

Course Title : GROUND WATER HYDROLOGY

Course Code : 23CE711

Regulation : NR23

UNIT – III: Analysis of Pumping Test Data – II

Multiple Choice Questions

1. Unsteady flow is also called:
 - A) Equilibrium Flow
 - B) Non-Equilibrium Flow
 - C) Uniform Flow
 - D) Laminar Flow
 - **Answer: B**
2. Theis developed a solution for:
 - A) Steady Flow
 - B) Unsteady Groundwater Flow
 - C) Surface Flow
 - D) Pipe Flow
 - **Answer: B**
3. Jacob's method is a simplification of:
 - A) Darcy's Law
 - B) Dupuit Equation
 - C) Theis Solution
 - D) Bernoulli Equation
 - **Answer: C**
4. Chow's method is used in:
 - A) Pumping Test Analysis
 - B) Rainfall Analysis
 - C) Irrigation
 - D) Drainage
 - **Answer: A**
5. A leaky aquifer receives water through:

- A) Impermeable Layer
 - B) Semi-pervious Layer
 - C) River Only
 - D) Wells
 - **Answer: B**
6. Theis solution assumes:
- A) Homogeneous Aquifer
 - B) Infinite Areal Extent
 - C) Constant Pumping Rate
 - D) All of the Above
 - **Answer: D**
7. Time-drawdown data are used to estimate:
- A) T and S
 - B) Rainfall
 - C) Runoff
 - D) Evaporation
 - **Answer: A**
8. Storage coefficient is obtained from:
- A) Pumping Tests
 - B) Temperature Data
 - C) Wind Data
 - D) Soil Color
 - **Answer: A**
9. Theis well function is commonly represented by:
- A) $W(u)$
 - B) $H(x)$
 - C) $F(y)$
 - D) $P(z)$
 - **Answer: A**
10. Leak aquifers are also called:
- A) Artesian Aquifers
 - B) Semi-confined Aquifers
 - C) Perched Aquifers
 - D) Fractured Aquifers
 - **Answer: B**

Fill in the Blanks

1. Unsteady flow is also known as _____ flow.
Answer: Non-equilibrium
2. Theis solution was developed in the year _____.
Answer: 1935
3. Jacob's method is based on a straight-line _____.
Answer: Approximation
4. Theis solution assumes a _____ pumping rate.
Answer: Constant

5. A leaky aquifer contains a _____ pervious confining layer.

Answer: Semi

6. The storage coefficient is denoted by _____.

Answer: S

7. The transmissivity is denoted by _____.

Answer: T

8. Theis well function is represented by _____.

Answer: $W(u)$

9. Pumping test data are plotted on _____ paper.

Answer: Semi-log

10. Leak aquifers are also called _____ aquifers.

Answer: Semi-confined
