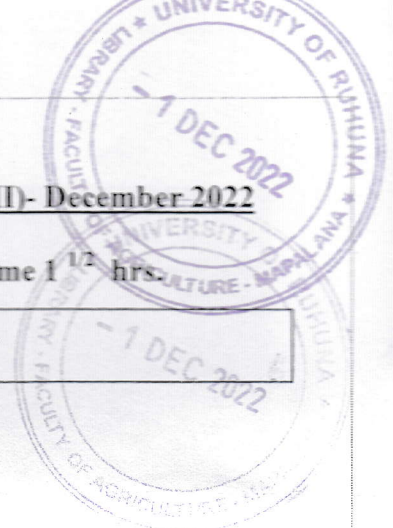


**UNIVERSITY OF RUHUNA**  
**THIRD EXAMINATION IN B.Sc. IN GREEN TECHNOLOGY (PART II)- December 2022**



Indigenous Knowledge Systems (ID3203)

Time 1 1/2 hrs

Index No:

Give answer to questions of Part A (questions 1 & 2) in the space provided.  
Use the given answer book to answer the questions of Part B.  
Only non programmable calculators are permitted.  
All questions carry equal marks.

Part A

Answer all questions

1.

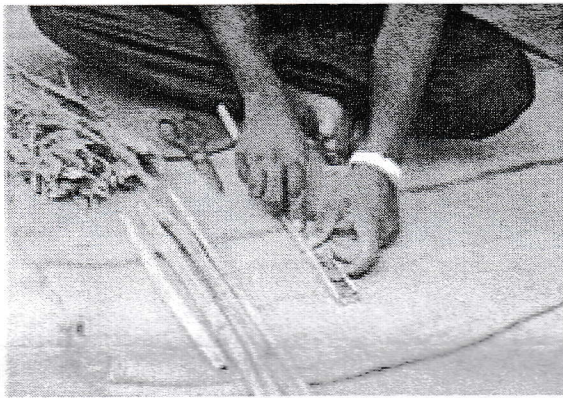


photo. -A



photo. -B

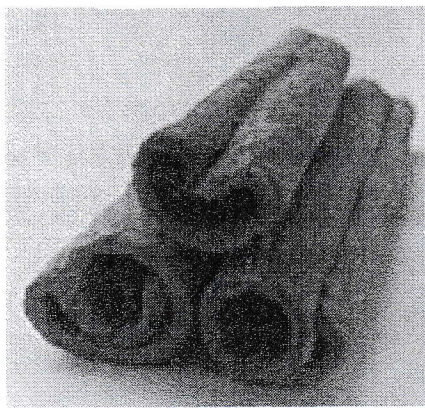


photo -C

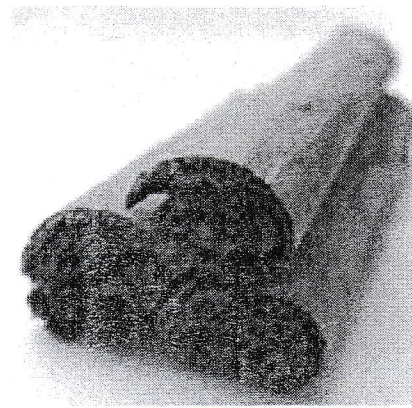


photo. -D

(a). Identify the given photos, A, B, C, and D.

A.....

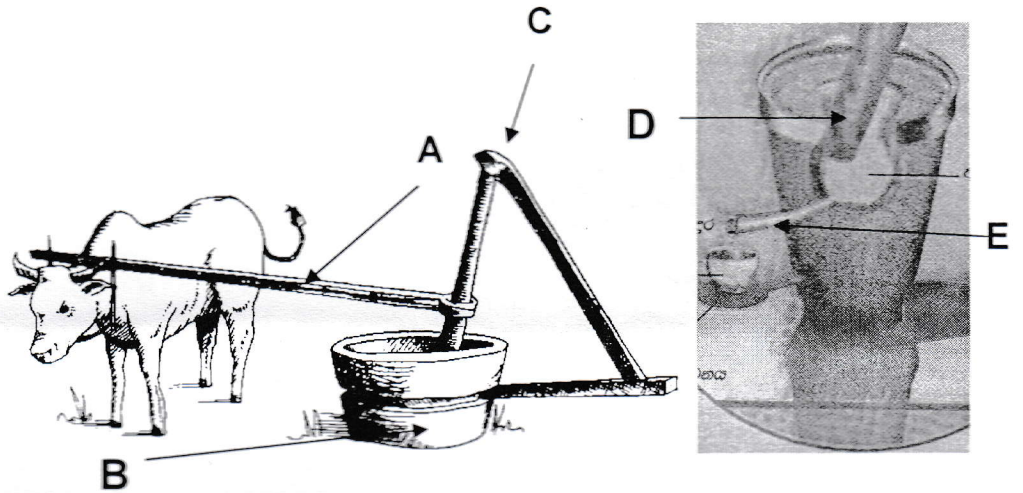
B.....

C.....

D.....

(10 Marks)

(b). Traditional oil extraction method is given in following photos;



i). Label the parts of A, B, C & D given in photos.

- A-----
- B-----
- C-----
- D-----

(05 Marks)

ii). Name 'E element' of the above oil extraction system.

.....

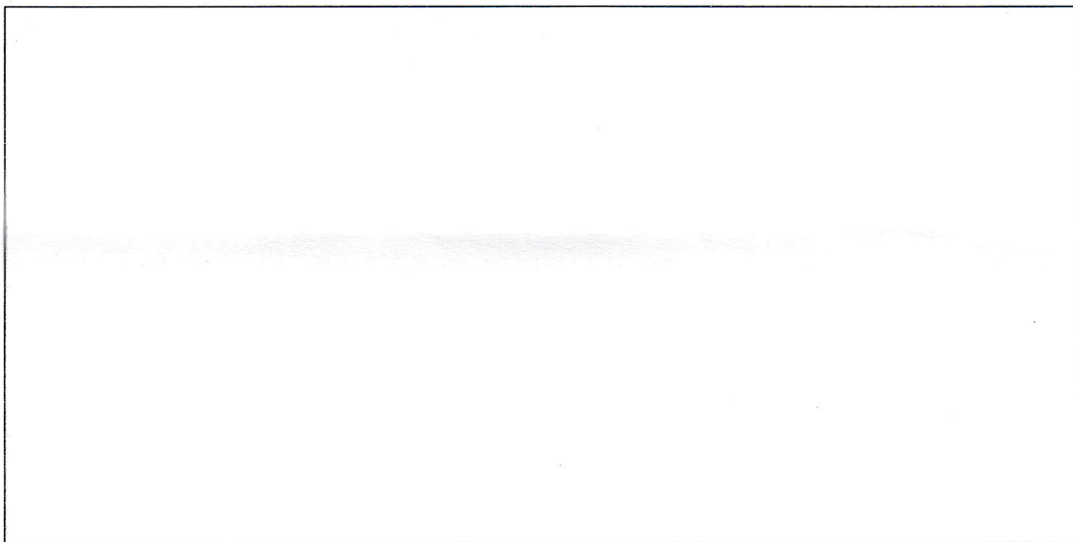
(05 Marks)

iii). what are the main functions of 'D element'?

.....  
.....  
.....  
.....

(10 Marks)

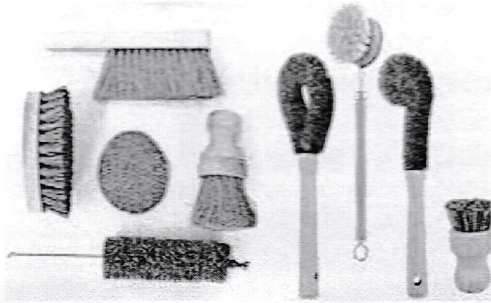
(c). Draw traditional cinnamon processing tools



(10 Marks)



d). Identify following photos and comment.



photo; A



photo; B



photo; C

Name of photo; A. -----

Functions ;-----

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Name of photo; B. -----

Functions;-----

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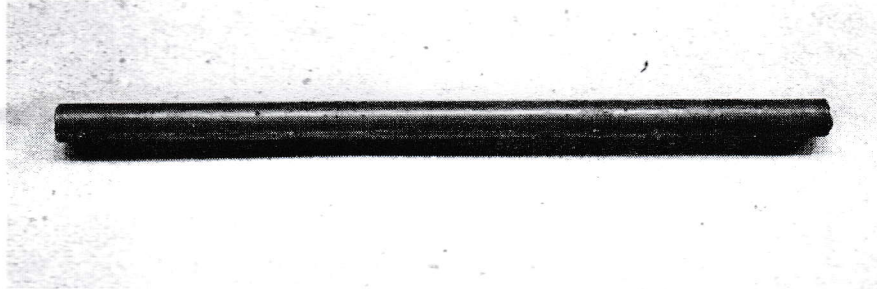
Name of photo; C. -----

Functions ;-----

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2. You are asked to design a new product;

The following indigenous implement which is useful for Cinnamon processing are required to consider in answering the questions.



(i). Identify the given indigenous implement.

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(05Marks)

(ii). Briefly explain the main function of it.

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----- (10Marks)

(iii). Explain the defect or disadvantages of the above implement.

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(10Marks)

(iv). Propose a new design to eliminate the identified defects or disadvantages in the above question.

**(Drawings must be clearly labeled and prepared by free hand.)**

**(25 Marks)**

Part B

Answer only Two questions.  
Question no. 1 is compulsory.

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01. (a). Define the term 'native plants.

(10 Marks)

(b). Discuss the economical and environment values of following plants.

- (i) Velvet Tamarind (Gal ciyabala)
- (ii) Mesua ferrea [Na]
- (iii) Mangifera zeylanica [Atamba]
- (iv) Artocarpus altilis [Kosdel]
- (v) Elaeocarpus serratus [Weralu]

(50 Marks)

(c) What are the advantages of using traditional crop improvement techniques in modern agriculture?

(40 Marks)

02. (a) Define the term 'indigenous knowledge'.

(20 Marks)

(b). True Sri Lankan Cinnamon is gained high demand in the international market over the 'cassia cinnamon', justify with reasons.

(40 Marks)

(c). Using suitable sketches describe the traditional and modern tools and machinery used in cinnamon processing industry.

(40 Marks)

03. (a) Discuss the following headings.

- (i) Compost tea production
- (ii) Giant pumpkins cultivation
- (iii) Square Melon production method

(30 Marks)

(c) List, valuable by-product of coir industry and prepare a table with two columns mentioning **economical** and **environment** values of each above items.

(70 Marks)

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