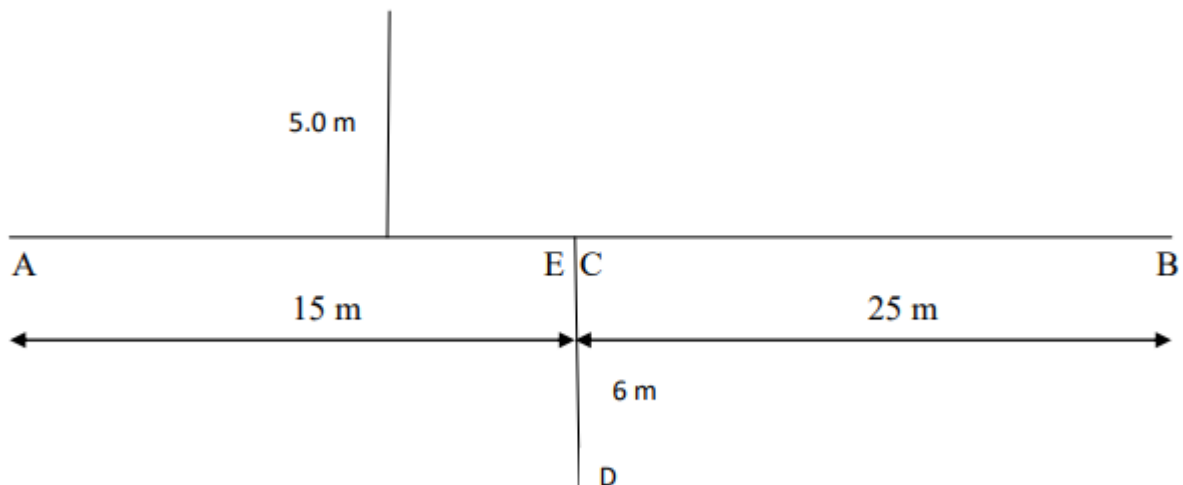


Explain Benefits of irrigation.
Explain ill-effects of Irrigation.
Define: Field Capacity, Permanent wilting point, Soil-moisture deficiency.
Explain Duty of water and delta.
Explain relation between Duty and Delta.
Define: Crop Period, Base Period, Kor Period, Culturable Commanded Area, Intensity of Irrigation, Time Factor.
Explain Factors affecting duty of water.
Explain Irrigation Efficiencies.
Explain Methods of Irrigation.
Differentiate between Sprinkle and Drip Irrigation.
Explain Contour Farming?
Explain Different types of channels?
State Procedures of Non-Alluvial Channels Design steps.
State Kennedy's Design Procedures.
Explain Lacey's Design Procedures.
Explain Balancing Depth?
Explain Water logging effect?
Draw a typical section of Diversion Headworks.
Explain Scouring sluices and Silt Excluder?
Explain Blingh's creep theory?
Explain Khosla's Theory?

Determine the uplift pressure at the given key points E,D and C of the intermediate pile shown in figure. Use Khosla's theory.



Explain Types of Cross Drainage Works?

Explain Determination of Flood Discharge by Empirical Flood Formulae?

Design an expansion transition for a channel for the following data:

Length of Flume = 20 m Width of Throat = 12 m Width of channel = 18 m.

Use (a) Mitra's method (b) Chaturvedi's method

State types of canal fall. Explain Notch and sarda type fall?

Explain Cross Regulator?

Explain Silt controlling Devices?