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BWA-002

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

**Term-End Examination
June, 2023**

**BWA-002 : SOLID WASTES COLLECTION AND
TRANSPORTATION**

Time : 3 Hours

Maximum Marks : 70

Note : (i) *Attempt any **seven** questions only.*

(ii) *All questions carry equal marks.*

1. Name all the components of a waste collection system. Describe any *two* of them in detail. 10
2. Discuss in detail 'Community waste storage'. 10
3. What purpose is served by sweeping machines, hand tools and litter bins ? Explain in detail. 10
4. What are non-compactions vehicles in collection of solid waste ? Elaborate the 'high-sided open-top vehicle' and the 'crane tipper system'. 10

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5. Describe the various information that should be collected and updated regularly for the solid waste collection planning. 10
6. How does frequency of waste collection relate to the cost, health and safety and effectiveness of waste management ? Elaborate. 10
7. What is the utility of Clarke-Wright algorithm of vehicle routing for waste collection ? Discuss the salient features of the algorithm. 10
8. Describe the *three* major costs of waste management along with the other types of cost incurred. 10
9. Explain, in detail the various types of revenues incurred from waste management. 10