GURUDAS COLLEGE

B. Sc. SEMESTER IV (Honours) Examination, 2021 Under CBCS Online Practical Examination, 2021 Subject: BOTA Subject Category: Honours CORE COURSE-9 Course: BOT-A-CC-4-9-P Course Name: Economic Botany Practical

Date of Examination: 11th Aug, 2021 Time: 12 noon - 1:30pm

Time: 1hr 30min

FM: 30

Answer any three questions from the followings:

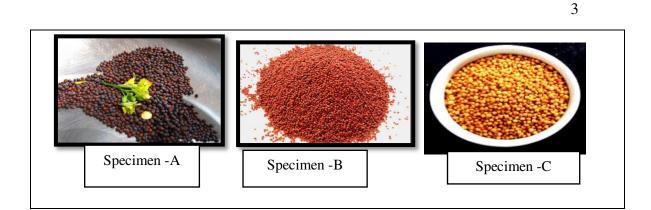
Q1.).Write down the requirements, procedure, observation and result for the detection of sucrose from **cane-juice** microchemical test studied by you. Mention the scientific name with family of **Sugarcane plant**.

(2+3+2+1)+(1+1)

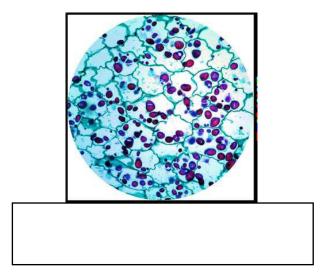
Q2a).Write down the procedure, observation and result for the detection of tannin using 5 % FeCl₃ solution from Tea leaf. Write one precaution for the test of lignin from 'T.S. of stem of Jute' using **Phloroglucinol-HCL (Wiesner) staining**. (2+1+1)+1

Q2b). Write down the procedure, observation and result of the micro-chemical test for protein using **Ninhydrin solution**. What is the reason of formation of the yellow precipitate in the '**Modified Milion's Test**' for the detection of protein? (2+1+1)+1

Q3a). Identify the seed Specimens A, B and C (Generic name= $\frac{1}{2}$ and specific epithet = $\frac{1}{2}$).



Q3b). Mention the forms, size, hilum and striation of starch grains in given T.S. of potato tuber. 3+1+3

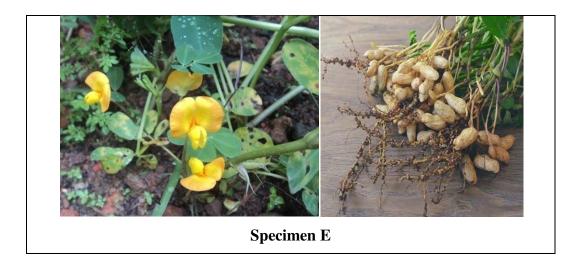


Q4a). Identify the following drug yielding plant Specimen **D** with reasons. Write the systematic position of the specimen. [Identification =1, Reasons = 3, Systematic position=1] 1+3+1



Specimen D

Q4b). Identify the legume plant Specimen **E**. Describe the habit structure and the systematic position of thespecimen. [Identification=1, Habit=3, Systematic position=1] 1+3+1



Q5a). Write down the procedure, observation and result for microchemical test of **wheat** starch grain using **Iodine solution** as reagent. 2+2+1

Q5b). Write down the scientific name, family and useful partofSpecimen 'F'. Write the requirements for test of lignin from 'T.S. of stem of Jute' using **Mäule staining**. (1+1+1)+2



Specimen F

Instructions for submission of answer scripts

- 1. Write the front page/top sheet as per instruction.
- 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 the following

Email IDs:

- 1. gchonsgen@gmail.com
- 2. gdcexamhons@gmail.com
- 3. botasem4gdc@gmail.com