

National Testing Agency

Question Paper Name :	Solid and hazardous Waste Management 29th August 2021 Shift 1
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Solid and hazardous Waste Management

Group Number :	1
Group Id :	603489284
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100
Is this Group for Examiner? :	No

Solid and hazardous Waste Management-1

Section Id :	603489416
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	603489746
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 60348919855 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The average per capita waste generation for a population greater than 5 million is _____ g/capita/day

1. 200
2. 350
3. 500
4. 750

Options :

- 60348974661. 1
- 60348974662. 2
- 60348974663. 3
- 60348974664. 4

Question Number : 2 Question Id : 60348919856 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following represents the three Rs of waste management?

1. Reduce - Reuse - Recycle
2. Reduce - Rearrange - Recycle
3. Reduce - Respect - Recycle
4. Reduce - Reconsider - Respect

Options :

60348974665. 1

60348974666. 2

60348974667. 3

60348974668. 4

Question Number : 3 Question Id : 60348919857 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The half life of Uranium 235 is _____.

1. 4.5 billion years
2. 700 million years
3. 25,000 years
4. 30 years

Options :

60348974669. 1

60348974670. 2

60348974671. 3

60348974672. 4

Question Number : 4 Question Id : 60348919858 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is a biodegradable waste?

1. Plastic
2. Brick
3. Aluminium
4. Wheat straw

Options :

60348974673. 1

60348974674. 2

60348974675. 3

60348974676. 4

Question Number : 5 Question Id : 60348919859 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The capacity of small transfer station is _____.

1. 10 tonnes per day
2. 100 tonnes per day
3. 500 tonnes per day
4. 1000 tonnes per day

Options :

60348974677. 1

60348974678. 2

60348974679. 3

60348974680. 4

Sub-Section Number : 2

Sub-Section Id : 603489747

Question Shuffling Allowed : Yes

Question Number : 6 Question Id : 60348919860 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Optimum temperature for the vermicomposting of solid wastes is 60 °C.

1. True
2. False

Options :

60348974681. 1

60348974682. 2

Sub-Section Number : 3

Sub-Section Id :

603489748

Question Shuffling Allowed :

Yes

Question Number : 7 Question Id : 60348919861 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Autoclaving is used for the treatment of _____.

1. Radioactive waste
2. E- waste
3. Fly ash
4. Biomedical waste

Options :

60348974683. 1

60348974684. 2

60348974685. 3

60348974686. 4

Question Number : 8 Question Id : 60348919862 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following are characteristics of hazardous waste?

- A. Ignitability
- B. Corrosivity
- C. Reactivity
- D. Toxicity

Choose the **correct** answer from the options given below:

1. A, B and C only
2. A and D only
3. A, C and D only
4. A, B, C and D

Options :

60348974687. 1

60348974688. 2

60348974689. 3

60348974690. 4

Sub-Section Number : 4

Sub-Section Id : 603489749

Question Shuffling Allowed : Yes

Question Number : 9 Question Id : 60348919863 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

95% energy is saved by the recycling of aluminum.

1. True
2. False

Options :

60348974691. 1

60348974692. 2

Sub-Section Number : 5

Sub-Section Id : 603489750

Question Shuffling Allowed : Yes

Question Number : 10 Question Id : 60348919864 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Given below are two statements, one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A : Alpha particles have positive charge.

Reason R : Gamma radiations have negative charge.

In light of the above statements, choose the **correct** answer from the options given below

1. Both **A** and **R** are true and **R** is the correct explanation of **A**
2. Both **A** and **R** are true but **R** is NOT the correct explanation of **A**
3. **A** is true but **R** is false
4. **A** is false but **R** is true

Options :

60348974693. 1

60348974694. 2

60348974695. 3

60348974696. 4

Sub-Section Number : 6

Sub-Section Id : 603489751

Question Shuffling Allowed : Yes

Question Number : 11 Question Id : 60348919865 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Incineration of solid wastes reduces its volume almost 90%.

1. True
2. False

Options :

60348974697. 1

60348974698. 2

Sub-Section Number : 7

Sub-Section Id : 603489752

Question Shuffling Allowed : Yes

Question Number : 12 Question Id : 60348919866 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which one of the following is not a Composting method?

1. Mangalore method
2. NADEP method
3. Indore method
4. Bangalore method

Options :

60348974699. 1

60348974700. 2

60348974701. 3

60348974702. 4

Question Number : 13 Question Id : 60348919867 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Given below are two statements

Statement I: Indian coal has high sulphur content.

Statement II: Indian coal has low chloride content.

In light of the above statements, choose the **correct** answer from the options given below

1. Both Statement I and Statement II are true
2. Both Statement I and Statement II are false
3. Statement I is true but Statement II is false
4. Statement I is false but Statement II is true

Options :

60348974703. 1

60348974704. 2

60348974705. 3

60348974706. 4

Sub-Section Number :

Sub-Section Id : 603489753

Question Shuffling Allowed : Yes

Question Number : 14 Question Id : 60348919868 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Landfill liner is a barrier that is laid at the bottom and sides of the landfill to protect the contaminants from entering into the soil and ground water.

1. True

2. False

Options :

60348974707. 1

60348974708. 2

Sub-Section Number : 9

Sub-Section Id : 603489754

Question Shuffling Allowed : Yes

Question Number : 15 Question Id : 60348919869 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Waste stabilization in landfill bioreactor occurs within _____ period of implementation.

1. 1 - 2 years

2. 5 - 10 years

3. 10 - 20 years

4. 25- 30 years

Options :

60348974709. 1

60348974710. 2

60348974711. 3

60348974712. 4

Question Number : 16 Question Id : 60348919870 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Given below are two statements

Statement I: Electronic scrap components, such as CPUs, contain potentially harmful materials such as lead, cadmium, beryllium, or brominated flame retardants.

Statement II: Recycling and disposal of e-waste may involve significant risk to health of workers and their communities.

In light of the above statements, choose the **correct** answer from the options given below

1. Both Statement I and Statement II are true
2. Both Statement I and Statement II are false
3. Statement I is true but Statement II is false
4. Statement I is false but Statement II is true

Options :

60348974713. 1

60348974714. 2

60348974715. 3

60348974716. 4

Question Number : 17 Question Id : 60348919871 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Char produced from the pyrolysis of municipal solid waste possess a calorific value of _____ MJ/kg

1. 7
2. 19
3. 28
4. 41

Options :

60348974717. 1

60348974718. 2

60348974719. 3

60348974720. 4

Question Number : 18 Question Id : 60348919872 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Biogas is composed of _____ and _____.

1. CO and CH₄
2. CO₂ and CH₄
3. N₂ and CH₄
4. H₂ and CH₄

Options :

60348974721. 1

60348974722. 2

60348974723. 3

60348974724. 4

Question Number : 19 Question Id : 60348919873 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following methods is best for the treatment of cattle dung ?

1. Open burning
2. Incineration
3. composting
4. ocean dumping

Options :

60348974725. 1

60348974726. 2

60348974727. 3

60348974728. 4

Question Number : 20 Question Id : 60348919874 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Given below are two statements

Statement I: Plasma gasification is an extreme thermal process using plasma which converts organic matter into a syngas.

Statement II: Syn gas is primarily made up of hydrogen and carbon dioxide.

In light of the above statements, choose the **most appropriate** answer from the options given below

1. Both Statement I and Statement II are correct
2. Both Statement I and Statement II are incorrect
3. Statement I is correct but Statement II is incorrect
4. Statement I is incorrect but Statement II is correct

Options :

60348974729. 1

60348974730. 2

60348974731. 3

60348974732. 4

Solid and hazardous Waste Management-2

Section Id :	603489417
Section Number :	2
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	30
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	603489755
Question Shuffling Allowed :	No

Question Number : 21 Question Id : 60348919875 Question Type : SUBJECTIVE

Correct Marks : 3

Give classification of solid wastes.

Question Number : 22 Question Id : 60348919876 Question Type : SUBJECTIVE

Correct Marks : 3

What do you understand by waste audit?

Question Number : 23 Question Id : 60348919877 Question Type : SUBJECTIVE

Correct Marks : 3

Write a note on recycling of solid wastes.

Question Number : 24 Question Id : 60348919878 Question Type : SUBJECTIVE

Correct Marks : 3

What are the sources of radioactive wastes?

Question Number : 25 Question Id : 60348919879 Question Type : SUBJECTIVE

Correct Marks : 3

Enlist different types of plastics.

Question Number : 26 Question Id : 60348919880 Question Type : SUBJECTIVE

Correct Marks : 3

Differentiate composting and vermicomposting.

Question Number : 27 Question Id : 60348919881 Question Type : SUBJECTIVE

Correct Marks : 3

What are different uses of fly ash?

Question Number : 28 Question Id : 60348919882 Question Type : SUBJECTIVE

Correct Marks : 3

Enlist different methods which can be used for the treatment of Biomedical waste.

Question Number : 29 Question Id : 60348919883 Question Type : SUBJECTIVE

Correct Marks : 3

Why incineration is better than open burning of solid waste?

Question Number : 30 Question Id : 60348919884 Question Type : SUBJECTIVE

Correct Marks : 3

What are the advantages and disadvantages of biological methods of solid waste treatment?

Solid and hazardous Waste Management-3

Section Id :	603489418
Section Number :	3
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	7
Number of Questions to be attempted :	5
Section Marks :	50
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1

Sub-Section Id :

603489756

Question Shuffling Allowed :

No

Question Number : 31 Question Id : 60348919885 Question Type : SUBJECTIVE

Correct Marks : 10

Explain traditional methods of solid waste disposal. What are their demerits?

Question Number : 32 Question Id : 60348919886 Question Type : SUBJECTIVE

Correct Marks : 10

Give a detailed account of solid waste collection process.

Question Number : 33 Question Id : 60348919887 Question Type : SUBJECTIVE

Correct Marks : 10

Define composting. What are its types? Explain the process of composting in detail. Give its merits and demerits.

Question Number : 34 Question Id : 60348919888 Question Type : SUBJECTIVE

Correct Marks : 10

Explain different methods used for hazardous waste treatment.

Question Number : 35 Question Id : 60348919889 Question Type : SUBJECTIVE

Correct Marks : 10

Make a plan for solid waste management in rural areas of India. Justify the use of different technologies.

Question Number : 36 Question Id : 60348919890 Question Type : SUBJECTIVE

Correct Marks : 10

Explain salient features of Solid waste management rules, 2016.

Question Number : 37 Question Id : 60348919891 Question Type : SUBJECTIVE

Correct Marks : 10

What is Swachh Bharat Abhiyan (Clean India Mission)? What are its objectives. Explain its implementation and targets achieved. How this programme can be improved?