G 1308

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Reg. No.

B.TECH. DEGREE EXAMINATION, MAY 2015

Branch: Civil Engineering

WATER RESOURCES ENGINEERING II (C)

(Old Scheme—Prior to 2010 Admissions)

[Supplementary]

Time: Three Hours

Maximum: 100 Marks

Answer shall be illustrated with sketches wherever necessary.

Part A

Answer all questions.
Each question carries four marks.

- 1. Explain Rock fill dams.
- 2. What is Arch dam?
- 3. What are contraction joints in gravity dam?
- 4. What are the forces acting on gravity dam?
- 5. Explain about Weir.
- 6. Write the principle of slit control?
- 7. Explain about canal regulation.
- 8. What is cross drainage work?
- 9. Explain about run-off river plants.
- 10. Explain about surge tanks.

 $(10 \times 4 = 40 \text{ marks})$

Part B

Answer all questions.
Each question carries 12 marks.

11. Explain the factors governing the selection of a particular type of dam.

Or

- 12. Explain the principle and shear stress acting on the gravity dam.
- 13. What are the types of arch dam? Explain constant radius arch dam.

Or

14. Write in detail, the Design criteria of earth dam?

Turn over

15. Explain Bligh's creep theory in detail.

Or

- 16. Explain the principles of slit control. What are the slit control devices? Explain shortly.
- 17. Explain with neat sketches about:
 - (i) Aqueduct.
 - (ii) Syphon aqueduct.

Or

- 18. Derive the discharge formula for trapezoidal notch fall.
- 19. Explain the classification of hydro plants based on co operating head on turbises?

Or

20. Explain in detail about penstocks.

 $(5 \times 12 = 60 \text{ marks})$