

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 86
(For candidates admitted during the academic year 2016-17& thereafter)

SUBJECT CODE: 16VS/VM/WM36

B.Voc. DEGREE EXAMINATION, NOVEMBER 2021

SUSTAINABLE ENERGY MANAGEMENT

COURSE : MAJOR CORE

PAPER : WASTE SEGREGATION AND MANAGEMENT

TIME : 3 Hours

MAX.MARKS: 100

SECTION – A

(20 marks)

Answer all the questions

(10 X 1 = 10)

I. CHOOSE THE CORRECT ANSWER.

1. What does the three Rs of recycling stand for?
 - a) Reuse, Rethink, Recycle
 - b) Recycle, Reduce, Replace
 - c) Rethink, Reduce, Replace
 - d) Reduce, Reuse, Recycle
2. Which option below is the least desirable if you want to lower environmental impact?
 - a) Recycling
 - b) using less to begin with
 - c) Waste put in landfill
 - d) reuse
3. Examples of non-biodegradable waste include plastic, _____, and radioactive waste
 - a) banana peel
 - b) newspaper
 - c) nylon
 - d) Potato
4. Which ONE of the following items DOES belong in the blue container?
 - a) Banana
 - b) plastic bottle
 - c) Straw
 - d) Battery
5. In land filling method the biggest disadvantage is formation of _____.
 - a) Solid waste
 - b) Leachate
 - c) Odour
 - d) Underground pollution

II. FILL IN THE BLANKS

6. The color coding of the bag used in hospitals to dispose off human anatomical wastes such as body parts is _____.
7. The type of worms are the best for vermicomposting is _____.
8. Labeling a container simply as “waste ” is _____
9. The most serious environmental effect posed by hazardous wastes is _____
10. Energy content can be determined using _____

Answer all the questions

(5 X 2 = 10)

III. ANSWER IN A SENTENCE OR TWO

11. What are the objectives of waste audit ?
12. How does vermicomposting help the environment?
13. Give any 2 collection components
14. Formula used for ash content
15. Identify the symbol



SECTION – B

Answer any TWO questions.

(15 X 2 = 30)

16. What are the main causes of food waste and its impacts on environment
17. Elaborate the different types hazards while experienced by MSW workers?
18. Name and explain the purpose of Personal protective equipments in solid waste management.
19.
 - a. Segregate the given waste according to the colour code and suggest the disposal technique for the same
a)Egg shells b)Fruit peels c)Glass d) Plastic d)Batteries e)Fluorescent tubes
 - b. Estimate the percentage of ash content of given waste.
Apple peel - Wet Weight = 11.85g, Dry weight = 0.5g
Coconut coir -Wet Weight = 10 g, Dry weight = 0.05g

SECTION – C

Answer any TWO questions.

(25 X 2 = 50)

20. Explain the kambha compost technique for organic waste with the complete procedure.
21. What are the various types of incinerators and describe any one with necessary diagram
22. Explain the various characteristics of residential solid waste

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23. Estimate the percentage of volatile solid of 2 different types of waste and observe and report the results

S. No	Type of waste	Waste	Wet weight of the waste in g	Dry weight of the waste in g
1.	Kitchen waste	Cucumber peels	18.67	0.15
2.	Kitchen waste	Tomato	18.67	0.20
3.	Kitchen waste	Sweet Lime	18.67	0.45
4.	Yard waste	Neem leaves	18.67	1.5
