



DEPARTMENT OF CIVIL ENGINEERING

Program: MS

Course Code: CE-566

Subject: Irrigation Engineering and Practices (MS)

Instructor: Prof. Dr. M.A.Q. Jahnagir Durrani

Semester: Summer 2020

Duration: 4 hours

Total Marks: 80

Note: Attempt all questions. Draw Sketches where necessary.

Q.NO (01)

(20marks)

- Define “Delta” and “Duty” and write the significance of duty of crop.
- Wheat requires about 10cm of water after every 35 days and the base period or crop period of wheat is 140 days. Find out the delta for wheat?
- Explain the factors affecting consumptive use.

Q.NO (02)

(20marks)

- What are the principal causes and ill effects of water logging?
- Describe the anti-water logging measures.
- Explain the methods adopted to reclaim saline soils.

Q.NO (03)

(20marks)

- How does Kennedy’s theory differ from Lacey’s theory for the design of irrigation canals.
- Design a regime channel for a discharge of 30 cumecs and mean diameter of the particle of 0.56 mm using Lacey’s theory.

Q.NO (04)

(20marks)

Write notes on the following:

- Field Capacity
- Permanent wilting point
- Canal Head Regulator
- Under Sluicies