

# Unit 3 - Week 2

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## Assignment 2

The due date for submitting this assignment has passed. **Due on 2019-08-21, 23:59 IST.**  
As per our records you have not submitted this assignment.

- It provides overview of Municipal Solid Waste Management in India and key challenges. It discusses key technological options in waste management.
- It discusses status and practice of solid, liquid waste and Faecal Sludge management in Alappuzha - a small town in Kerala.
- It provides overview of participative and decentralised planning in waste management.

1) The following statement is true or false. 1 point

Municipal Solid Waste Management (MSWM) is management of waste coming from industries

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

2) Sanitary waste includes following 1 point

- Diapers
- Sanitary pads/cups
- Medical Waste
- All of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: Diapers, Sanitary pads/cups

3) In India the informal sector plays crucial role in following solid waste management functions 1 point

- Collection
- Segregation
- Recycling
- Recovering
- All of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: Recycling

4) In Indian cities the percentage of following type of waste is higher 1 point

- Organic
- Inorganic

No, the answer is incorrect. Score: 0  
Accepted Answers: Organic

5) Highest per capita waste generation and waste with highest calorific value has been observed to be generated by 1 point

- Small Towns
- Medium Towns
- Large Cities

No, the answer is incorrect. Score: 0  
Accepted Answers: Large Cities

6) A city with tropical and humid weather produces waste with high calorific value. Among the following options which are the best suited for the city. 1 point

- Waste to energy
- Composting
- None

No, the answer is incorrect. Score: 0  
Accepted Answers: Waste to energy

7) The following statement is true or false. 1 point

Low income households produce waste high in inorganic content whereas high income households produce waste high in organic content.

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

8) As per Constitution of India the management of municipal solid waste is responsibility of 1 point

- Central Government
- State Government
- Urban Local Bodies
- All of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: Urban Local Bodies

9) One of the major stakeholders in the solid waste management whose contribution needs to be accounted in waste management service chain is 1 point

- Non-governmental Organisations
- Individuals/households
- State Governments
- Informal Sector

No, the answer is incorrect. Score: 0  
Accepted Answers: Informal Sector

10) Which statement(s) of the following is true for decentralised solid waste management. 1 point

- Waste segregation at source
- Local employment generation
- Better resources recovery
- Needs less monitoring and regulation

No, the answer is incorrect. Score: 0  
Accepted Answers: Waste segregation at source, Local employment generation, Better resources recovery

11) The following statement is True or False 1 point

The Extended Producers Responsibility (EPR) expects producers only to take back their products and manage(dispose/recycle/reuse) them in accordance with the environmental standards.

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

12) Within the proposed 3-bin system under integrated solid waste management approach the sanitary waste should be disposed in 1 point

- Green bin
- White Bin
- Black Bin
- None of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: None of the above

13) The statement is true or false. 1 point

The system of collecting solid waste directly from homes is known as secondary collection system.

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

14) The statement is True or False 1 point

Composting is the degradation process of inorganic waste materials in the presence of oxygen.

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

15) The following statement is True or False. 1 point

The pipe composting technology is a viable option for cluster of households.

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

16) Is it correct to say that plastics can be recycled indefinitely? 1 point

- Yes
- No

No, the answer is incorrect. Score: 0  
Accepted Answers: No

17) Of the following technical options in plastic waste reuse/recycle which one has witnessed more success in India. 1 point

- Bitumen Roads
- Pyrolysis
- Incineration
- None of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: Bitumen Roads

18) Understanding the socioeconomic parameters of households is not essential for planning a decentralised wastewater treatment system for an area. 1 point

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

19) Correction of canal profile is intended 1 point

- To determine the volume of desludging to be done
- To ensure suitable gradient for uninterrupted flow of water
- To ensure that sidewalls do not cave in
- None of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: To ensure suitable gradient for uninterrupted flow of water

20) Ensuring that the distance between septic tank and well is a minimum of 7.5 m minimizes the possibility of contamination of the well water. 1 point

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: True

21) If the number of household members in a family is 5, how much is the total amount of wastewater generated in a day? (Assume standard water consumption is 135 liter per capita per day) 1 point

- 675 liter
- 608 liter
- 540 liter
- 500 liter

No, the answer is incorrect. Score: 0  
Accepted Answers: 540 liter

22) Leach pit can be used for the safe disposal of black water. 1 point

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

23) Which sanitation system can be considered a complete system? 1 point

- Septic Tank
- Pit Latrine
- Service Latrine
- All of the above
- None of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: None of the above

24) In what ways does faecal sludge management move risk when compared to sewer network? 1 point

- Spatially
- Temporally
- Socially
- All of the above
- None of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: All of the above

25) What distinguishes a septic tank from a pit? 1 point

- Water -Tightness
- Wall Material
- Periodic Emptying
- Bottom Material

No, the answer is incorrect. Score: 0  
Accepted Answers: Water -Tightness

26) What is the suggested frequency of emptying on-site system? 1 point

- 6 months - 1 year
- 2-3 years
- 5-7 years
- 10 years

No, the answer is incorrect. Score: 0  
Accepted Answers: 2-3 years

27) Which among the following can be considered safe disposal of FS by emptier truck? 1 point

- In Sewer network
- In Water Bodies
- At Treatment Plant
- In agricultural fields
- At solid waste dumping site/landfill

No, the answer is incorrect. Score: 0  
Accepted Answers: In Sewer network, At Treatment Plant

28) Which is not a characteristic of a sewer system? 1 point

- Water based transport of excreta
- Capital Intensive
- Self Cleansing Velocity
- Builds on existing OSS

No, the answer is incorrect. Score: 0  
Accepted Answers: Builds on existing OSS

29) What challenges is an emptying agency likely to face? 1 point

- Inadequate Volume
- Highly viscous FS
- Inapproachable OSS
- Very wide roads

No, the answer is incorrect. Score: 0  
Accepted Answers: Highly viscous FS, Inapproachable OSS

30) The type of OSS does not matter in design other components of FS service chain 1 point

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

31) Shit-flow diagram is a form of material flow analysis of excreta 1 point

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: True

32) Which sampling strategy was used for household surveys in Alappuzha 1 point

- Purposive Sampling
- Random
- Stratified Random
- Snowball sampling

No, the answer is incorrect. Score: 0  
Accepted Answers: Random

33) A pit is safe containment system in high ground water table region 1 point

- True
- False

No, the answer is incorrect. Score: 0  
Accepted Answers: False

34) Which of the following had paved way for decentralised SWM in Alappuzha? 1 point

- Public protest and failure of centralised options
- High density of population and limited land availability
- Act made more stringent treatment of solid waste at source
- Collaboration with various agencies and groups
- Public awareness campaigns
- All of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: All of the above

35) Current Municipal Solid Waste Management in Alappuzha does not follow 1 point

- Segregation of waste
- Imposing penalty on those who dump waste
- Household door-to-door collection of organic waste
- Composting organic waste

No, the answer is incorrect. Score: 0  
Accepted Answers: Household door-to-door collection of organic waste

36) Fill in the blank from given choices 1 point

In natural like Alappuzha, the biodegradable waste typically takes about \_\_\_\_ days to become organic compost in aerobic units.

- 20-30 days
- 40-60 days
- 90-120 days
- More than 200 days

No, the answer is incorrect. Score: 0  
Accepted Answers: 90-120 days

37) So far, decentralised SWM in Alappuzha has helped in 1 point

- Providing different technological options for managing wastes
- Correcting the issues and improve the system
- Improving the working conditions of sanitation workers
- 100% reduction in people using unscientific practices to dispose wastes

No, the answer is incorrect. Score: 0  
Accepted Answers: Providing different technological options for managing wastes, Correcting the issues and improve the system, Improving the working conditions of sanitation workers

38) In Alappuzha, aerobic units were proposed for dealing with wastes from: 1 point

- Households and Small Shops
- Households, Hotels, Houseboats
- Hospitals
- All of the above

No, the answer is incorrect. Score: 0  
Accepted Answers: Households and Small Shops