

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)
- Straight glacis falls
 - Khosla's method
 - Diversion head work
 - Barrage
 - 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)

- Canal regulation work
- Distributor head regulators
- 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.

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.

