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BWA-004

**CERTIFICATE IN SOLID WASTES
TREATMENT TECHNIQUES (CSWATT)**

Term-End Examination

June, 2022

BWA-004 : DISPOSAL OF WASTES

Time : 3 Hours

Maximum Marks : 70

Note : (i) *Attempt any **ten** questions. All questions carry equal marks.*

(ii) *Calculator is allowed.*

1. Write the advantages and disadvantages of solid waste landfill. 7
2. Discuss about line layers to facilitate the decomposition of the solid waste as well trap toxic gases. 7
3. Explain commonly used physical and chemical processes for leachate treatment. 7

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4. A landfill serves a population of 2,53,000. Each week 325 trucks bring a total of 2180 ton of solid waste. The volume of the landfill is 11240000 m³. At the present time 63% of the landfill is used. The ratio of cover to compacted fill is 1.9. Determine the projected life remaining for the landfill. Assume the density of the compacted waste to be 490 kg/m³. 7
5. Discuss the conditions affecting landfill gas production. 7
6. Write general requirements for a leachate collection system. 7
7. Explain the requirement of safe closure of landfill site. 7
8. Enlist environmental components. Explain any *two* environmental components briefly. 7
9. Write a note on Initial Environmental Evaluation (IEE). 7
10. Explain the benefit of conducting EIA. 7

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11. What is the scope of Environmental Management Plan (EMP) ? Which activities are included in EMP ? 7
12. How does landfilling affect human health ? Explain briefly. 7
13. List the features and benefits for waste management while using bin sensors. 7
14. How can you reduce the health risks during waste management ? 7
15. What are the various rights that an employee has under the Occupational Safety, Health and Working Conditions Code, 2020 ? 7