

- Q.27 Explain the gravimetric method of soil moisture determination.
- Q.28 Name the various constituents of soil and their importance.
- Q.29 Explain the Drainage properties of soil.
- Q.30 What are different soils separates? Give one classification of soil separates.
- Q.31 Explain the use of bunds to control erosion.
- Q.32 Discuss the reasons of formation Saline Soil.
- Q.33 What is Soil Texture? Give the USDA classification of soil texture.
- Q.34 Describe the importance of ground water recharge.
- Q.35 Describe the different benefits of sub surface drainage.

#### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 What are the permanent structures for control of erosion? Explain their types and adaptability.
- Q.37 Write a detailed note on the problem of Water logging. Describe its causes, effects and management.
- Q.38 Explain the reasons and factors of formation of Saline, alkaline and Acid soils. And briefly describe their harmful effects.

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**3rd Sem / Agri.**

**Subject:- Soil and Water Conservation/ Soil Conserv.**

Time : 3Hrs.

M.M. : 100

#### SECTION-A

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

- Q.1 Soil particles Arrangement is referred to as  
a) Soil organization      b) Soil structure  
c) Soil Texture            d) None of the above
- Q.2 Types of bench Terraces based on use or application  
a) Irrigated type            b) Hill type  
c) Orchard type            d) All of these
- Q.3 If there is a little slop in the field, the soil erosion can be prevented by:  
a) Contour farming  
b) Contour terracing  
c) Contour strip cropping  
d) All of these
- Q.4 Contour trenches are constructed  
a) On contour of the land  
b) Not on the contour of the land

- c) Along the slope  
d) All are correct
- Q.5 Gully erosion is the last phase of  
a) Sheet erosion      b) Rill erosion  
c) Normal erosion      d) None of these
- Q.6 The mathematical formula of Darcy's Law is  
a)  $q = k i A$       b)  $Q = k I A^2$   
c)  $Q = i A$       d) None of these
- Q.7 Contour bunding is done to check  
a) Rain drop erosion      b) Rill erosion  
c) Sheet erosion      d) Gully erosion
- Q.8 Which soil has high water retaining capacity?  
a) Sand      b) Silt  
c) Clay      d) Loam
- Q.9 The maximum moisture is available to plant at  
a) Field capacity  
b) Hygroscopic coefficient  
c) Wilting point  
d) Saturation
- Q.10 According to USDA soil classification, the size of fine sand should be in between  
a) 0.001 - 0.0001 mm      b) 0.01 - 0.1 mm  
c) 0.1 - 0.25 mm      d) 0.25 - 0.5 mm

## SECTION-B

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

- Q.11 Write the mathematical formula of Darcy's Law.  
Q.12 Define Reclamation of soil.  
Q.13 Write the formula of Bulk density Density.  
Q.14 Define Porosity.  
Q.15 ESP stands for \_\_\_\_\_.  
Q.16 Define Degree of Saturation.  
Q.17 Rill erosion takes place after \_\_\_\_\_.  
Q.18 What is the strip cropping?  
Q.19 Chute spillways are used at \_\_\_\_\_ slop.  
Q.20 Define drainage coefficient.

## SECTION-C

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

- Q.21 How the soils act as a natural body. Explain?  
Q.22 Discuss the soil conservation through tree and grass cultivation.  
Q.23 Define soil structure. Write different factors affecting the soil structure.  
Q.24 Describe the Watershed Management.  
Q.25 Describe different types of Terraces.  
Q.26 What are the vegetated water ways in erosion control?