| Reg. No. : | | | | | | |
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| Keg. No | | | | | | |

Question Paper Code: 35016

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Fifth Semester

Civil Engineering

01UCE506 - IRRIGATION ENGINEERING

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. What are the techniques of water distribution in the farms?
- 2. List out any four properties of soil.
- 3. Differentiate duty and delta.
- 4. What is crop period?
- 5. Define diversion headwork.
- 6. Define barrage.
- 7. What is meant by canal escape?
- 8. List out the components of a diversion head works.
- 9. What are the works of on-farm developments?
- 10. Summarize the need for optimization of water use.

| PART - B | $(5 \times 16 =$ | 80 Marks) |
|----------|------------------|-----------|
|----------|------------------|-----------|

| 11. | (a) | Explain briefly the classification of soil water. | | | |
|-----|-----|-----------------------------------------------------------------------------------------------------------------|---------------|--|--|
| | | 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 dut | y. (16) | | |
| | | Or | | | |
| | (b) | Explain the direct methods to measure the consumptive use. | (16) | | |
| 13. | (a) | Explain the selection of site for a dam and selection of type of dam. | (16) | | |
| | | Or | | | |
| | (b) | Explain the component parts of a spillway. | (16) | | |
| 14. | (a) | Explain the subsurface methods of irrigation and discuss its merits and dem | erits (16) | | |
| | | Or | | | |
| | (b) | Explain the various type of alignment of canals. | (16) | | |
| 15. | (a) | Explain on farm development works in irrigation water management. | (16) | | |
| | | Or | | | |
| | (b) | Explain briefly about water user's association and its scope and possible function irrigation water management. | ns on (16) | | |
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