



বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

**B.Sc. (Honours) in AGRICULTURE
1st Semester Examination 2021**

PAPER—AGS-104

INTRODUCTION TO FORESTRY

Full Marks : 70

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

THEORY

1. Answer any *ten* questions.

10×2

(a) What is Agroforestry?

(b) What is Silviculture?

(c) Define BH. What is breast height used in India?

(d) Define weeding.

- (e) Mention the significance of DBH.
- (f) Mention two methods for height determination of a standing tree.
- (g) Distinguish between Latitude and Altitude.
- (h) Mention any two artificial re-generation methods can be done in a forest.
- (i) What precautions will be taken during measuring diameters of a tree using a callipers?
- (j) Write down two dis-advantages of using tape in diameter measuring.
- (k) Define topographic factor.
- (l) Define mensuration.
- (m) What are the advantages and dis-advantages of Abney's level?
- (n) Mention the objectives of re-forestation.
- (o) Define wind-break and shelter-belts.

2. Answer any six questions. 6×5

- (a) What is clear felling? Write the advantages and dis-advantages of their type of artificial forest regeneration. 2+3
- (b) Briefly discuss about thinning and cleaning tending operations.
- (c) Mention the different objectives of silviculture.
- (d) Mention the different rules for measurement of dry matter of a standing tree.

- (e) Write a short note on shifting cultivation.
- (f) What are the different tropical forest groups found in India?
- (g) Define re-generation in forest. What are the major steps for natural regeneration?
- (h) Write the importance of Agro-forestry. Mention the criteria of selection of trees of Agro forestry. 2+3
- (i) Mention how to determine the age of a tree?
- (j) Write the measurements of volume of a standing tree.

PRACTICAL

Answer any *two* questions. 2×10

1. Write down the process for measurement of height of standing tree. Prepare a requisition for the same. 7+3
 2. How to measure DBH of a standing tree. What are the precautionary measures to be taken during DBH measurement? 6+4
 3. Give identifying character of the plants 5+5
 - (a) Shorea
 - (b) Delbargia.
 4. Mention the process for measurement of volume of a fallen log. What is form factor? 7+3
-