

TED (10)–4002

Reg. No.

(REVISION—2010)

Signature

FOURTH SEMESTER DIPLOMA EXAMINATION IN CIVIL ENGINEERING—
MARCH, 2014

IRRIGATION ENGINEERING

[Time : 3 hours

(Maximum marks : 100)

Marks

PART—A

(Maximum marks : 10)

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Define the term irrigation.
2. Define perennial irrigation.
3. Define scour.
4. What is saturation gradient ?
5. What are two major crop seasons of Kerala ?

(5×2=10)

PART—B

(Maximum marks : 30)

II Answer *any five* of the following questions. Each question carries 6 marks.

1. What are the disadvantages of irrigation ?
2. Explain duty and delta.
3. Distinguish between elementary and practical profile of dam.
4. What are the functions of canal head works ?
5. List the various methods of irrigation and its suitability.
6. What are the effects of water logging ?
7. What is the function of canal escape ?

(5×6=30)

PART—C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each question carries 15 marks.)

UNIT—I

- III (a) Why irrigation is vital for a country like India ? 7
- (b) What are the various methods for improving duty ? 8

OR

	Marks
IV (a) State the factors effecting runoff.	7
(b) How the flood discharge is measured ?	8
UNIT—II	
V (a) Differentiate barrage and weir with sketches.	7
(b) State different types of dams, explain in detail.	8
OR	
VI (a) Explain different classification of head work.	7
(b) Describe with sketch different parts of a weir.	8
UNIT—III	
VII (a) Describe with sketch drainage gally and construction joints.	7
(b) Explain causes of failure of an earth dam.	8
OR	
VIII (a) Explain factors to be considered for selecting the site for a dam.	7
(b) List forces acting on a gravity dam by drawing the fig. of dam.	8
UNIT—IV	
IX (a) State and explain different classification of canal.	7
(b) Explain preventive measures to reduce soil erosion.	8
OR	
X (a) Explain the necessity and types of canal lining.	7
(b) Explain super passage and aqueduct with figures.	8
