

- Q.27 Discuss the soil conservation through tree and grass cultivation
- Q.28 How the soils act as a natural body. Explain?
- Q.29 Discuss the reclamation of Alkaline Soil
- Q.30 Write a short note on Drop Spillway
- Q.31 What are the health hazard of water logged soil ?
- Q.32 Describe different types of Terraces
- Q.33 Write different factors affecting erosion by wind.
- Q.34 Describe in brief the agronomic measure to control erosion.
- Q.35 What do you understand by ground water recharge. Explain its importance.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 What are the temporary structures for control of erosion? Briefly explain their types and adaptability.
- Q.37 Discuss the Need, importance and methods of water harvesting.
- Q.38 Describe the principles, adaptability, and constructional features of drop spilway

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Subject:- Soil and water conservation / Soil Conserve.

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Which soil has high water retaining capacity
a) Sand b) Silt
c) Clay d) Loam
- Q.2 Water harvesting refers to
a) Collection of ground water
b) Collection of rainwater and its recycling for conductive use
c) profile water management
d) water collection into pond
- Q.3 The relation between void ratio and porosity
a) $n=(1+e)/e$ b) $n=e/(1+e)$
c) $e=n/(1+n)$ d) None of the above
- Q.4 Rill erosion takes place after
a) Sheet erosion b) Splash erosion
c) Stream bank erosion d) Gully erosion

- Q.5 Darcy's Law is applicable when Renolds number is
- Equal to 1
 - More than 1
 - Less than 1
 - Less than 2
- Q.6 Cation exchange capacity is expressed as
- Mole / Litre
 - Percent
 - Meq / Litre
 - Meq / 100g
- Q.7 Forest prevent soil erosion by binding soil particles in their
- Leaves
 - Roots
 - Buds
 - Stems
- Q.8 Bunds, dams and drains are constructed to prevent
- Gully erosion
 - Steam bank erosion
 - Sheet erosion
 - Slip erosion
- Q.9 Contour trenches are constructed
- On contour of the land
 - Not on the contour of the land
 - Along the slope
 - All are correct
- Q.10 Chute spillways are used at
- Mild slope
 - Steep slope
 - Both a & b
 - None of these

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SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Define porosity
- Q.12 Write the formula of Bulk Density
- Q.13 Define Field Capacity
- Q.14 Define Reclamation
- Q.15 State permanent wilting point
- Q.16 Define Drainage coefficient
- Q.17 Write the formula of Void Ratio
- Q.18 ESP Stands for _____
- Q.19 Define Soil Reaction (pH)
- Q.20 Define Soil Erosion

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Name the various constituents of soil and their importance.
- Q.22 Define soil permeability and its importance
- Q.23 Differentiate Tile Drain and Mole Drains
- Q.24 What are the different methods of Soil moisture determination? Explain any one in brief
- Q.25 Describe the Darcy's Law in detail
- Q.26 Differentiate between surface and sub-surface drainage

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