

# বিদ্যাসাগর বিশ্ববিদ্যালয়

## VIDYASAGAR UNIVERSITY

# B.Sc. (Honours) in AGRICULTURE 2nd Semester Examination 2022

#### PAPER—AGS-203

## SOIL AND WATER CONSERVATION ENGINEERING

Full Marks: 50

Time: 2 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.

1. Answer any ten questions.

10×2

- (a) Define soil erosion.
- (b) Name the different types of water erosion.
- (c) What do you understand by Land-slides?
- (d) What is strip cropping?
- (e) 'Moist soils are more susceptible to water erosion' Explain.

- (f) How much soil is loss due to water erosion in India and what is the permissible value of soil loss in India?
- (g) How much percentage of reservoirs capacity is annualy loss due to desilting? Define desilting.
- (h) Name two ways of water conservation.
- (i) Define splash erosion.
- (i) What is contour bund?
- (k) Discuss the losses due to wind erosion.
- (1) What do you mean by cation exchange capacity of soil?
- (m)Define watershed.
- (n) Name the components of watershed.
- (o) Write the equation of measuring soil erosion.
- 2. Answer any six questions.

 $6 \times 5$ 

- (a) Discuss in brief, 'mechanism of water erosion'.
- (b) Explain the factors affecting water erosion.
- (c) Discuss universal soil loss equation.
- (d) Explain, mechanical measures to prevent crosion.
- (e) Explain different types of wind erosion.

- (f) What are the objectives of water shed management? Discuss the principles of water shed management. 2+3
- (g) Write a brief note on soil movement.
- (h) Explain the benefits of integrated watershed management.
- (i) Discuss any four classes of land capability classification, suitable for measures crop cultivation.
- (j) Discuss in brief the agronomic measures to prevent erosion.

C/22/2nd Sem/AGS-203