**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, APRIL 2023**

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|  | **1MT2128** | Roll No. | Total Printed Pages: 1 |
| **1MT2128** |  |
| M. Tech. I Year II-Semester (Main/Back) End Semester Examination, April 2023  **(EE)** | |
| **MEEECV2105 : Groundwater Contamination and Remediation** | | | |

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

Min. Passing Marks: **24**

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.

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

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|  |  | **UNIT-I (CO1)** | **Marks** |
| **Q.1** | **(a)** | What are the parameters to identify the contamination of ground water | **(6)** |
|  |  |  |  |
|  | **(b)** | Explain the concept of Environmental Engineering | **(6)** |
|  |  |  |  |
|  |  | **OR** |  |
|  |  |  |  |
| **Q.2** |  | Elucidate the practical example of landfill site GW contamination. | **(12)** |
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|  |  | **UNIT-II (CO2)** |  |
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| **Q.3** |  | How the landfill site GWT can be secured from the contamination | **(12)** |
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|  |  | **OR** |  |
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| **Q.4** |  | Elucidate the various measures of remediation to ground water contamination | **(12)** |
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|  |  | **UNIT-III (CO3)** |  |
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| **Q.5** |  | Describe the various government initiative to reduce the contamination of ground water. | **(12)** |
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|  |  | **OR** |  |
| **Q.6** |  | How environmental engineers dealing the contamination issue related to various infrastructure project. Explain with two practical examples. | **(12)** |
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|  |  | **UNIT-IV (CO4)** |  |
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| **Q.7** |  | Why the depth of ground water is reducing now a days. Also explain the suitable remedial measures for this | **(12)** |
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|  |  | **OR** |  |
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| **Q.8** |  | What are the futuristic planning to reduce or eliminate the ground water contamination challenges | **(12)** |
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|  |  | **UNIT V (CO5)** |  |
| **Q.9** |  | Explain the importance of geogrid to ground water engineering | **(12)** |
|  |  |  |  |
|  |  | **OR** |  |
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| **Q.10** | **(a)** | Describe the leachate and its negative consequences on ground water | **(6)** |
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|  | **(b)** | What are the possible measures of ground water contamination at different places? | **(6)** |