

23CE711 : Ground Water Hydrology (PE-IV)

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Unit V: Saline Water Intrusion & Basin Management

Introduction to Saline Water Intrusion

- Definition and concept of Introduction to Saline Water Intrusion
- Important principles related to Introduction to Saline Water Intrusion
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Occurrence of Saline Water Intrusion

- Definition and concept of Occurrence of Saline Water Intrusion
- Important principles related to Occurrence of Saline Water Intrusion
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Causes of Intrusion

- Definition and concept of Causes of Intrusion
- Important principles related to Causes of Intrusion
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Effects on Groundwater

- Definition and concept of Effects on Groundwater
- Important principles related to Effects on Groundwater
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Ghyben-Herzberg Relation

- Definition and concept of Ghyben-Herzberg Relation
- Important principles related to Ghyben-Herzberg Relation
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Derivation of Relation

- Definition and concept of Derivation of Relation
- Important principles related to Derivation of Relation
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Freshwater-Saltwater Interface

- Definition and concept of Freshwater-Saltwater Interface
- Important principles related to Freshwater-Saltwater Interface
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Shape of Interface

- Definition and concept of Shape of Interface
- Important principles related to Shape of Interface
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Factors Affecting Interface

- Definition and concept of Factors Affecting Interface
- Important principles related to Factors Affecting Interface
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Control of Intrusion

- Definition and concept of Control of Intrusion
- Important principles related to Control of Intrusion
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Recharge Barriers

- Definition and concept of Recharge Barriers
- Important principles related to Recharge Barriers
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Pumping Management

- Definition and concept of Pumping Management
- Important principles related to Pumping Management
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Monitoring Techniques

- Definition and concept of Monitoring Techniques
- Important principles related to Monitoring Techniques
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Groundwater Basin Management

- Definition and concept of Groundwater Basin Management
- Important principles related to Groundwater Basin Management
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Management Objectives

- Definition and concept of Management Objectives
- Important principles related to Management Objectives
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Sustainable Utilization

- Definition and concept of Sustainable Utilization
- Important principles related to Sustainable Utilization
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Case Study 1

- Definition and concept of Case Study 1
- Important principles related to Case Study 1
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Case Study 2

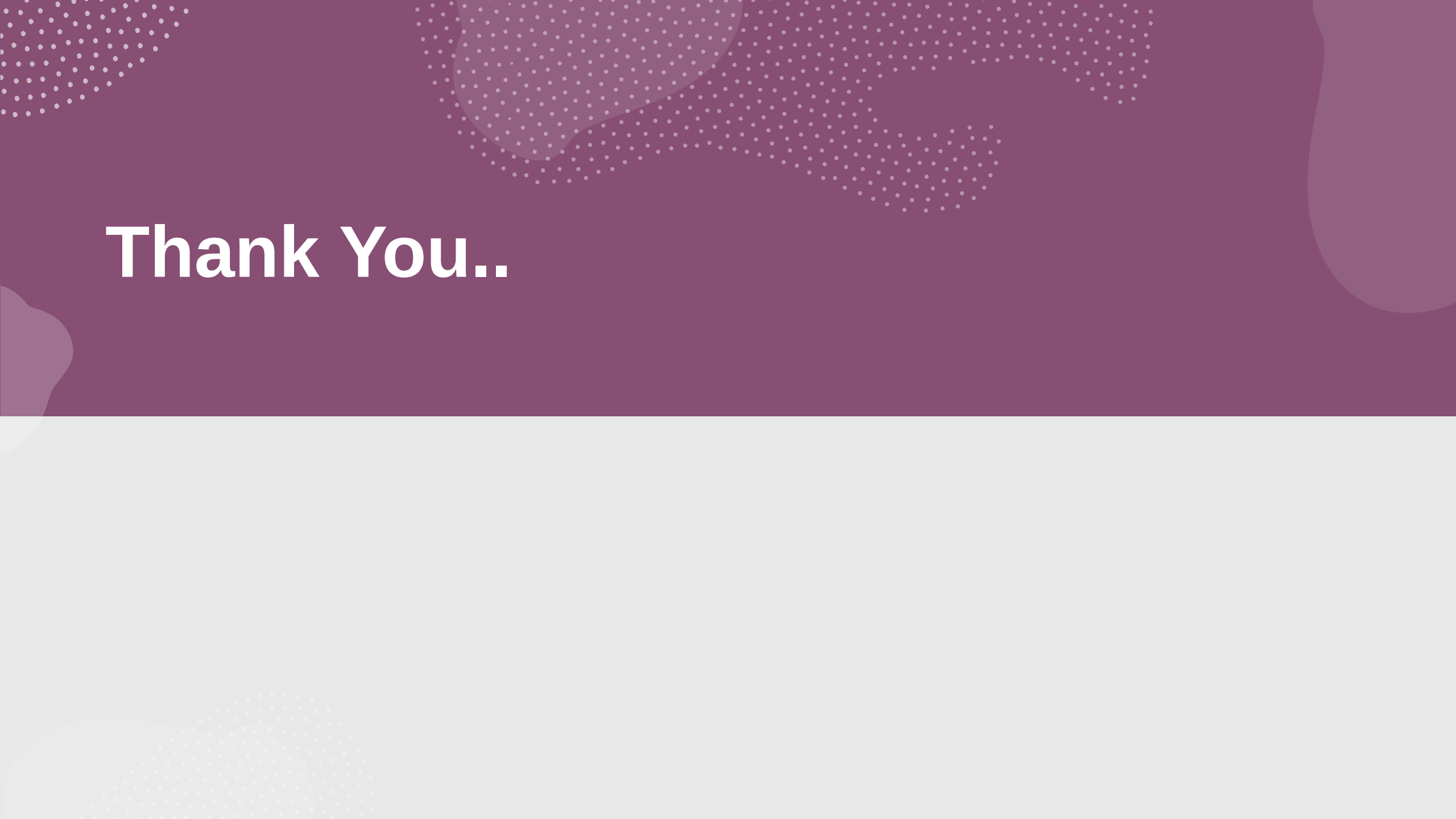
- Definition and concept of Case Study 2
- Important principles related to Case Study 2
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Challenges and Solutions

- Definition and concept of Challenges and Solutions
- Important principles related to Challenges and Solutions
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable

Summary

- Definition and concept of Summary
- Important principles related to Summary
- Engineering significance and applications
- Examples, diagrams, and calculations where applicable



Thank You..