

S.B. Roll No.....

**IRRIGATION ENGINEERING**  
**4<sup>th</sup> Exam/Civil/0511/June'2015**

**Duration: 3hrs**

**M.Marks 75**

**SECTION- A**

**Q.No.1 Answer all questions.**

**(15)**

- i. Lift irrigation is done by -----.
- ii. Due to efflorescence soil becomes -----.
- iii. The first watering to a crop is called -----.
- iv. Run-off is measured in-----.
- v. Pits dug in the bed of canal are known as -----.
- vi. Meandering of river takes place in ----- reach.
- vii. Sprinkler irrigation resembles-----.
- viii. A strainer type well is most common in -----soil.
- ix. Fish ladder is provided for the up and down movement of fish in river at weir site---- --T/F.
- x. Stream gauging is done to find out -----of a catchment area.
- xi. A canal aligned along the contours is called contour canal-----T/F.
- xii. Silting of reservoir makes the dam weak----T/F.
- xiii. Earth dams are rigid in construction----T/F.
- xiv. Weeds are water loving plants-----T/F.
- xv. Mota layer is pervious----T/F.

**SECTION- B**

**Q.No.2. Attempt any SIX Questions.**

**6x5 = 30**

- i. Explain various types of reservoirs.
- ii. Give layout of a permanent canal system with the help of sketch.
- iii. Give difference between flow and well irrigation.
- iv. Give classification of drains.
- v. Explain the function and types of spurs or groynes used in river training works.
- vi. Explain the effects of water logging.
- vii. Explain various stages of a river.
- viii. Give relationship between duty, delta and base period.

**SECTION-C**

**Attempt any three Questions**

**10x3 = 30**

- Q3. Explain various methods of irrigation in detail with the help of sketches.  
Q4. Explain various types of rain gauges in detail with the help of sketches.  
Q5. Explain various types of lining in case of canals in detail.  
Q6. Explain various types of cross drainage works used in detail with the help of sketches.