

- Q.25 What are different causes of water logging?
 Q.26 Describe the Watershed Management.
 Q.27 What are factors affecting the erosion by wind?
 Q.28 Describe the role of terracing to control erosion by water.
 Q.29 Suggest the reclamation of acid Soil.
 Q.30 Write a short note on Gully erosion.
 Q.31 How the soils act as a natural body. Explain?
 Q.32 Describe the need and importance of water harvesting.
 Q.33 What is ground water recharge. Explain its importance.
 Q.34 Describe in brief the different practices adopted to control erosion.
 Q.35 How will you determine the moisture content of soil on dry and wet bases.

SECTION-D

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

- Q.36 Explain in detail the reclamation of Saline. Alkaline and Acid soils. And briefly describe their management.
 Q.37 Describe the permanent structures for control of erosion? Explain their types and adaptability.
 Q.38 Discuss the Need, importance and methods of water harvesting.

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3rd Sem.
Branch : Agri
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Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

- Q.1 The relative proportion of sand, clay and silt determines
 a) Soil structure b) Soil texture
 c) Soil mass d) Soil volume
 Q.2 The velocity of flow in open channel is determined by
 a) Manning formula b) Darcy's formula
 c) Both A & B d) None of these
 Q.3 Which of the following is not a method for water conservation?
 a) Rainwater harvesting
 b) Improving irrigation efficiency
 c) Avoiding water wastage
 d) Groundwater extraction
 Q.4 According to USDA soil classification, the size of the fine sand should be in between
 a) 0.001 – 0.0001mm b) 0.01-0.1mm
 c) 0.1-0.25mm d) 0.25-0.5mm

- Q.5 If there is a little slope in the field, the soil erosion can be prevented by
 a) Contour strip cropping
 b) Contour terracing
 c) Control framing
 d) All of these
- Q.6 Contour bunding is done to check
 a) Raindrop erosion b) Rill erosion
 c) Sheet erosion d) Gully erosion
- Q.7 The maximum moisture is available to plan at
 a) Field capacity
 b) Hygroscopic coefficient
 c) Wilting point
 d) Saturation
- Q.8 Alkali soils are reclaimed by
 a) Leaching of soil b) Using limestone
 c) Using gypsum d) Provision of drainage
- Q.9 Which soil has high water retaining capacity
 a) Sand b) Silt
 c) Clay d) Loam
- Q.10 The mathematical formula of Darcy's Law is
 a) $Q=iA$ b) $Q=KIA^2$
 c) $q=kiA$ d) None of these

SECTION-B

Note: Objective type questions. All questions are compulsory. **(10x1=10)**

- Q.11 Define Electrical conductivity.
 Q.12 Write the full form of U.S.D.A.
 Q.13 Define Soil structure.
 Q.14 Define Hygroscopic coefficient.
 Q.15 Write the formula of Void Ratio.
 Q.16 Define water logging.
 Q.17 What do you mean by Strip Cropping.
 Q.18 SAR stands for _____.
 Q.19 Define Rain drop erosion.
 Q.20 Define Drainage.

SECTION-C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen Questions. **(12x5=60)**

- Q.21 Define Soil Texture. Write USDA classification of soil texture.
 Q.22 Write the factors responsible for the formation of acid soil.
 Q.23 How will you differentiate Rain drop erosion and sheet erosion?
 Q.24 Describe the gravimetric methods of soil moisture determination.