Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov/Dec– 2017**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **17CE3052** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ENVIRONMENTAL GEOTECHNOLOGY** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the factors governing location criteria for landfill. | CO2 | 15 |
| b. | Reframe the production of wastes in society. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Quote and explain the causes of soil pollution. | CO1 | 8 |
| b. | Illustrate the relevance of risk assessment for remediation of contaminated site. | CO1 | 12 |
|  |  |  |  |  |
| 3. | a. | Describe the stability of landfills for the safe waste disposal. | CO2 | 10 |
|  | b. | Write a note on Current practices of waste disposal. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Paraphrase the processes advection, diffusion and dispersion. | CO3 | 12 |
|  | b. | Define electrokinetic remediation for removal of contaminants. | CO6 | 8 |
|  |  |  |  |  |
| 5. | a. | Discuss about the different containment methods for groundwater protection. | CO2 | 12 |
|  | b. | State the relevance of preparation of feasibility report in site selection for landfill. | CO2 | 8 |
| (OR) | | | | |
| 6. | a. | Recall the different mechanisms for stabilization of contaminated site. | CO5 | 15 |
|  | b. | Identify the method to remove the gasoline from soil. | CO1 | 5 |
|  |  |  |  |  |
| 7. | a. | Differentiate between Micro and Macro encapsulation. | CO5 | 8 |
|  | b. | Recognize the application of solidification and stabilization technologies and explain. | CO5 | 8 |
|  | c. | Summarize the concept of soil contamination process. | CO3 | 4 |
| (OR) | | | | |
| 8. | a. | Describe the methods bio remediation and bio venting. | CO1 | 10 |
|  | b. | Distinguish between inorganic and organic stabilization. | CO5 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Recall the different physical process for insitu remediation methods. | CO6 | 15 |
|  | b. | Paraphrase the term mechanical dispersion | CO2 | 5 |

ALL THE BEST