

PGDWR-01**Post Graduate Diploma in Water
Resources Management**

June - Examination 2015

**Need of Water Resource Planning and
Management****PGDWR-01***Time : Three Hours**[Max. Marks : 100*

Note: The Question paper is divided into three sections A, B and C. Write Answers as per given instructions.

Section-A

Very Short Answer Questions (Compulsory)

Note: Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 2 marks. (10×2=20)

1. (i) Mention the physiographic divisions of India.
- (ii) Explain the main requirements to flow measurement?
- (iii) Mention the harmful effects of irrigation?

(1)

PGDWR-01/100 / 4

- (iv) Define infiltration rate?
- (v) Explain the crop water requirement?
- (vi) Define green manure?
- (vii) What is sprinkler irrigation?
- (viii) Mention the components of drip irrigation system?
- (ix) Define gravity irrigation?
- (x) Define soil structure?

Section-B

(Short Answer Questions)

Note: Answer any 4 questions. Each answer should not exceed 200 words. Each question carries 10 marks. $4 \times 10 = 40$

- 2. Which waterways are fit for navigation in India?
- 3. Mention the indirect method for measuring water flow?
- 4. Explain the role of water in plant development?
- 5. Explain the rooting characteristics and moisture use of crops?
- 6. What are the advantages of drip irrigation system?
- 7. Explain the bubbler method of irrigation?
- 8. Make a note on density of soil?
- 9. Explain the approaches for estimating crop water requirement.

(2)

Section-C

(Long Answer Questions)

Note: Answer any two questions. You have to delimit your answer maximum up to 500 words. Each question carries 20 marks. $2 \times 20 = 40$

- 10. Critically analyze the performance of irrigation development in India?
- 11. Explain the stages of critical growth of crops?
- 12. On the basis of portability how can sprinkler systems be classified?
- 13. Define maximum water holding capacity, field capacity and permanent wilting point?

—X—

(3)