Roll No.: 4.5.822.2.2.

Total No. of Questions: 5]

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# EG-314

# B.E. VII Semester (CGPA) Civil Engg. Examination 2018

# IRRIGATION ENGINEERING

Paper - CE-705

Time Allowed: Three Hours]

[Maximum Marks: 60

- Note: i) All questions are compulsory.
  - ii) All questions carry equal marks.
  - iii) Assume suitable data, if necessary.

### Unit - I

- Q.1 Explain the following (any four)
  - i) Straight glacis falls
  - ii) Khosla's method
  - iii) Diversion head work
  - iv) Barrage
  - v) Bligh's method

#### OR

Explain the term Bligh's creep theory for seepage flow.

## Unit - II

- Q.2 a) Describe with neat sketch 'Syphon Aqueduct'.
  - b) Describe the various types of cross drainage work.

#### OR

Explain the following (Any two)

- i) Canal regulation work
- ii) Distributor head regulators
- iii) Label crossing

# Unit - III

- Q.3 a) Describe various causes of failure of earth dams.
  - b) Discuss briefly the different types of reservoirs the purpose served by each type.

OR

- a) Write short note on diaphragm earth dams.
- b) Describe 'Reservoir sedimentation and its control'.

### Unit-IV

- Q.4 a) What are the various forces acting on a gravity dams?
  - b) Differentiate between a low gravity and high gravity dam.

#### OR

- a) What is meant by the elementary profile of a gravity dam and how is it reduced?
- b) What are the advantages of a gravity dam over the earth dam?

### Unit - V

- Q.5 a) Describe ogee spillway with its design procedure.
  - b) Describe the various methods used for energy dissipation below spillways.

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OR

# Write short notes on (Any four)

- i) Draft tube
- ii) Compare thermal and hydro power
- iii) Syphon spillway
- iv) Surge tank
- v) Compare impulse reaction turbine.

