Q.26 Describe ground water recharge and its importance.

Q.27 Describe the different water harvesting systems.

Q.28 What is difference between Surface and Sub-surface drainage?

Q.29 Define drainage and the different drainage properties of soil.

Q.30 Write different functional components of surface drainage.

Q.31 Differentiate between tile and mole drain.

Q.32 Explain Watershed Management.

Q.33 Differentiate Rain drop erosion and sheet erosion.

Q.34 Describe the role of Vegetated waterways in checking erosion.

Q.35 Describe ground water recharge and its importance.

SECTION-D

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

Q.36 Explain the problem of water logging with its causes, effects and management.

Q.37 Describe the temporary structures for control of erosion? Briefly explain their types and adaptability.

Q.38 Describe the principles, adaptability, and constructional features of Drop Spillway.

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3rd Sem / Agri. Engg.
Subject:- Soil and Water Conservation

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Water harvesting refers to

a) Profile water management
b) Collection of ground water
c) Collection of rainwater and its recycling for conductive use
d) water collection into pond

Q.2 Rill erosion takes place after

a) Splash erosion b) Sheet erosion
c) Gully erosion d) Stream bank erosion

Q.3 Acid soils can be reclaimed by

a) $CaCO_3$ b) HNO_3
c) H_2SO_4 d) $CaSO_4$

Q.4 Forests prevent soil erosion by binding soil particles in their

a) Leaves b) Roots
c) Buds d) Stem

Q.5 The maximum moisture is available to plant at

a) Saturation
b) Field capacity
c) Hygroscopic coefficient
d) Wilting point

Q.6 Soil erosion can be reduced by:

a) Planting proper plants
b) Making dams
c) Reducing over grazing
d) All of those

Q.7 Chute spillways are used at

a) steep slope b) mild slope
c) both a & b d) None of these

Q.8 Darcy's Law is applicable when Renolds number is

a) Less than 1 b) Equal to 1
c) More than 1 d) Less than 2

Q.9 Which of the following soil is non-plastic

a) Silt b) Silty-clay
c) Sand d) Clay

Q.10 Graded terraces are used on the area of

a) High rainfall only
b) Medium to high rainfall
c) Medium rainfall only
d) None of these

SECTION-B

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

Q.11 Define watershed.

Q.12 Lining of irrigation channels decreases the water logging area. (True/False)

Q.13 Define wilting point.

Q.14 CEC stands for_____.

Q.15 Define drainage coefficient.

Q.16 Collecting and storage of rain water for future use is a _____technique.

Q.17 Define field capacity of soil.

Q.18 Define soil aeration.

Q.19 Define reclamation of soil.

Q.20 Write the formula for calculating porosity.

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 medium of plant growth.

Q.22 Explain the factors affecting Erosion by water.

Q.23 Describe the principle of gully erosion.

Q.24 Explain the Darcy's Law in detail.

Q.25 Define soil structure. Write different factors affecting the soil structure.