

**071906T4AEN**

**AGRICULTURAL ENGINEERING LEVEL 6**

**ENG/OS/AGR/CR/06/6/A**

**Perform Irrigation Activities**

**March/April 2025**



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION  
COUNCIL (TVET CDACC)**

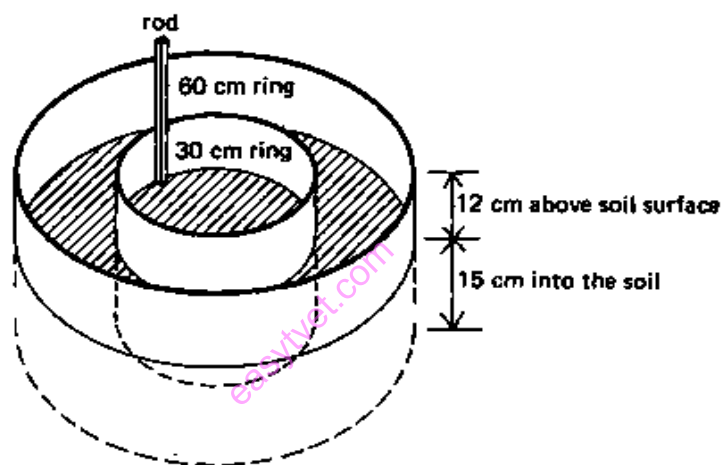
**PRACTICAL ASSESSMENT**

**Time: 3 HOURS**

**INSTRUCTIONS TO CANDIDATE:**

1. You are required to perform the following tasks:
  - i. Set up the experiment as shown in **Figure 1** below.
  - ii. Collect data on infiltration depths, time and record on the data sheet in **Table 1** below.
  - iii. Calculate cumulative time, depth and infiltration rate of the soil
  - iv. Plot a curve of cumulative infiltration depth against cumulative time.
2. You have been provided with the following resources for the practical tasks:
  - Shovel/hoe
  - Spade
  - Mallet
  - Stop watch
  - 20 litre bucket

- Timber (75 mm x 75 mm) x 900 mm long
- At least 50 litres of water
- Ring infiltrometer of 30 cm diameter
- Ring infiltrometer of 60 cm diameter
- Measuring rod graduated in cm
- Hessian cloth
- Graph paper
- Soap
- Water



**Figure 1: Set- Up of Field Test**

**Table 1: Data Sheet**

Time Interval (min.)	Cumulative time (min)	Initial reading (cm)	Final reading (cm)	Infiltration depth (cm)	Infiltration rate (cm/min)	Infiltration rate (cm/hr)	Cumulative infiltration depth (cm)
2							
3							
5							

5							
5							
10							
10							
20							

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