



## BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(Ag)-Hons-2022/B.Sc.(Ag)-Hons-2023

Course Name – Soil and Water Conservation Engineering

Course Code - CC-BAG276(T)

( Semester II )

Full Marks : 50

Time : 2:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

(i) Infer the correct answer : which leads to soil erosion

- |          |                 |
|----------|-----------------|
| a) wind  | b) glacier      |
| c) water | d) All of these |

(ii) Show correct answer: The land becomes unfit for cultivation and is known as

- |               |                |
|---------------|----------------|
| a) Waste land | b) Black land  |
| c) Bad land   | d) Desert land |

(iii) Infer the correct option : The father of agricultural Engineering in India

- |                       |                  |
|-----------------------|------------------|
| a) M.S. Swaminathan   | b) Mason Vough   |
| c) Dr. Norman Borlaug | d) None of these |

(iv) Relate that causes of deforestation

- |                 |                  |
|-----------------|------------------|
| a) Pollution    | b) No floods     |
| c) Soil erosion | d) None of these |

(v) Relate the main causative factor for desertification?

- |                          |                  |
|--------------------------|------------------|
| a) Tourism               | b) Overgrazing   |
| c) Irrigated agriculture | d) None of these |

(vi) Infer a one option that crops is the most effective in controlling soil erosion:

- |               |               |
|---------------|---------------|
| a) Maize      | b) Cotton     |
| c) Green gram | d) Pigeon pea |

(vii) Infer the caused by of sheet erosion

- |                        |                  |
|------------------------|------------------|
| a) Glacier             | b) Heavy rains   |
| c) Fast running rivers | d) None of these |

(viii) Show the correct answer: Soil conservation means:

- a) Prevention of spread of desert  
 c) To check soil erosion by wind and rains
- b) To check soil erosion by afforestation  
 d) All of these
- (ix) Infer the the one option that Soil conservation can best achieved by having:  
 a) Wind screens  
 c) Good plant covers
- b) Low rainfall  
 d) Restricted human activity
- (x) Infer a answer that main indicator of soil erosion :  
 a) Ozone layer  
 c) Afforestation
- b) Deforestation  
 d) Goats and grazing animals
- (xi) Show the correct answer:If the top soil has been eroded, we retire a land and grow over it:  
 a) Lichens  
 c) Legumes
- b) Blue-green algae  
 d) Grasses
- (xii) Relate a specific prevent for which Bunds, dams and drains are constructed :  
 a) Stream bank erosion  
 c) Slip erosion
- b) Sheet erosion  
 d) Gully erosion
- (xiii) Show one following options, a sloped land may be initially kirup due to reduced rainfall  
 a) Rill erosion  
 c) Sheet erosion
- b) Gully erosion  
 d) All of these
- (xiv) Infer the amount of soil lost to the sea each year due to rainfall from the following options  
 a) 3,000 million tons  
 c) 3,00,00,000 million tons
- b) 3,000,000 million tons  
 d) 3,00,000 billion tons
- (xv) Shown one factor from the following which is the main cause of accelerated decay  
 a) Excessive rains  
 c) Overfelling and overgrazing
- b) Wind storms  
 d) All of these
- (xvi) Demonstrate the correct answer: The soil erosion on slopes proceeds in the following manner:  
 a) Gully ? Rill ? ravine  
 c) Rill ? Gully ? Ravine
- b) Rill ? Ravine ? Gully  
 d) Ravine ? Rill ? Gully
- (xvii) Infer the correct answer:Wave erosion is more prevalent and well marked:  
 a) Along rivers  
 c) In water falls
- b) At the sea shore  
 d) In all these places
- (xviii) Demonstrate the correct answer: Soil conservation is the process where:  
 a) Sterile soil is converted into fertile soil  
 c) Soil erosion is allowed
- b) Soil is aerated  
 d) Soil is protected against loss
- (xix) Show the correct answer: In dry farming initially the fertility of the land can be increased by:  
 a) Agrostology  
 c) Growing grazing fields
- b) Basin listing  
 d) Animal husbandry
- (xx) Demonstrate the correct answer:If there is a little slope in the field, the soil erosion can be prevented by:  
 a) Contour terracing  
 c) Confour farming
- b) Contour strip cropping  
 d) All of these

### Group-B

(Short Answer Type Questions)

2.5 x  
10=25

2. Explain the soil erosion? (2.5)
3. Explain the Splash erosion? (2.5)
4. Explain the sheet erosion? (2.5)
5. Briefly explain the Rill erosion (2.5)
6. Write classification of gully based on the shape? (2.5)
7. Briefly explain the water erosion? (2.5)
8. Classification of water erosion? (2.5)
9. Classification of gully erosion based on the shape? (2.5)
10. Briefly explain about the DDP (2.5)
11. Elaborate the problems arising due to soil erosion (2.5)

**OR**

Design the control measures for gully erosion (2.5)

**Group-C**

(Long Answer Type Questions)

5 x 1=5

12. Explain the Importance Soil and Water Conservation Programmes implemented by Govt (5)

**OR**

Explain the universal soil loss equation (5)

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