation for detection of sucrose in sugarcane juice. 5
2. Name any two tests for detection of tannin. Write the components of reaction mixture and observation of any one test for detection of tannin. 1+4
3. Identify the specimen from the picture below with proper reasons. 2.5



4. Identify the following drug yielding plant with reasons. 2.5



GROUP- C (Internal assessment) FM-10

Answer any five from the following

2×5

1. Turmeric is the _____ of the plant:

- (a) Root
- (b) Stem
- (c) leaf
- (d) Seed

2. *Camelia sinensis* is the botanical name of:

- (a) Tea
- (b) Coffee
- (c) Fig
- (d) Neem

3. Legumes belong to the.....family.

- a. Rosaceae
- b. Fabaceae
- c. Lamiaceae
- d. Asteraceae

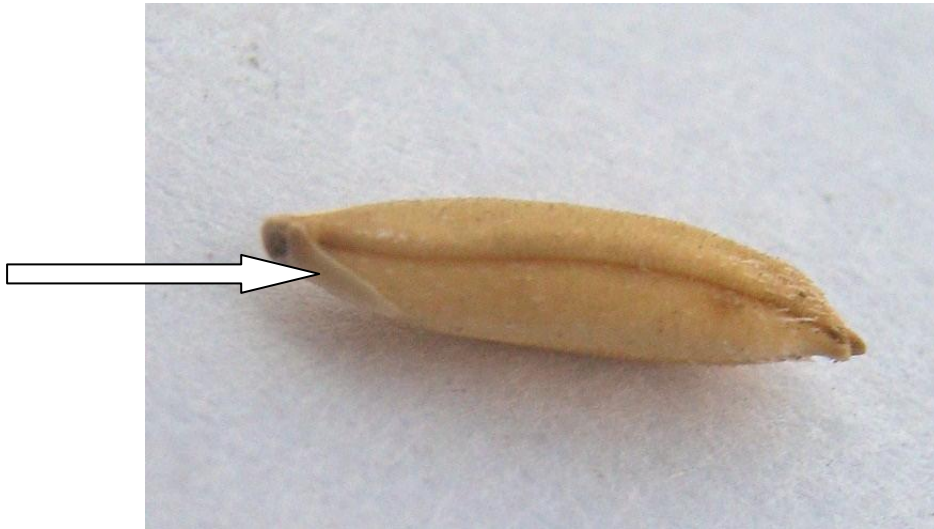
4. Japonica group of rice varieties are from

- a. Mexico
- b. China
- c. Africa
- d. Japan

5. Which part of the rice plant yields rice straw

- a. Seed
- b. Panicle
- c. Roots
- d. Leaves

6. Refer to the picture below. Which morphological part is shown by the arrow?



- a. Rice straw
- b. Empty glume
- c. Lodicle
- d. Ligule

7. Refer to the picture below. Identify the structure



- a. Raphides
- b. Starch grains
- c. Cystolith
- d. None of the above

Instructions for submission of answer scripts

1. Write the front page/top sheet as per instruction. Give page numbers to each page.
2. Scan the pages in sequence and make a single PDF file.
3. Rename file as per instruction.
4. Email the PDF file within the stipulated time to **botasem4GDC@gmail.com** and also give CC email to **bothons2020on@gmail.com** and **gdccug20@gmail.com**