

NAME OF THE INSTRUMENT: ORDINARY RAIN GAUGE

➤ RAIN:

- **Rain** is precipitation of liquid water particles either in the form of drops having diameter greater than 0.5 mm or in the form of smaller widely scattered drops.

➤ PURPOSE OF MEASUREMENT AND ITS PRINCIPLE:

- Rainfall recorded on 08:30 hrs is the amount of rainfall for last 24 hrs, i.e. the amount of rainfall for that particular day.
- The principle of rainfall measurement is to obtain the depth of the layer of water that has fallen.
- For example, 1 millimeters rainfall means every 1 mm² area is filled with the water of height 1 mm.

➤ UNIT:

- Milimeter (mm)

➤ LEAST COUNT:

- 0.2 mm

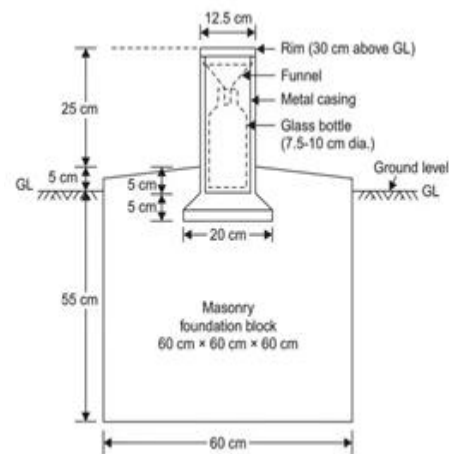
➤ TIME OF OBSERVATIONS:

- 08:30 hrs & 14:18 hrs as and when there is rain.
- However, at times of heavy rainfall, two or three intermediate readings may be taken and their sum reported as rainfall for the past 24 hrs.

➤ DETAILS OF EQUIPMENT:

- Ordinary rain gauge (ORG) is an instrument used for measuring the amount of rainfall.
- It consists of five parts- (1) funnel, (2) receiver, (3) body, (4) base and (5) measuring cylinder.
- The funnel is provided with a brass rim, which is circular and exactly 127 mm in diameter.

- The rim of the rain gauge is 30 cm above the ground level and 25.4 cm above cemented platform.
- The rainwater collected in receiver is measured with the help of a standard measuring cylinder.
- The 20 cm capacity rain gauge with 200 cm² collector and 4-liter bottle is widely used and is sufficient to measure 24 hrs. rainfall of most of Indian observatories.
- The 40 and 100 cm capacity rain gauges are used at few places with high rainfall.
- A measuring cylinder calibrated in mm, graduated in 20 mm is used to measure the rainfall.



Measuring cylinder

