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**Question Paper Code: 31516**

B.E. / B.Tech. DEGREE EXAMINATION, NOVEMBER 2015

Fifth Semester

Civil Engineering

01UCE506 – IRRIGATION ENGINEERING

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Write down the needs of irrigation.
2. List out any four properties of soil.
3. Differentiate duty and delta.
4. Define crop ratio.
5. What are the forces acting on a dam?
6. Summarize the factors to be considered for designing a weir.
7. Define canal regulation
8. List out the components of a diversion head works.
9. What are water losses?
10. Summarize the need for optimization of water use.

PART - B (5 x 16 = 80 Marks)

11. (a) Detail about the merits and demerits of irrigation in detail. (16)

Or

(b) Discuss about various types of irrigation methods generally adopted. (16)

12. (a) Enlist the factors affecting duty. Describe the various methods of improving duty. (16)

Or

(b) Define consumptive use of water and explain various factors affecting it. (16)

13. (a) (i) What are the factors affecting the selection of type of dam? (10)

(ii) Write in detail about the components of diversion works. (6)

Or

(b) Explain the any two types of spillway with neat sketch. (16)

14. (a) Explain the types of cross drainage works with neat sketch. (16)

Or

(b) Explain the various type of alignment of canals. (16)

15. (a) Explain participatory irrigation management with suitable example. Emphasize on water users association. (16)

Or

(b) Explain on farm development works in irrigation water management. (16)

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