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Dr.R.Angeline Prabhavathy PRINCIPAL

AUTHENTICATION CERTIFICATE

This is to certify that all the Value Added Courses conducted were not part of normal curriculum

Contents of Bridge Course:

- 1. DANCE (SOLO)
- 2. DANCE (GROUP)
- 3. SONG (SOLO)
- 4. SONG (GROUP)
- 5. ELOCUTION (TAMIL)
- 6. ELOCUTION (ENGLISH)
- 7. DRAWING
- 8. POETRY WRITING
- 9. QUIZ
- 10. BASIC GRAMMAR & amp; SPOKEN ENGLISH

They are all aimed at promoting the overall skills and personality of the students over and above the

curriculum.

MAJUNJATTON

ZHAGAPPAPURAM P.C KANYAKUMARI DISTRICT 629 401

Email: info@avce.edu.in PRINCIPAL

Annai Vailankahni College of Engineer POTTALKULAM

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DEPARTMENT OF CIVIL ENGINEERING

VALUE ADDED COURSE

on

"VAC2K22CEWM- Waste Management"

Certificate will be issued.

COURSE OBJECTIVE

- To obtain knowledge in Waste Management and Control.
- To acquire knowledge in Monitoring Pollution in Sanitary Landfills.
- To Gain knowledge in Environmental and health effects on solid waste management.
- To know about the Standards for Treatment and Disposal of Bio-Medical wastes.

Schedule:

01-08-2022 to 09-08-2022

**Subject to change if required

No Course Fees

Fordetails Contact:

Mrs.M.Morrin Gracida
Assistant professor
Department of Civil Engineering
Email:morrin-ce@avce.edu.in

COURSE OUTCOME

- Able to understand-Waste Management and Control.
- Acquire knowledge in Monitoring Pollution in Sanitary Landfills.
- Gain knowledge in Environmental and health effects on solid waste management.
 - Knowing the Standards for Treatment and Disposal of Bio-Medical wastes.

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DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2022-2023

CIRCULAR

26/7/22

Ref: From the desk of the CE HOD/ CE, Ref No: 2022-2023/CE/ VAC2K22CEWM

It is decided to conduct WASTE MANAGEMENT Course for II, III & IV Year Civil Engineering Students for the academic year 2022-2023. Students are asked to contact their respective Class in charge for the enrolment of the course on or before 29/7/22. The course will be held from 01/8/22 for II, III & IV year Students.

Venue:

BOSCH LAB

Students are asked to use this opportunity to obtain knowledge in waste management and control.

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Website: www.avce.edu.in

Department of Civil Engineering Course Code: VAC2K22CEWM Course Name: Waste Management

SUMMARY

The Value Added Course in "Waste Management" during the academic year 2022-2023, was planned for Civil Engineering students during the month of August 2022. The main intention of the course was to provide knowledge about the Concept of managing waste and disposing them in safe manner 37 students enrolled for the course and participated in the course

Students gained knowledge in various aspects of

- ✓ Understanding -Waste Management and Control.
- ✓ Acquire knowledge in Monitoring Pollution in Sanitary Landfills.
- ✓ Gain knowledge in Environmental and health effects on solid wastemanagement
- ✓ Knowing the Standards for Treatment and Disposal of Bio-Medical wastes Feedback collected from the students for further improvement in delivery the value added course

J. Remila **COURSE COORDINATOR**





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AVK Nagar, PothaiyadiSalai, Pottalkulam
Azhagappapuram Post, Kanyakumari District - 629 401



DEPARTMENT OF CIVIL ENGINEERING

VALUE ADDED COURSE: WASTE MANAGEMENT
COURSE CODE: VAC2K22CEWM

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POTTALKULAM
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KANYAKUMARI DIST

WASTE MANAGEMENT- VAC2K19-CIVWM

Syllabus

Unit I -Waste Management and Control

Sources of waste- integrated waste management - waste storage - waste collection-

waste transfer and transport methods of disposal-Open dump-landfill Incineration- onsite

disposal- sanitary disposal.

Unit II- Monitoring Pollution in Sanitary Landfills

Monitoring pollution in sanitary landfills-hazards effect on pollution from landfills-

resource recovery-sustainability- avoidance and reduction method, Waste minimization.

Unit III - Cost

Environmental costs- social costs-economic costs-waste management concepts,

Environmental and health effects on solid waste management-environmental aspects.

Unit IV- Environmental and Health Effects of Bio Medical Waste Management

Biomedical wastes -sources and classification of biomedical wastes.

Unit V- Standards for Treatment and Disposal of Bio-Medical wastes

Disposal methods-management of biomedical wastes-control methods-techniques.

Duration 45 Periods

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DEPARTMENT OF CIVIL ENGINEERING

VALUE ADDED COURSE: WASTE MANAGEMENT

COURSE CODE: VAC2K22CEWM

DAY: I

	SES	SSION I		
PERIOD	DATE	TIMINGS	HOURS	
1	01.08.2022	9.00 AM-10.30 AM	1.30	
2	01.08.2022	11.00 AM-12.30 PM	1.30	
	SES	SION II		
3	01.08.2022	1.00 PM-2.30 PM	1.30	
4	01.08.2022	2.30 PM-4.00 PM	1.30	

DAY: II

	SES	SSION I		
PERIOD	DATE	HOURS		
1	02.08.2022	9.00 AM-10.30 AM	1.30	
2	02.08.2022	11.00 AM-12.30 PM	1.30	
	SES	SION II		
3	02.08.2022	1.00 PM-2.30 PM	1.30	
4	02.08.2022	2.30 PM-4.00 PM	1.30	

DAY: III

	SE	SSION I		
PERIOD	DATE	TIMINGS	HOURS	
1	03.08.2022	9.00 AM-10.30 AM	1.30	
2	03.08.2022	11.00 AM-12.30 PM	1.30	
	SES	SSION II		
3	03.08.2022	1.00 PM-2.30 PM	1.30	
4	03.08.2022	2.30 PM-4.00 PM	1.30	

DAY: IV

	SES	SSION I		
PERIOD	DATE	TIMINGS	HOURS	
1	04.08.2022	9.00 AM-10.30 AM	1.30	
2	04.08.2022	11.00 AM-12.30 PM	1.30	
	SES	SSION II		
SE OF 3	04.08.2022	1.00 PM-2.30 PM	1.30	
- 0	04.08.2022	2.30 PM-4.00 PM	1.30	

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DAY: V

	SES	SSION I			
PERIOD	DATE	TIMINGS	HOURS		
1	05.08.2022	9.00 AM-10.30 AM			
2	05.08.2022	11.00 AM-12.30 PM	1.30		
	SES	SSION II			
3	05.08.2022	1.00 PM-2.30 PM	1.30		
4	05.08.2022	2.30 PM-4.00 PM	1.30		

DAY: VI

	SES	SSION I			
PERIOD	DATE	HOURS			
1	06.08.2022	9.00 AM-10.30 AM	1.30		
2	06.08.2022	11.00 AM-12.30 PM	1.30		
	SES	SION II			
3	06.08.2022	1.00 PM-2.30 PM	1.30		
4	06.08.2022	2.30 PM-4.00 PM	1.30		

DAY: VII

	SES	SSION I	
PERIOD	DATE	HOURS	
1	08.08.2022	9.00 AM-10.30 AM	1.30
2	08.08.2022	11.00 AM-12.30 PM	1.30
	SES	SION II	
3	08.08.2022	1.00 PM-2.30 PM	1.30
4	08.08.2022	2.30 PM-4.00 PM	1.30

DAY: VIII

	SES	SSION I		
PERIOD	DATE	TIMINGS	HOURS	
1	09.08.2022	9.00 AM-10.30 AM	1.30	
2	09.08.2022	11.00 AM-12.30 PM	1.30	
	SES	SSION II		
3	09.08.2022	1.00 PM-2.30 PM	1.30	
4	09.08.2022	2.30 PM-4.00 PM	1.30	

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VAC COURSE ON WASTE MANAGEMENT **ACADEMIC YEAR 2022-2023** STUDENTS ENROLLED LIST

Sl.No	RegNo	Name	Year
1	960119103001	CHITRA A	IVCivil
2	960119103002	KARTHIKA C	IVCivil
3 960119103003		LAKSHMI E	IVCivil
4	960119103004	SUBINRAJ T	IVCivil
5	960119103005	UMA R	IVCivil
6	960119103301	RAJAN K	IVCivil
7	960120103002	JENIN C	IIICivil
8	960120103003	SNEKA C	IIICivil
9	960120103004	THANESH KUMAR R	IIICivil
10	960120103301	ALEX J	IIICivil
11	960120103302	AYNASH JOSHUA T	IIICivil
12	960120103303	BALA MURUGAN R	IIICivil
13	960120103304	ESAIKUMAR J	IIICivil
14	960120103307	PRINCE P R	IIICivil
15	960120103308	PRINCY CHERIYAN	IIICivil
16	960120103309	RAMESH ELANGO R	IIICivil
17	960120103310	SAHAYA GREETES C	IIICivil
18	960120103311	SINDHU M	IIICivil
19	960121103001	ABISH R	IICivil
20	960121103002	ANU DHARSHINI N	IICivil
21	960121103003	BAVI K	IICivil
22	960121103004	DEVI S	IICivil
23	960121103005	JESHIKA S	IICivil
24	960121103008	PAVITHRA K	IICivil
25	960121103009	SNEHA N	IICivil
26	960121103010	SUBISHA J	IICivil
2 27	960121103011	SWETHA S	IICivil
/ // 28	960121103302	ESAKKI PANDI K	IICivil
29	960121103303	JACOB ALLWIN R	IICivil



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30	960121103304	JEBISH J	llCivil
31	960121103305	MAGESH M	IICivil
32	960121103306	MARIA AJITH M	IICivil
33	960121103307	NIBIN N	IICivil
34	960121103308	RATHEESH C	IICivil
35	960121103310	SENTHIL KUMAR K	IICivil
36	960121103311	SUJIN P	IICivil
37	960121103312	VINU C	IICivil

J. <u>Remila</u> COURSE COORDINATOR

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J. Pemila course coordinator

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ANNAI VAILANKANNI COLLEGE OF ENGINERING AZHAGAPPAPURAM P O.KK DISTRICT, TAMILNADU 629 401 VALUE ADDED COURSE: WASTE MANAGEMENT COURSE CODE: VAC2K22CEWM

NAME OF THE STUDENT HITRA A ARTHIKA C SLNO VEAR/DEPT IV/CE III/CE RAMESH ELANGO R SAHAYA GREETES C SINDHU M ABISH R ANU DHARSHINI N III/CE III/CE DEVIS II/CE II/CE II/CE JACOB ALLWIN R JEBISH J MAGESH M II/CE IARIA AJITH M SENTHIL KUMAR

D-Kemila COURSE COORDINATOR

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DEPARTMENT OF CIVIL ENGINEERING VAC COURSE ON WASTE MANAGEMENT

MCQs on Waste Management

1. Waste removal system was established in which of the following cities for the first time?	
(a) Athens	
(b) Lahore	
(c) Paris	
(d) London	
2. Which of the following solid wastes describes the term 'Municipal Solid Waste'?	
(a) Toxic	
(b) Hazardous	
(c) Non-toxic	
(d) Non-hazardous	
3. Why is it difficult to recycle plastics?	
(a) It is very hard	
(b) It comes in different sizes	
(c) It is adhesive	



(d) It contains different types of polymer resins

4. Which of the following is done on an individual level? (a) Burning (b) Disposal (c) Recycling (d) Source reduction 5. Why is recycled paper banned for use in food containers? (a) Because it creates a lot of spaces (b) Because it creates contamination (c) Because paper can be used only one time (d) Because paper is very thick and can't cover the food containers 6. Which of the following plans is used as a waste management plan? (a) Plan for reuse (b) The integrated plan (c) Plan for recycling (d) Plan for reducing 7. The organic material of the solid waste will decompose (a) By the flow of water (b) By the soil particles (c) By the action of microorganisms (d) By oxidation 8. Which of the following wastes is called the Municipal Solid Waste (MSW)? fal Food wastes

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(b) Wood pieces
(c) Plastic cans
(d) All of the above
9. The process of burning municipal solid wastes under suitable temperature and conditions in a specific furnace is called
(a) Landfill
(b) Incineration
(c) Recycling
(d) Vermi composting
10. The burning of solid waste is not recommended because
(a) It is very costly
(b) It requires a lot of space
(c) It requires modern technologies
(d) It causes several environmental issues
11. When the organic matter present in the sanitary landfill decomposes, it generates
(a) Methane
(b) Nitrogen
(c) Hydrogen
(d) All of the above
12. Which of the following is the oldest and the most common method used to dump solid wastes?
(a) River

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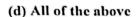
- (b) Ocean (c) Landfill
 - (d) None of the above
 - 13. The disposable wastes contain
 - (a) Solids
 - (b) Slurries
 - (c) Liquids
 - (d) All of the above
 - 14. Find the correct statement
 - (a) The waste from one process becomes the input for another process
 - (b) All the processes related to consumption and production produce some kind of waste
 - (c) There is no real waste in nature
 - (d) All of the above
 - 15. Which of the following methods is better for the solid waste problem?
 - (a) Recycling
 - (b) Landfilling
 - (c) Both a and b
 - (d) None of the above
 - 16. Which of the following statements is incorrect for plastic wastes?
 - (a) It is used to make compost
 - (b) It lasts for a longer period of time

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(c) Toxic fumes are produced when burnt

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- 17. Which of the following can be recycled many times?
- (a) Wood
- (b) Plastic
- (c) Aluminium
- (d) Organic materials
- 18. Which of the following gas is produced from landfill wastes?
- (a) Biogas
- (b) Natural gas
- (c) Liquified petroleum gas
- (d) All of the above
- 19. Which of the following statements is true about zero waste management?
- (a) Separate collection of each kind of waste
- (b) Segregation of garbage at the source
- (c) Community involvement
- (d) All of the above
- 20. How many main components are there in integrated waste management?
- (a) Two
- (b) Three
- (c) Seven
- (d) Eleven

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21. Amongst the following options of solid wastes, which one describes the term "Municipal Solid Waste"?

- a. Hazardous
- b. Toxic
- c. Non-hazardous
- d. Non-toxic
- 22. Which among the following is used to dump the waste collected in the cities?
 - a. Landfills
 - b. Oceans
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 - d. All of the above
- 23. Which of the following material can be recycled multiple times?
 - a. Aluminium
 - b. Wood
 - c. Organic Materials
 - d. Plastic
- 2 4. The gas produced from the landfill wastes is known as _____
 - a. Liquified Petroleum Gas
 - b. Natural Gas
 - c. Biogas
 - d. None of the above
- 25. Solid Waste Management has how many functional components?
 - a. Four
 - b. Five
 - c. Six
 - d. Three
- 26. What is the full form of ISWM?
 - a. Integrated Solid Waste Machine
 - b. International Solid Waste Management
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- 27. How many ways are there to treat the waste thermally?

a. 3

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KANYAKUMARI DIST.

b.	6
c.	
d.	
u.	3
	nich gas is generated on the decomposition of the organic matter present in the ry landfill?
a.	Oxygen
	Methane
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d.	Hydrogen
29. Id	entity the incorrect statement of the following given statements regarding
the pl	astic wastes.
	Plastic can be used to form compost
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30 H	ow many types of landfills are there?
a.	5
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	3
d.	4
	ow many major sources of solid waste are there based on their origin?
a) 10	,
b) 5	
c) 9 d) 6	
u) u	
32. W	hich of the below is not an idea behind solid waste management?
	ntrol of waste generation
	rage and collection
c) Dis	
d) Sto	p waste generation
33 TI	ne number of functional components of solid waste management is:
a) 5	Al I
b) 3	Marel
c) 6	COLLEGE
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1. By the flow of water

2. The soil particles

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3. The action of microorganisms

40. The organic material of the solid waste will decompose

4. By oxidation

3. Mercury 4. Mg

41. Eventually, the only solution for the treatment of e-waste, provided it is carried out in an environment-friendly manner, is:

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- 1. Incineration
- 2. Burying in landfill sites
- 3. Dumping in developing countries
- 4. Recycling
- 42. Why is plastic so difficult to recycle?
 - 1. It's a rigid material.
 - 2. Because plastic is inherently sticky,
 - 3. Due to different types of polymer resins
 - 4. Due to the different sizes of plastic
- 43. Identify the Wastes That Are Known as Municipal Solid Waste (MSW) from the following?
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 - 3. food waste
 - 4. all of the above
- 44. How Does an Organic Material Decompose in the Buried Solid Waste?
 - 1. By the action of microorganisms
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 - 3. By the soil particles
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- 4. Three
- 48. Which integrated waste management is reduced on an individual level?
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- 49. Which of the following statements is not true about plastic waste?
 - 1. Can be used to make organic fertilizer
 - 2. It lasts longer
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- 50. Which is the least preferred strategy of Integrated Solid Waste Management according to their Environmental benefits?
 - 1. Landfills
 - 2. Composting
 - 3. Waste to Energy
 - 4. Recycling

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DEPARTMENT OF CIVIL ENGINEERING VAC COURSE ON WASTE MANAGEMENT MCQs on Waste Management with answers

1. Waste removal system was established in which of the following cities for the first time?

	8
(a) Athens	
(a) Athens	

(b) Lahore

(c) Paris

(d) London

Sol:(a) Athens.

2. Which of the following solid wastes describes the term 'Municipal Solid Waste'?

(a) Toxic

(b) Hazardous

(c) Non-toxic

(d) Non-hazardous

Sol:(d) Non-hazardous.

3. Why is it difficult to recycle plastics?

(a) It is very hard

(b) It comes in different sizes

(c) It is adhesive

(d) It contains different types of polymer resins





- (b) It comes in different sizes
- (c) It is adhesive
- (d) It contains different types of polymer resins
- Sol:(d) It contains different types of polymer resins
- 4. Which of the following is done on an individual level?
- (a) Burning
- (b) Disposal
- (c) Recycling
- (d) Source reduction
- Sol: (d) Source reduction.
- 5. Why is recycled paper banned for use in food containers?
- (a) Because it creates a lot of spaces
- (b) Because it creates contamination
- (c) Because paper can be used only one time
- (d) Because paper is very thick and can't cover the food containers
- Sol: (b) Because it creates contamination.
- 6. Which of the following plans is used as a waste management plan?
- (a) Plan for reuse
- (b) The integrated plan
- (c) Plan for recycling
- (d) Plan for reducing



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Sol:(b) The integrated plan.	
7. The organic material of the solid waste will decom	pose
(a) By the flow of water	7.
(b) By the soil particles	
(c) By the action of microorganisms	
(d) By oxidation	
Sol:(c) By the action of microorganisms.	
8. Which of the following wastes is called the Municipa	al Solid Waste (MSW)?
(a) Food wastes	ar bond (vaste (MSW):
(b) Wood pieces	
(c) Plastic cans	,
(d) All of the above	
Sol:(d) All of the above.	
9. The process of burning municipal solid wastes under conditions in a specific furnace is called	suitable temperature and
(a) Landfill	
(b) Incineration	
(c) Recycling	
(d) Vermicomposting	
Sol: (b) Incineration.	
10. The burning of solid waste is not recommended beca	luse
(a) It is very costly	\mathcal{A}

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(b) It requires a lot of space (c) It requires modern technologies (d) It causes several environmental issues Sol:(d) It causes several environmental issues. 11. When the organic matter present in the sanitary landfill decomposes, it generates (a) Methane (b) Nitrogen (c) Hydrogen (d) All of the above Sol: (a) Methane 12. Which of the following is the oldest and the most common method used to dump solid wastes? (a) River (b) Ocean (c) Landfill (d) None of the above Sol:(c) Landfill. 13. The disposable wastes contain (a) Solids

(b) Slurries

(c) Liquids

(d) All of the above

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- 14. Find the correct statement
- (a) The waste from one process becomes the input for another process
- (b) All the processes related to consumption and production produce some kind of waste
- (c) There is no real waste in nature
- (d) All of the above

Sol:(d) All of the above.

- 15. Which of the following methods is better for the solid waste problem?
- (a) Recycling
- (b) Landfilling
- (c) Both a and b
- (d) None of the above

Sol: (a) Recycling.

- 16. Which of the following statements is incorrect for plastic wastes?
- (a) It is used to make compost
- (b) It lasts for a longer period of time
- (c) Toxic fumes are produced when burnt
- (d) All of the above

Sol: (a) It is used to make compost.

- 17. Which of the following can be recycled many times?
- (a) Wood
- (b) Plastic



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Sol:(c) Aluminum.
18. Which of the following gas is produced from landfill wastes?
(a) Biogas
(b) Natural gas
(c) Liquified petroleum gas
(d) All of the above
Sol:(a) Biogas.
19. Which of the following statements is true about zero waste management?
(a) Separate collection of each kind of waste
(b) Segregation of garbage at the source
(c) Community involvement
(d) All of the above
Sol:(d) All of the above.
20. How many main components are there in integrated waste management?
(a) Two
(b) Three
(c) Seven
(d) Eleven
Sol:(b) Three. POTTALKULAM P.C. AZHAGAPPAPURAM P.C. AZHAGAPPAPURAM P.C. PENNCIPAL
PRINCIPAL ANNAI VAILANKANNI COLLEGE OF ENGINEERING POTTALKULAM AZHAGAPFAPURAM - 629 401 KANYAKUMARI DIST.

(c) Aluminium

(d) Organic materials

21. Amongst the following options of solid wastes, which one describes the term	"Municipal
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- a. Hazardous
- b. Toxic
- c. Non-hazardous
- d. Non-toxic

Ans: c. Non-Hazardous

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Ans: a. Landfills

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 - c. Organic Materials
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- 2 4. The gas produced from the landfill wastes is known as _____
 - a. Liquified Petroleum Gas
 - b. Natural Gas
 - .c. Biogas
 - d. None of the above
- 2 5. Solid Waste Management has how many functional components?

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- a. Four
- b. Five
- c. Six
- d. Three

Ans: c. Six

26. What is the full form of ISWM?

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- a. Integrated Solid Waste Machine
- b. International Solid Waste Management
- c. International Solid Waste Mechanism
- d. Integrated Solid Waste Management

Ans: d. Integrated Solid Waste Management

- 27. How many ways are there to treat the waste thermally?
 - a. 3
 - b. 6
 - c. 2
 - d. 5

Ans. a. 3

- 28. Which gas is generated on the decomposition of the organic matter present in the sanitary landfill?
 - a. Oxygen
 - b. Methane
 - c. Nitrogen
 - d. Hydrogen

Ans: b. Methane

- 29. Identity the incorrect statement of the following given statements regarding the plastic wastes.
 - a. Plastic can be used to form compost
 - b. When we burn plastic, toxic fumes are released
 - c. These wastes last for a longer period of time
 - d. All of the above
- Ans. a. Plastic can be used to form compost
- 30.. How many types of landfills are there?
 - a. 5
 - b. 2
 - c. 3
 - d. 4

Ans. c. 3



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	31. How many major sources of solid waste are there based on their origin? a) 10 b) 5 c) 9 d) 6
	Answer: c
	 32. Which of the below is not an idea behind solid waste management? a) Control of waste generation b) Storage and collection c) Disposal d) Stop waste generation
	Answer: d
	 33. The number of functional components of solid waste management is: b) 3 c) 6 d) 4
	Answer: c
c	34. The term ISWM refers to: a) International Solid Waste Management b) Integrated Solid Waste Management c) Integrated Solid Waste Machine d) International Solid Waste Mechanism Answer: b
	5. There are ways to treat waste thermally.) 5) 3) 2) 6
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36.How many types of landfills are there? a) 3 b) 2 c) 5 d) 4
Answer: a
37. The WHO has classified the bio-medical waste into categories. a) 5 b) 4 c) 3 d) 2
Answer: b
38. Which gas produced in open dumps from the decomposition of biodegradable waste? a) Ethane b) Methane c) Propene d) Ethene
Answer: b
39. The newspaper contains one of the following toxic materials. it is
1. Cadmium

- 2. Pb
- 3. Mercury
- 4. Mg

Answer - b, Pb

- 40. The organic material of the solid waste will decompose
 - 1. By the flow of water
 - 2. The soil particles
 - 3. The action of microorganisms
 - 4. By oxidation

Answer - c, By the act of microorganisms



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41. Eventually, the only solution for the treatment of e-waste, provided it is carried out in an environment-friendly manner, is:

- 1. Incineration
- 2. Burying in landfill sites
- 3. Dumping in developing countries
- 4. Recycling

Answer - d, Recycling

42. Why is plastic so difficult to recycle?

- 1. It's a rigid material.
- 2. Because plastic is inherently sticky,
- 3. Due to different types of polymer resins
- 4. Due to the different sizes of plastic

Answer – c, Due to different kinds of polymer resins

43. Identify the Wastes That Are Known as Municipal Solid Waste (MSW) from the following?

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Answer - d, all of the above

44. How Does an Organic Material Decompose in the Buried Solid Waste?

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- 2. By the action of oxidation
- 3. By the soil particles
- 4. By the flow of water

Answer - a, by the action of microorganisms

45. Which of the following gases is generated when the matter inside the sanitary landfill breaks down?

- 1. Methane
- 2. Nitrogen
- 3. Hydrogen
- 4. All of the above

Answer - a, Methane

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46. Municipal solid wastes are burned in a properly designed furnace under suitable temperatures and operating conditions. This process is called as

- 1. Landfill
- 2. Incineration
- 3. Recycling
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Answer - b, Incineration

- 47. Solid Waste Management has how many functional components?
 - 1. Four
 - 2. Five
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 - 4. Three

Answer - c, Six

- 48. Which integrated waste management is reduced on an individual level?
 - 1. Burning
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- 49. Which of the following statements is not true about plastic waste?
 - 1. Can be used to make organic fertilizer
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KANYAKUMARI DISTRICT

All of the above

Answer - a, Can be used to make organic fertilizer

- 50. Which is the least preferred strategy of Integrated Solid Waste Management according to their Environmental benefits?
 - 1. Landfills
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4. Recycling

Answer - a, Landfills

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DEPARTMENT OF CIVIL ENGINEERING VAC COURSE ON WASTE MANAGEMENT

MCQs on Waste Management

-
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2. Which of the following solid wastes describes the term 'Municipal Solid Waste'?
(a) Toxic
(b) Hazardous
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3. Why is it difficult to recycle plastics?
(a) It is very hard
(b) It comes in different sizes
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Twhich of the following is done on an individual level?

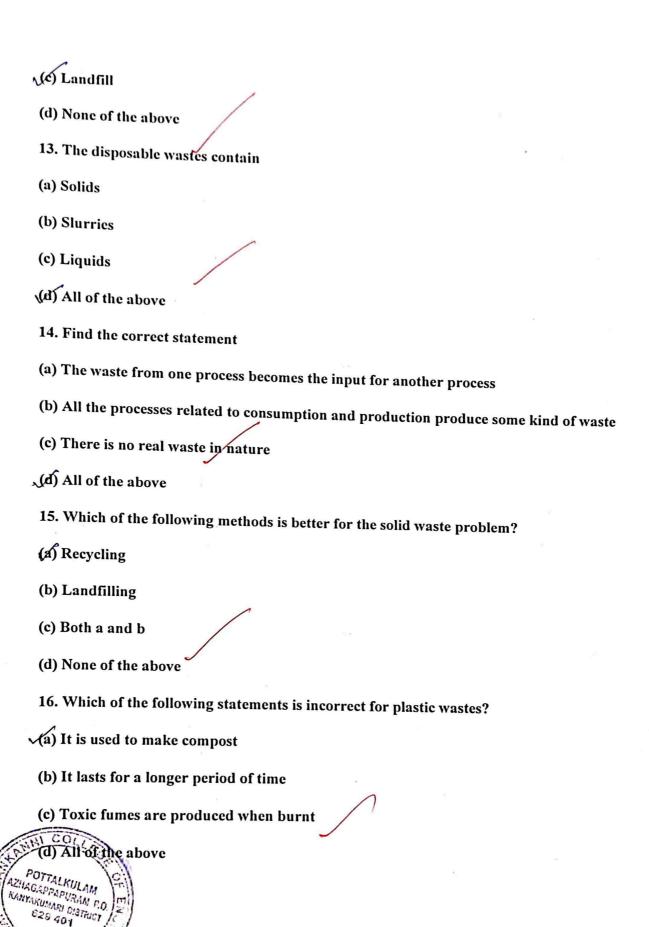
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(a) Burning
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(a) River	
(b) Occan College Coll	



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ANNAI VAILANKANNI COLLEGE OF ENGINEERING AZHAGAPPAPURAM.P.O,KK DISTRICT,TAMIL NADU -629 401 VALUE ADDED COURSE: WASTE MANAGEMENT COURSE CODE: VAC2K22CEWM

SLNO	NAME OF THE STUDENT	YEAR/DEPT	MARKS(100)
1	CHITRA A	IV/CE	90
2	KARTHIKA C	IV/CE	82
3	LAKSHMI E	IV/CE	100
4	SUBINRAJ T	IV/CE	90
5	UMA R	IV/CE	100
6	RAJAN K	IV/CE	85
7	JENIN C	III/CE	95
8	SNEKA C	III/CE	100
9	THANESH KUMAR R	III/CE	100
10	ALEX J	III/CE	85
11	AYNASH JOSHUA T	III/CE	80
12	BALA MURUGAN R	III/CE	95
13	ESAIKUMAR J	III/CE	85
14	PRINCE P R	III/CE	80
15	PRINCY CHERIYAN	III/CE	100
16	RAMESH ELANGO R	III/CE	85
17	SAHAYA GREETES C	III/CE	85
18	SINDHU M	III/CE	95
19	ABISH R	II/CE	85
20	ANU DHARSHINI N	II/CE	90
21	BAVI K	II/CE	100
22	DEVI S	II/CE	100
23	JESHIKA S	II/CE	100
24	PAVITHRA K	II/CE	100
25	SNEHA N	II/CE	92
26	SUBISHA J	II/CE	92
27	SWETHA S	II/CE	92
28	ESAKKI PANDI K	II/CE	95
29	JACOB ALLWIN R	II/CE	98
30	JEBISH J	II/CE	82
31	MAGESH M	II/CE	86
32	MARIA AJITH M	II/CE	78
33	NIBIN N	II/CE	95
34	RATHEESH C	II/CE	92
35	SENTHIL KUMAR K	II/CE	98
36	SUJIN P	II/CE	86
37	VINU C	II/CE	96

COURSE COORDINATOR

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POTTALKULAM

AZHAGAPPAPURAM - 629 401

KANYAKUMARI DIST.



Annai Vailankanni College of Engineering (Approved by AICTE & Affiliated to Anna University, Chennai)

AV.K.Nagar, Azhagappapuram(P.O), Kanyakumari District-629 401.

Certificate	
This is to certify that Mr/Mska.C	
ofAnnai Vailankanni College of Engineuring	
has attended the Course on	
during the academic Year 20 <u>22</u> -20 <u>23</u>	
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Certificate	
This is to certify that Mr/Mska • C	
of Annai Vailankanni College of Engineering	
has attended the Course on Waste Management	
during the academic Year 20 <u>22</u> -20 <u>23</u>	
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CO-ORDINATOR HOD	7. Your
CO-ORDINATOR HOD	PRINCIPAL

DEPARTMENTOFCIVIL ENGINEERING

FEEDBACK

(ValueaddedCourse Training)

Na	nncoftheProgram	:		Cer	tificateC	ourseTraini	ng
To	pic	:	Waste	Mana	geme	nt	
Da	ite:		1 8 8088		<u> </u>	Time:	9.00 am - 4.00 s
Ye	ar	:			1/11/111/	₩/Others	•
1.	Thequality of the course	econ	tent:	1			
	5. Excellent	√ 4.	VeryGood	3.Good	2. Satis	sfactory	1. Poor
2.	Thesequenceofthe Tra	inin	g plan:				
	√5. Excellent	4.	VeryGood	3.Good	2. Satis	sfactory	I.Poor
3.	YourExpectationand le	evelo	oftheTraining	:			
	5. Excellent	A.	VeryGood	3.Good	2. Satis	sfactory 1	I.Poor
4.	Interaction/ Hands-on	Sess	ionsofthefacı	ulty:			
	√5 . Excellent	4.	VeryGood	3.Good	2. Satis	sfactory	I.Poor
5.	Thequalityof coursema	ateri	al:				
	5. Excellent	4.	VeryGood	3.Good	2. Satis	sfactory	I.Poor
6.	Thetrainingwasclear a	ndea	syunderstan	d:			
	8. Excellent	4.	VeryGood	3.Good	2. Satis	sfactory	I. Poor
7.	Suggestionforimprove	men	tifany	: Mos	e val	ue add	led course
	training	3	Can be	- Cond	ucted	J.	
8.	Overallratingaboutcert	ifica	tecourseValı	ueaddedCoi	urse Tra	ining	:
AN	5. Excellent	4.	VeryGood	3.Good	2. Satis	sfactory	1.Poor
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AZHAGAPPAPURAM - 629 401
KANYAKUMARI DIST.

Name& Signatureofthe Participant



ANNAI VAILANKANNI COLLEGE OF ENGINEERING

(Approved by AICTE & Affiliated to Anna University, chennai)

AVK Nagar, Pottalkulam, Azhagappapuram P.O, Kanyakumari District -629401

REPORT ON BRIDGE COURSE PROGRAM – 2022-2023

As a part of identifying the skills of our students, they were asked to choose one skill related to the arts whether visual arts or performing arts. They were given chance to perform their art and skills like oratory, essay writing, poem composing, quiz, drawing, painting, sculpture, pottery, music, dance etc. And the names of students were segregated into different groups based on their interests and talents.

COMPETITIONS:

Eleven groups were formed to encourage the skills of our students and they were encouraged to improve their skills and they were brought to the dais to perform their skills. As a part of improving their skills, it was decided to conduct competitions to them based on their interests. Students were very interested in enrolling their names to participate in various competitions such as elocution, essay writing, poem composing, quiz, drawing, painting, singing and dance.

We have planned and conducted eleven competitions to find out the skills and bring out them. So, competitions on Drawing, Painting, Essay Writing in Tamil, Essay Writing in English, Poem Composing in Tamil and Poem Composing in English have been conducted.

DRAWING AND PAINTING COMPETITIONS:

Forty- five students chose drawing as their interested skill and enrolled their names to participate in drawing and painting competitions but only 18 students participated.

ESSAY WRITING COMPETITIONS:

HAGAPPAFURAM P.O ANYAKUMARI DISTRICT

Twenty-seven students prefer the skill, "Art of Writing Essays". Seventeen students enrolled their names for Essay Writing Competitions in Tamil and 27 students for Essay Writing Competitions in

English.

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POEM COMPOSING COMPETITIONS:

Fifteen students were able to identify their poem composing skill and all of them enrolled their names to participate in the poem composing competition. All of them decided to participate in both Tamil and English Poem Composing Competitions.

Contents of Bridge Course

- 1. DANCE (SOLO)
- 2. DANCE (GROUP)
- 3. SONG (SOLO)
- 4. SONG (GROUP)
- 5. ELOCUTION (TAMIL)
- 6. ELOCUTION (ENGLISH)
- 7. DRAWING
- 8. POETRY WRITING
- 9. QUIZ
- 10. BASIC GRAMMAR & SPOKEN ENGLISH

Finally the valedictory program was held on 28-11-2022 in the afternoon session external judges Mr. Robert and Mrs.Sweety have judged the program and the selection list was finalised, at last the program came to an end at 3.30 pm.

COORDINATOR

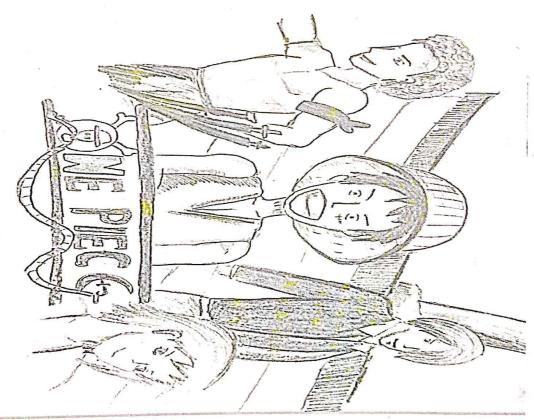
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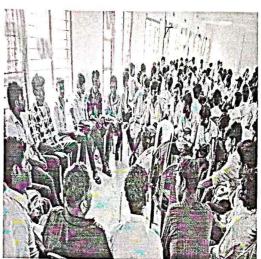
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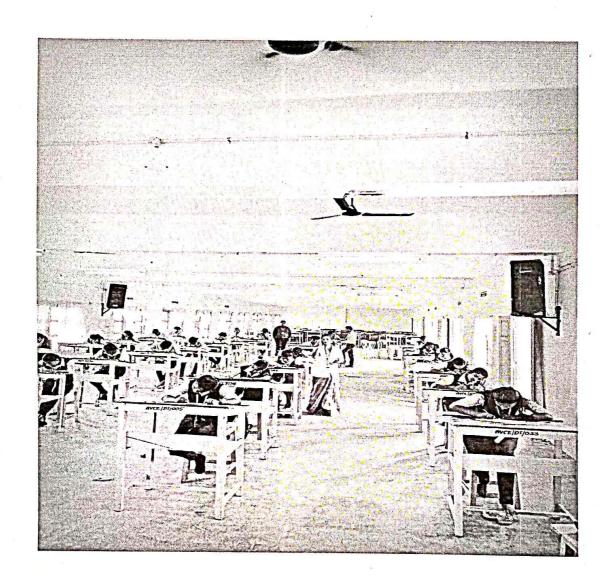








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Basic Grammar & Spoken English Questions

Questions to motivate spoken English

- How will you introduce yourself?
- Describe your hometown/village
- Write a few sentences about a person you admire.
- Write a few sentences about your favourite subject
- What are the advantages and disadvantages of watching television?
- How will you direct a person to Annai Vailankanni College of Engineering from Chennai?

Frame questions for the given sentences

- I went to the beach yesterday.
- Reading is my hobby
- The class was good
- Columbus discovered America

Spot the error in the following sentences

- The taste of pepper and salt were overpowering
- Everything except the flowers are ready

- He is one of those people who never listens to reason
- Bread and butter are a favoured breakfast

Choose the correct synonyms

Choices	Associate/ Enemy/ Companion/ Acquaintance	Able/ Capable/ Sufficient/ Scarce	Dull/ Apathy/ Zenith/ Enthusiasm	Invisible/ Incapable / Unavoidable/
Onestion	Comrade	Ample	Zeal	Inevitable
	а	q	O	

Inedible

Choose the correct antonyms

SI, No	Questron	Chojees
G	Agony	Pain/Peace/Ecstasy/ Serenity
9	Attract	Subtract/Repel/Draw/Pull
O	Fertile	Lush/ Abundant/ Rich/ Barren
q	Unique	Common/ Sole/ Exclusive/
	William of the first little parties of the state of the s	aigilic

Read the passage and answer the questions given below

southern part of _ unique nation Indian subcontinent is peninsula in India is Asia.

Insert the correct preposition

the importance _planning. forecasting is apparent key role it plays The need

Write the jumbled sentences in the correct order

- a)It was first founded by Xia Dynasty.
- b) And, it was only in 1949 that the republic of China came into its current form.

- c) China is one of the oldest countries in the world.
- unified most parts of present day China. d) It was in 221 BC that the Qin Dynasty

Expand the following abbreviations

a)UNO b)UPSC c)CBI d)ISRO

Write the one word substitutes for the following

- Government of the people, by the people, for the people
- A book containing information on all branches of knowledge
- A place where fruit trees are grown
- One who looks on the bright side of the things

Cloze Test

deciding to call 'heads' or 'tails' when a coin is (b) Decision making without considering the (a) like

energy in all directions. Part of this radiation is greenhousegases, the atmosphere will radiate The greenhouse effect is the process by which what it would be without its atmosphere. If a radiation from a planet's atmosphere warms the planet's surface to a temperature above directed towards the surface, warming it. planet's atmosphere contains

Cont...

supporting life. Human activities, primarily the Earth's natural greenhouse effect is critical to burning of fossil fuels and clearing of forests, have intensified the natural greenhouse effect, causing global warming.

a) What is greenhouse effect?

b)What has led to global warming?

Fill the correct articles in the blank

may be very easy. What is particularly (c) is to make a good decision. A good (d) is based on a choice of calculated alternatives based on judgement.

(i) everything (ii) alternatives (iii) judgement (iv) decision

(i) thrown (ii) caught (iii) found (iv) tossed

(i) thoughtful (ii) opinionated (iii) difficult (iv) entertaining (i) decision (ii) opinion (iii) judgement (iv) idea

Choose the correct analogy

– Eat : Rice

i) Drink : Juice ii)Coffee : Tea iii)Pepper : Salt iv)Sit

:Stand

– Pianist : Piano

i)Listen: Music ii)Play: Instrument iii)Guitarist:

Guitar iv)Compose: Songs

– Table : Carpenter

i)Grass : Florist ii)Medicine : Doctor iii)Dress : Tailor

iv)Bridge: Teacher

– Bread : Butter

i)Coffee: Tea ii)Idly: Chutney iii)Sugar: Salt iv)Sweet : Sour Fill in the blank with the missing

tense forms

Past Partifeiple			sought
Past		gave	
Present	know	cut	
	ر م		þ

Fill in the blanks with the correct homonym

- _ (principle, principal) is a man of 1. The
- students are given coaching every

(week, weak)

the flour (need, knead)

(night, knight) was honoured at

A Seli

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CERTIFICATE

of PARTICIPATION

This is to Certify that Ms. M. SELVA BHARATH

TST VEAR ECE

-has actively participated in the Program 8KILL DEVELOPMENT - "DRAWING COMPETITION" held at Annai Vailankanni

College Of Engineering on <u>এ৪নাণ এ০এঝ</u>

Coordinator

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TSt YEAR CSE

-has actively participated in the Program

COMPETITION Pheld at Annai Vailankanni College Of Engineering on <u>এ৪০০০ এ১৯৯</u> SKILL DEVELOPMENT-COULT

Coordinator

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3.	ABINESH N	
4.	ANITHA A ANUSIYA M	
5.	ARCHANA T	
6.	ARI VENKATESH N	
7.	AROCKIA JOE A	
8.	AROCKIA REJALDO R	
9.	DEEPAK B	
10.	DEVIKA V	
11.	DONI D	
12.	ESAKIAMMAL P	
13.	EZHILAN M	
14.	GANESH M	
15.	JOSEWA A	
16.	KALIYAMMAL M	
17.	KARAN M	
18.	KARTHEESAN S	
19.	KRITHIKA B	
20.	LIVIN RAJ P	
21.	MADHAN RAJ M	
22.	MADHUMITHA M	
23.	MADHU PRIYA G	
24.	MAHALAKSHMI T	
25.	MARIA SARANYA J	
26.	MATHAN P	
27.	MUTHUMARI M	
28.	POOJA T	
29.	PUVANESWAR M	
30.	RABEENA R	
31.	RAMEENA R	
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<u> </u>	39.	SIVAGAMI G
-	40.	SUJI S
-	41.	TAMIZH SELVAN A
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-	43.	THRISA S
 	44.	VICTORIYA J
-	45. 46.	VINOSHA V
-	47.	VISHNU S
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	51.	CHANDRA G
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		GLARANCE WISEMAN M
		GODLIN SHARON W
		ISSAAM RATIB T U
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57		KATHIRVEL G
58		KAVIYA T
59		MARUTHESH S
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88.	ALDRINE JASCO S V
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98.	KALINE RIO SYLVIA D
99.	KANISH M
100.	KAVIYA J
101.	KIRUTHIKA B
102.	KITHERI SAHAYA MILCY T
103.	KRISHNA KUMAR
104.	MAHESH B S
105.	MAHESWARI M
106.	MINI GLADIS V
107.	MOSES L
108.	NISHANTH M A
109.	PON SUMILY P
110.	PRATHIPA A
111.	RABINESH R
112.	RATHISAN R
113.	SABINESH V
	SATHA SINGH M
114.	SENTHIL M
115.	SHAMA PRASAD R T
116.	SHAWAT I ICLO. 12
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117.	SIVA A M	
118.	SIVA PRANESH R	
119.	VEERSATH M	1
120.	VENICE K EBANEZAR K	1
121.	INBA MUKILA	1
122.	JENIFER J	1
123.	RANFANT JOSE SAJUNA S	
124.	SIVA BHARATH S	7
125.	SURESH A	-
126.	BALA MURUGAN M	
127.	CHRISTAL SUBITHA O	-
128.	MALATHY B	
129.	MALLIKA S	
130.	NISHA A	
131.	SAHAYA KALAI SELVI B	
132.	SELVA SUTHA A	
133.	SIVAKAMI S	-
134.	ANISH.S	*********
135.	ANISHA.A	
136.	ANITHA.M	
137.	ASHA.D	
138.	ASHIKA.M	
139.	ASWATHI.M	
140.	BAVITHRA.K	

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