Seat No.

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MAR_APR 2026 SUMMER EXAMINATION

1154 B.Tech. CBCS

Sub. Name: Water Resources Engineering - II

Sub. Code: 67749/84746/84931

Day and Date: Tuesday ,26-05-2026 **Total Marks: 70**

Time: 02:30 PM To 05:00 PM

Instructions: **1. Assume suitable data wherever necessary and mention it boldly**
2. Draw neat labelled diagrams wherever necessary
3. Figures to the right indicate full marks

Special Inst.: **1) Que. No. 4 from Section - I & Que. No. 8 from Section - II are compulsory.**
2) Attempt any two questions from Que. No. 1,2,3
3) Attempt any two questions from Que. No. 5,6,7

Q1) Answer the following **[10]**

a. Explain in detail the components and functions of Earthen dams. **[5]**

b. Which investigations are required for reservoir planning? Explain them in detail. **[5]**

Q2) Answer the following **[10]**

a. Define and describe in detail with a neat sketch the elementary profile and practical profile of a gravity dam. **[5]**

b. Describe in detail modes of failures in Gravity dams. **[5]**

Q3) Answer the following **[10]**

a. Classify the spillways. Describe any one in detail. **[5]**

b. What are the essential requirements of the spillway? How would you select a suitable site for the spillway? **[5]**

Q4) Answer the following (Any three) **[15]**

a. What is silting of reservoirs? What factors influence it? **[5]**

b. What is High dam & Low dam? Explain. **[5]**

c. Write a detailed note on Outlets in dam. **[5]**

d. Explain various factors affecting Selection of type of dam. **[5]**

Q5) Answer the following **[10]**

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a. Explain Bligh's creep theory in detail. **[5]**

b. Draw a layout of Diversion headwork and explain any three components in detail. **[5]**

Q6) Answer the following **[10]**

a. Explain various types of Canal falls with neat sketch. **[5]**

b. Explain Head and Cross Regulatory work with functions. **[5]**

Q7) Answer the following **[10]**

a. Discuss Groynes and its types in detail with neat sketch. **[5]**

b. Explain the components of Hydro power plant in detail. **[5]**

Q8) Answer the following (Any three) **[15]**

a. What are the causes of failure of weirs on permeable foundation. **[5]**

b. Discuss in detail selection criteria for canal lining **[5]**

c. Write a Note on: Interlinking of Rivers **[5]**

d. Write a note on: Weir & Barrages. **[5]**

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End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -
This Question Paper may be distributed for following Subjects as common code.
सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

1] (101) Bachelor of Engineering (67749) Water Resources Engineering II Part 4 SEM 8
2] (1154) B.Tech. CBCS (84746) Water Resources Engineering - II Part 4 SEM 8
3] (101) Bachelor of Engineering (84931) Water Resources Engineering - II Part 4 SEM 8