**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, November 2022**

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|  | **4BT7171** | **Roll No.** | **Total Printed Pages: 1** |
| **4BT7171** |  |
| B. Tech. IV Year VII- Semester (Main/Back) End Semester Examination, November 2022  **(CV)** | |
| **BCV07103: Water Resources Engineering** | | | |

# Time: **3** Hours. Total Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **. ------------------Nil-----------------------** **2. ------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | What is Falls? Write the classification of Falls. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | What are the points of site selection of CDW? | **(6)** | **Understanding** |
|  |  | **OR** |  |  |
| **Q.2** | **(a)** | What is Cross-Drainage works? Explain the necessity of CDW | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | What are the types of CDW? Write down the merits and demerits of CDW. | **(6)** | **Remembering** |
|  |  | **UNIT-II (CO2)** |  |  |
| **Q.3** | **(a)** | Write down the points of site selection of Diversion head works. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Write down the difference between Weir and Barrage. | **(6)** | **Understanding** |
|  |  | **OR** |  |  |
| **Q.4** | **(a)** | Write down the difference between Bligh’s and Khosla’s method. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Explain the different parts of Diversion Head Works. | **(6)** | **Remembering** |
|  |  | **UNIT-III (CO3)** |  |  |
| **Q.5** | **(a)** | Write the classification of Different types of Dams | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Explain Embankment Dams with suitable example. | **(6)** | **Understanding** |
|  |  | **OR** |  |  |
| **Q.6** | **(a)** | Write down the factors in site selection of Embankment dams. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | What are the causes of failure of Embankment Dams? | **(6)** | **Understanding** |
|  |  | **UNIT-IV (CO4)** |  |  |
| **Q.7** | **(a)** | What is spillway? Write down the applications of spillway. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Explain the different types of spillways with neat sketch. | **(6)** | **Applying** |
|  |  | **OR** |  |  |
| **Q.8** | **(a)** | Explain the process of Energy dissipation below spillways. | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Explain flood routing through Spillways and spillway capacity. | **(6)** | **Applying** |
|  |  | **UNIT V (CO5)** |  |  |
| **Q.9** | **(a)** | Write down the purpose of providing Reservoir. | **(6)** | **Understanding** |
|  |  |  |  |  |
|  | **(b)** | Write down the classification of Reservoir. | **(6)** | **Remembering** |
|  |  | **OR** |  |  |
| **Q.10** | **(a)** | What are the different causes of Reservoir sedimentation? | **(6)** | **Remembering** |
|  |  |  |  |  |
|  | **(b)** | Write down the factors affecting Watershed Management. | **(6)** | **Remembering** |