



SASURIE COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi. Affiliated to Anna University, Chennai

Near NH544, Coimbatore Bypass, Near Vijayamangalam Tollgate, Tirupur 638056

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION - 1

CURRICULAR ASPECTS

SUBMITTED BY



INTERNAL QUALITY ASSURANCE CELL

SASURIE COLLEGE OF ENGINEERING





1.2 AcademicFlexibility(30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	GEC	ENVI	ENVIRONMENTAL ENGINEERING AND REMEDIATION											
		Er.S.E	Balasubran	nani,		Er.S.K	Karthikeyan,							
Resource Pe	rson:	Direct	or,			Prop	rietor,							
		Sri Ka	ımalam Co	onstruction,			amalam Coi	nstruction,						
		Tirupı	ır - 64160		Tirupur - 641602									
Dat e of con	duct f	rom:	10.12.20	18	To:	14.12	2.2018	Duration:	30H	ours				
Organized I)epart	ment:	CIVILE	NGINEERI	NG	1			<u>I</u>					
Participant		2/3/4		Semester:	E	VEN	No of Stu	donta		68				
Year:		41314		Semester:	E	A IDIA	No. of Students Registered:			UO				
Venue: Le	cture	hall of	II & III y	ear CIVIL										

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Ref: SCE / CIVIL /Students / VAC / 2018 - 2019 / EVEN

03.12.2018

CIRCULAR

In order to bridge the curricular gap between the Academic Syllabus and Industry requirements, Department of Civil Engineering and IQAC of our Institution in association with Sri Kamalam Construction, is organizing a Value Added Course (VAC) for the students of II, III and IV year of CIVIL on the title "Geoenvironmental Engineering and Remediation" from 10.12.2018 to 14.12.2018. At the end of the VAC, course completion certificates will be issued to the eligible participants as per the following norms.

Students, who are securing more than 70% on total score in the VAC test and secured
more than 75% in VAC attendance is eligible to receive the course completion certificate for
the VAC attended.

Resource Person	Er.S.Balasubramani,	Er.S.Karthikeyan,				
Resource I erson	Director,	Proprietor,				
Details	Sri Kamalam Construction,	Sri Kamalam Construction,				
	Tirupur - 641602	Tirupur - 641602				
Venue	Lecture hall of II & III year C	IVIL				

P. PO BILLS
HOD/CIVIL

PRINCIPAL

Copy to:

- 1. Chairman & Secretary for information
- 2. Principal office
- 3. IQAC Co-Ordinator
 - 4. Class In charges II, III & IV-Year CIVIL
 - 5. II, III & IV-Year CIVIL Students
 - 6. CIVIL Notice Board
 - 7. Department File



Ref: SCE / CIVIL /Students / VAC / 2018 – 2019 / EVEN

03.12.2018

SYLLABUS - VALUE ADDED COURSE"Geoenvironmental Engineering and Remediation"

From 10.12.2018 to 14.12.2018 (5 days)

Duration: 30 Hours

Academic Year: 2018-2019/EVEN

S.No.	Topics Covered	Duration (In Hours)	Date
1	Introduction to Geoenvironmental Engineering	3	10.12.2018
2	Site Characterization Techniques	+ 3	10.12.2018
3	Contaminant Transport in Soils	3	11.12.2018
4	Geosynthetics in Remediation	3	11.12.2018
5	In-situ Remediation Technologies	3	12.12.2018
6	Landfill Design and Management	3	12.12.2018
7	Ground Improvement Techniques for Remediation	3	13.12.2018
8	Risk Assessment and Management in Geoenvironmental Projects	3	13.12.2018
9	Case Studies in Geoenvironmental Remediation	3	14.12.2018
10	Environmental Impact Assessment (EIA)	3	. 14.12.2018
	Total Hours	30	· · · · · · · · · · · · · · · · · · ·

After successful completion of 30 Hours VAC, the assessment test for the VAC titled "Geoenvironmental Engineering and Remediation" will be conducted on 14.12.2018.

VAC Coordinator

Waxhyg for

HoD/CIVIL

Dr.M.VIJAYAKUMAR ME., Ph.D.
PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,

Vijayamangalam - 638 056, Tirupur (Dt).



STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

"Geoenvironmental Engineering and Remediation"

From 10.12.2018 to 14.12.2018 (5 days)

Duration: 30 Hours

Academic Year: 2018-2019/EVEN

S.No.	Reg No.	Name of the Student	Year /* Branch
1.	732417103001	BASKARAN K	II/CIVIL
2.	732417103002	GAYATIIRI N	II/CIVIL
3.	732417103003	GOWTHAM P	II/CIVIL
4.	732417103004	LAVANYA M	II/CIVIL
5.	732417103005	NAVEENA S	II/CIVIL
6.	732417103006	NIVETHA S	II/CIVIL
7.	732417103007	SANGAR G	II/CIVIL
8.	732417103008	SURYA N	II/CIVIL
9.	732417103009	THARUNKUMAR J	II/CIVIL
10.	732417103010	VAISHNAVI P	II/CIVIL
11.	732417103011	VALLARASU M	II/CIVIL
12.	732417103012	VIJAY S	II/CIVIL
13.	732416103003	ARUN KUMAR B	III/CIVIL
14.	732416103004	BHARATHI S K	III/CIVIL
15.	732416103005	BISMIYA BASHEER	III/CIVIL
16.	732416103006	CHANDHRIII.	III/CIVIL
17.	732416103007	CHANDRU K M	III/CIVIL
18.	732416103008	ELLAPPARAJ P	III/CIVIL
19.	732416103009	HARISH P	III/CIVIL
20.	732416103010	KURALARASAN S	III/CIVIL
21.	732416103011	MAGESHWARAN M	III/CIVIL
22.	732416103012	MAHENDIRAN P	III/CIVIL
23.	732416103013	MANIMARAN V	III/CIVIL
24.	732416103015	PRAVEENA T	III/CIVIL
25.	732416103016	RANJITHKUMAR G	III/CIVIL
26.	732416103017	RINSHA K P	III/CIVIL
27.	732416103018	SAKTHISUBRAMANI K	III/CIVIL
28.	732416103019	SENTHILNATHAN G	III/CIVIL
29.	732416103020	SIVARAMACHANDRAN N	III/CIVIL
30.	732416103021	SOUNDARYA S	III/CIVIL





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STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

S.No.	Reg No.	Name of the Student	Year / Branch
31.	732416103022	SUBASH P	III/CIVIL
32.	732416103023	VIGNESH V NAIR	III/CIVIL
33.	732416103024	VIJAYAPANDI V	III/CIVIL
34.	732416103025	VIKRAMAN C	III/CIVIL
35.	732416103301	SATHISH KUMAR S	III/CIVIL
36.	732416103501	PRIYANKA J	III/CIVIL
37.	732416103503	PRAVEEN KUMAR A	III/CIVIL
38.	732416103701	MAYAKARUPPU K	III/CIVIL
39.	732415103001	AJITH K A	IV/CIVIL
40.	732415103002	AJITH KANNAN V	IV/CIVIL
41.	732415103003	AMARESAN E	IV/CIVIL
42.	732415103005	DEVENDIRAN P	IV/CIVIL
43.	732415103006	GOKULAVANI A	IV/CIVIL
44.	732415103007	GOPI RAJ G	IV/CIVIL .
45.	732415103008	GOWRIVELMUGUNTHAN AE	IV/CIVIL
46.	732415103009	GOWTHARAMAN P	IV/CIVIL
47.	732415103010	INDHUREKA N	IV/CIVIL
48.	732415103011	KALAIVANAN M	IV/CIVIL
49.	732415103012	KAMALNATH S	IV/CIVIL
50.	732415103013	KRISHNAROOBINI J	IV/CIVIL
51.	732415103014	MANORANJITHAM G	IV/CIVIL
52.	732415103015	MELARASAN V	IV/CIVIL
53.	732415103017	MUTHURAM K	IV/CIVIL
54.	732415103018	NARASHIMMAN R	IV/CIVIL
55.	732415103019	POOVENDHIRAN V	IV/CIVIL
56.	732415103021	RAMYASRI A	IV/CIVIL
57.	732415103022	SAMBATH RAJA M	IV/CIVIL
58.	732415103023	SANTHOSH KUMAR S	IV/CIVIL
59.	732415103024	SANTHOSH P	IV/CIVIL
60.	732415103025	SARAVANAN G	IV/CIVIL
61.	732415103026	SATHASIVAM M	IV/CIVIL
62.	732415103027	SELVAGANAPATHY S	IV/CIVIL
63.	732415103028	SHANMUKASUNDARAM R	IV/CIVIL
64.	732415103029	SURIYAPANDI K	IV/CIVIL
65.	732415103030	SURYA KUMAR S	IV/CIVIL
66.	732415103031	SWAPNA M	IV/CIVIL







STUDENTS PARTICIPATION LIST - VALUE ADDED COURSE

S.No.	Reg No.	Name of the Student	Year / Branch
67.	732415103032	VEERAMANI E	IV/CIVIL
68.	732415103302	VIGNESH U	IV/CIVIL

Dalygopel VAC Coordinator R. Part



STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

"Geoenvironmental Engineering and Remediation"

From 10.12.2018 to 14.12.2018 (5 days)

Duration: 30 Hours

Academic Year: 2018-2019/ EVEN

S.No	Reg No.	Name of the Student	Year/	10.12	2.2018	11.12	.2018	12.12	2.2018	13.12	2.2018	14.12	2.2018	No. of Hours	Signature of the
			Branch	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	Attended	Student
1.	732417103001	BASKARAN K	Iİ/CIVIL	06	1	1	1	1	1	1	1	1	1	27	K. Barb.
2.	732417103002	GAYATHRI N	II/CIVIL	1	1	1	1	1	1	1	1	1	1	30	N. Grove Outrai
3.	732417103003	GOWTHAM P	II/CIVIL	1	1	1	a	1	1	1	a	1	1	24	D. Gred
4.	732417103004	LAVANYA M	II/CIVIL	1	1	1.	1	1	1	1	1	1	a	27	H. Lavarya
5.	732417103005	NAVEENA S	II/CIVIL	1	1	1	1	1	1	1	1	1	1	30	8. Nanha
6.	732417103006	NIVETHA S	II/CIVIL	1	1	1	1	a	1	1	1	1	1	27	S.Nevaltre
7. 1	732417103007	SANGAR G	II/CIVIL	1	1	1	1	1	1	1	1	1	1	.30	Songar
8.	732417103008	SURYA N	II/CIVIL	1	1	1	1	1	1	a	1	1	1	27	Swya
9.	732417103009	THARUNKUMAR J	II/CIVIL	1	1	(1	1	i	(1	1	1	30	Jan
10.	732417103010	VAISHNAVI P	II/CIVIL	1	1	a	1	1	1	1	1	a	1		vaishaviul
11.	732417103011	VALLARASUM	II/CIVIL	1	1	1	1	1	1	a	1	1	1	27	land
12.	732417103012	VIJAY S	II/CIVIL	1	1	1	1	1	1	1			,	30	SVan
13.	732416103003	ARUN KUMAR B	III/CIVIL	(1	1	1	a	f	1	Ì	1	i	27	Anun K





STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

\$.No	Reg No.	Name of the Student	Year/ Branch	10.13	2.2018	11.12	2018	12.12	2.2018	13.1	2.2018	14.12	2.2018	No. of Hours	Signature of the
1.4				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	Attended	Student
14.	732416103004	BHARATHI S K	III/CIVIL			1	1	9	1	1	1	1	1	30	Bhoods
15.	732416103005	BISMIYA BASHEER	III/CIVIL		1	a	1	1	1	1.	1	1	1	27	D.
16.	732416103006	CHANDHRU L	III/CIVIL	1	1	1	1	a	1	9	1	1	1		10
17.	732416103007	CHANDRU K M	III/CIVIL	1	1	1	P	1	1	,		,	,	24	2. with
18.	732416103008	ELLAPPARAJP	III/CIVIL	1	1	1	a	1	1	a	A	,	1	30	Chand
9.	732416103009	HARISH P	III/CIVIL	1	1	-	1	1	2	4	,	/	/	24	May Rom. P
0.	732416103010	KURALARASANS	III/CIVIL	1	1	((/	1	1	30	Pottered
1.	732416103011	MAGESHWARAN M	III/CIVIL		1	-			!	/_	/	1	1	30	Kuls
2.	732416103012	MAHENDIRAN P			1	(1	- (1	1	1	30	Marrostinay
3.	732416103013	MANIMARAN V	III/CIVIL				a		1			1	1	27	muy
4.	732416103015	PRAVEENA T	III/CIVIL		1	(1	1			1	1	1	30	M. Maril
5.	732416103016		III/CIVIL		1	9	1	1	1	9	1	1	1	24	T. Poul
6.		RANJITHKUMAR G	III/CIVIL	1	1		1	1	1	1	1	1	1	30	Gr. Ransistan
	732416103017	RINSHA K P	III/CIVIL		1	a	1	1	1	t	a	1	,	24	Brook . K
7.	732416103018	SAKTHISUBRAMANI K	III/CIVIL		1	1	1		1	,	1	-	v		Symatol
8.	732416103019	SENTHILNATHAN G	III/CIVIL	1	1	1	a	1	1	,	,	,	,	20	Southisons
9.	732416103020	SIVARAMACHANDRAN N	III/CIVIL			,	1	a	1	^-	/_	/	/		Survey
0.	732416103021	SOUNDARYA S	III/CIVIL	-		(1	4	1	9	- /-	/ /	1	24	5W/09/001019
1.	732416103022	SUBASH P	HI/CIVIL	9	,				/	/	1	/	1	30	Rafi to allage
2.	732416103023	VIGNESH V NAIR		-	(a		1	a	/	11	1	1	24	P. Subach.
		TO THE TAXABLE PROPERTY.	III/CIVIL		(1	1	1	1	1	1	1	1	30.	hogres wels x





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STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

S.No	Reg No.	Name of the Student	Year/ Branch	10.12	2.2018	11.12	.2018	12.12	2.2018	13.12	2.2018	14.12	2.2018	No. of Hours	Signature of the
			Branch	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	Attended	Student
33.	732416103024	VIJAYAPANDI V	III/CIVIL	1	1	a	1	1	1	1	1	1	1	24	Frijagnin
34.	732416103025	VIKRAMAN C	III/CIVIL	1	1	1	1	1	1	1	1	1	1	30	Vi
35.	732416103301	SATHISH KUMAR S	IİI/CIVIL	1	1	1	a	0	1	1	a	1	1	24	SIL
36.	732416103501	PRIYANKA J	III/CIVIL	1	1	1	1	1	1	1	1	1	1	24-	
37.	732416103503	PRAVEEN KUMAR A	III/CIVIL	1	,	1	1	1	1	1	1	1	1	30	A pramehologo
38.	732416103701	MAYAKARUPPU K	III/CIVIL	,	1	1	1	1	1	1	0	1	1	24	13. May
39.	732415103001	АЛТНКА	IV/CIVIL	1	1	1	1	1	1	1	1	1	1	30	.00
40.	732415103002	AJITH KANNAN V	IV/CIVIL	1	1	1	1	,	1	1	,	,		20	4
41.	732415103003	AMARESAN E	IV/CIVIL		1	1	1	1	1	1	1	1	1		Ajith Koum
42.	732415103005	DEVENDIRAN P	IV/CIVIL	1	1	1	1	1	1	1	1	1)	30	Amar
43.	732415103006	GOKULAVANI A	IV/CIVIL		1	ì		1	1	1	1	1	1		P. Bevendiran
44.	732415103007	GOPI RAJ G	IV/CIVIL		1	a	1	,	1	,	3	,	1	30	Grobal. A.
45.	732415103008	GOWRIVELMUGUNTHAN AE	IV/CIVIL	1	,	1	1		1	1	1	,	1	27	Croperfay
46.	732415103009	GOWTHARAMAN P	IV/CIVIL			1	0		1	d	1	1	1,	30	gout
47.	732415103010	INDHUREKA N	IV/CIVIL	-		6	7	-		4		1	1	24	P. Ofour
48.	732415103011	KALAIVANAN M	IV/CIVIL	1	1	C	1	a	1	a	1	1	,	30	Induraka. N
49.	732415103012	KAMALNATH S	IV/CIVIL	7	1	^	1	~	,	1			-/-	24	Kaliz .tl
50.	732415103013	KRISHNAROOBINI J	IV/CIVIL	1	P	-		1	1		,	1	/	30 (S. Jeans!
51.	732415103014	MANORANJITHAM G	IV/CIVIL)	•	,			,		1	1	1	30	Kom
			OI VIL								/	/	1	30	many







STUDENTS ATTENDANCE LIST - VALUE ADDED COURSE

S.No	Reg No.	Name of the Student	Year/	10.1	2.2018	11.12	2.2018	12.12	2.2018	13.12	2.2018	14.12	2.2018	No. of Hours	Signature of the
			Branch	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	Attended	Student
52.	732415103015	MELARASAN V	IV/CIVIL	1	a	1	1	1	1	1	1	1	1	24	V. malde
53.	732415103017	MUTHURAM K	IV/CIVIL	1	1	19	1	1	1	1	,	1	1	30	Muthuram. V
54	732415103018	NARASHIMMAN R 1	IV/CIVIL	1	1	1	a	1	1	1	a	1	1	24	
55.	732415103019	POOVENDHIRAN V	IV/CIVIL	1	1	a	P	1	1	1	1	1	3	24	R. Naw.
56.	732415103021	RAMYASRI A	IV/CIVIL	1	1	P	1	1	1	,	1	2	1	36	
57.	732415103022	SAMBATH RAJA M	IV/CIVIL	1	1	1	1	a	1	1	1	1	1	27	Share
58.	732415103023	SANTHOSH KUMAR S	IV/CIVIL	6		•		1	1	,	,	1	1		M. Sentos
59.	732415103024	SANTHOSH P	IV/CIVIL	1	1		,	,		-	1	1	1	30	South 15.
60.	732415103025	SARAVANAN G	IV/CIVIL	1	9	r		1		1	,	,	1	30	Santhor, P
61.	732415103026	SATHASIVAM M	IV/CIVIL	1	1	1	1	1				,	/	30	Sevencinan, Ci
62.	732415103027	SELVAGANAPATHY S	IV/CIVIL	A	1		1	1	-			1	/,	30	Satheren
63.	732415103028	SHANMUKASUNDARAM R	IV/CIVIL	C	1	1.	1	1	a	- 1	1	. ,	,	30	Shamy
64.	732415103029	SURIYAPANDI K	IV/CIVIL	1	(1	1	1	1	1	1	1	1		(quine)
65.	732415103030	SURYA KUMAR S	IV/CIVIL	1	1		a	1	1	a	1	,	1	30	
66.	732415103031	SWAPNA M	IV/CIVIL	1		1	1	A	1	1	,	4	1	24	800
67.	732415103032	VEERAMANI E	IV/CIVIL	1		1	1	1	1	a	1	a	1	30	lumpera. M
68.	732415103302	Mignesh u	IV/CIVIL	1	,	1)	1	1	1	1	1	1	29	Vignost.

VAC Coordinator imalie



			Report on Value	Add	led C	Course						
Title:	Title: Geoenvironmental Engineering and Remediation											
Resource	Person:	Dire Sri l	Balasubramani, ector, Kamalam Construction, pur - 641602		Propi Sri K	Karthikeyan rietor, amalam Copur - 641602	nstruction,					
Date of co	nduct fro	m:	10.12.2018	To:	14.12	2.2018	Duration:	30 Hours				
Organized	by:		CIVIL ENGINEERING a Construction	nd I	QAC	in associa	ition with	Sri Kamalam				
Academic	Year:		2018 - 2019			Sem	ester:	EVEN				
Participant	Year:	II, II	I, IV Year CIVIL			No. of Stud	lents Particip	ated: 68				
Venue:	Lecture	hall o	f II & III year CIVIL									

Outcome of Value Added Course (VAC)

At the end of the Course, Students can be able to

- Demonstrate a comprehensive understanding of the principles and concepts in geoenvironmental engineering.
- Analyze and predict contaminant transport in soils, considering factors that influence movement and dispersion.
- Evaluate and apply geosynthetics in remediation projects, understanding their functions and benefits.
- Conduct risk assessments and develop risk management strategies for geoenvironmental projects, considering legal and regulatory aspects.
- Understand and integrate environmental impact assessment (EIA) principles into geoenvironmental projects, ensuring sustainable and environmentally responsible engineering practices.

Assessment Process

- Students, who are securing more than 70% on total score in the VAC test and secured more than 75% in VAC attendance is eligible to receive the course completion certificate for the VAC attended
- Total Score = (0.5 *Attendance in VAC out of 100 percentage + 0.5 *Test mark in VAC out of 100 marks)

No. of students successfully completed the VAC course is 68 Students based on the above assessment process.

VAC Co-ordinator

P.Perfin HoD/CIVIL

Principal n-12-18



Certificate of Participation

This is to	certify that Mr./Ms		GOV	VTHAM P,III/C	IVIL	has
successfully	completed the Valu	e Added Course	titled "Geo	Environmental	Engineering a	nd Remediation"
Organized b	y the <i>Department of C</i>	ivil Engineering in	association v	vith IQAC of Sa	surie College o	f Engineering and
Sri Kamala	m Construction from	10-12-2018 to 14-1	2-2018 (5 Day	rs).		

Co-ordinator

R.P.Sung Head of the Department

Ollh Principal



Certificate of Participation

This is to certify that Mr./Ms ARUN KUMAR B, IV/CIVIL has
successfully completed the Value Added Course titled "Geo Environmental Engineering and Remediation"
Organized by the Department of Civil Engineering in association with IQAC of Sasurie College of Engineering and
Sri Kamalam Construction from 10-12-2018 to 14-12-2018 (5 Days).

Co-ordinator

Head of the Department

Principal



Certificate of Participation

This is to certify that Mr./Ms	BASKARAN K,III/CIVIL has
successfully completed the Value Added Course	titled "Geo Environmental Engineering and Remediation"
Organized by the Department of Civil Engineering in a	ssociation with IQAC of Sasurie College of Engineering and
Sri Kamalam Construction from 10-12-2018 to 14-12-	-2018 (5 Days).

white of the contract of the c

R PSy Head of the Department

Principal

Dr.M. VLIAVAKUMAR ME, Ph.D.

PRINCIPAL
SASURIE COLLEGE OF ENGINEERING,
Vijayamangalam - 638 056, Tirupur (Dt).



Certificate of Participation

	This is to	certify that	at Mr./Ms		ANA	DHA RAJ K,IV/	CIVIL	h	as
	successfully	completed	d the Value	Added Course	e titled "Geo	Environmental	Engineering	and Remediation	1,77
F.	Organized b	y the <i>Depar</i>	rtment of Civ	vil Engineering	in association	with IQAC of Sa	asurie College	of Engineering an	ıd
	Sri Kamala	ım Constru	ction from 10	0-12-2018 to 14-	-12-2018 (5 Da	ys).			

July full

R P.S. S Head of the Department

Olline Principal

PRINCIPAL ME., Ph.D.

SASURIE COLLEGE OF ENGINEERING, Vijayamangalam - 638 056, Tirupur (Dt).



TEST QUESTION PAPER - VALUE ADDED COURSE

"Geoenvironmental Engineering and Remediation"

From 10.12.2018 to 14.12.2018 (5 days)

Duration: 30 Hours

Academic Year: 2018-2019/EVEN

Date of Test: 14.12.2018

MULTIPLE CHOICE QUESTIONS (25 X 1 = 25 Marks)

Name of the Student:

Year/Sem:

AU Register Number:

Answer all the questions:

- 1. What is the primary focus of geoenvironmental engineering?
 - a. Structural analysis
 - b. Environmental sustainability
 - c. Traffic engineering
- d. Geospatial mapping
- 2. Which technique is commonly used for site characterization in geoenvironmental projects?
 - a. X-ray diffraction
 - b. Ground-penetrating radar
 - c. Spectroscopy
 - d. Geotechnical drilling
- 3. What is the purpose of geosynthetics in remediation?
 - a. Enhancing soil fertility
 - b. Contaminant transport control
 - c. Structural stability improvement
 - d. Noise pollution reduction
- 4. Which in-situ remediation technology involves the use of microorganisms to break down contaminants?
 - a. Thermal desorption
 - b. Phytoremediation
 - c. Bioremediation
 - d. Electrokinetic remediation



- 5. What are the key considerations in landfill management?
 - a. Maximizing contamination
 - b. Minimizing monitoring
 - c. Controlling gas emissions
 - d. Reducing liner effectiveness
- 6. Which ground improvement technique involves the injection of chemicals to neutralize contaminants?
 - a. Soil nailing
 - b. Grouting
 - c. Dynamic compaction
 - d. Vibro-compaction
- 7. What is a crucial aspect of risk assessment in geoenvironmental projects?
 - a. Ignoring legal requirements
 - b. Identifying and analyzing potential hazards
 - c. Avoiding stakeholder involvement
 - d. Neglecting regulatory compliance
- 8. In the context of geoenvironmental engineering, what does EIA stand for?
 - a. Environmental Impact Analysis
 - b. Environmental Improvement Assessment
 - c. Ecological Impact Appraisal
 - d. Environmental Impact Assessment
- 9. Which of the following is NOT an in-situ remediation technique?
 - a. Chemical oxidation
 - b. Pump and treat
 - c. Soil vapor extraction
 - d. Excavation and disposal
- 10. What role does geotechnical drilling play in site characterization?
 - a. Monitoring gas emissions
 - b. Extracting soil and groundwater samples
 - c. Enhancing soil fertility
 - d. Conducting seismic studies
- 11. What is the primary purpose of ground improvement techniques in geoenvironmental projects?
 - a. Increasing construction costs
 - b. Reducing soil strength
 - c. Enhancing soil properties
 - d. Ignoring environmental considerations
- 12. Which regulatory aspect is essential for geoenvironmental engineers to consider in risk management?



- a. Speed limits
- b. Zoning laws
- c. Environmental regulations
- d. Tax codes
- 13. What is the primary goal of bioremediation?
 - a. Removal of contaminants using physical barriers
 - b. Enhancement of soil fertility
 - c. Breakdown of contaminants by microorganisms
 - d. Excavation and disposal of contaminated soil
- 14. Which of the following is an example of a geosynthetic material?
 - a. Concrete
 - b. Plastic sheeting
 - c. Asphalt
 - d. Metal mesh
- 15. What does the term "contaminant transport" refer to in geoenvironmental engineering?
 - a. Movement of pollutants in soil and water
 - b. Transportation of construction materials
 - c. Traffic flow in urban areas
 - d. Air quality monitoring
- 16. What is the significance of in-situ remediation technologies in geoenvironmental projects?
 - a. High cost and limited effectiveness
 - b. Minimal environmental impact
 - c. Preservation of natural ecosystems
 - d. Addressing contamination without excavation
- 17. Which type of landfill design is considered environmentally preferable?
 - a. Open dumping
 - b. Engineered landfill
 - c. Unlined landfill
 - d. Illegal landfill
- 18. What is the primary purpose of a geotechnical study in geoenvironmental projects?
 - a. Landscape architecture
 - b. Understanding geological history
 - c. Assessing soil and rock properties
 - d. Identifying plant species
- 19. In ground improvement, what does the term "grouting" involve?
 - a. Injecting cementitious material into soil

Dr.M.VIJAYAKUMAR ME., Ph.D.,
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- b. Planting vegetation for soil stabilization
- c. Excavating contaminated soil
- d. Creating a natural drainage system
- 20. Which environmental impact is NOT typically assessed in an Environmental Impact Assessment (EIA)?
 - a. Air quality
 - b. Noise pollution
 - c. Economic development
 - d. Traffic congestion
- 21. What is the primary function of soil vapor extraction in remediation?
 - a. Enhancing soil fertility
 - b. Extracting volatile contaminants from the soil
 - c. Contaminating groundwater
 - d. Increasing soil compaction
- 22. What is the purpose of environmental risk assessment?
 - a. Ignoring potential hazards
 - b. Identifying and analyzing potential risks
 - c. Eliminating all risks
 - d. Ignoring stakeholder concerns
- 23. What is the primary advantage of using geosynthetics in engineering projects?
 - a. Reducing soil strength
 - b. Enhancing soil fertility
 - c. Providing stability and reinforcement
 - d. Increasing water infiltration
- 24. Which of the following is a common challenge in geoenvironmental projects?
 - a. Lack of regulatory requirements
 - b. Limited need for risk assessment
 - c. Absence of contamination issues
 - d. Balancing economic and environmental considerations
- 25. What role does phytoremediation play in geoenvironmental engineering?
 - a. Extracting contaminants using plants
 - b. Enhancing soil fertility with chemical additives
 - c. Excavating contaminated soil
 - d. Ignoring environmental regulations





TEST QUESTION ANSWER KEY - VALUE ADDED COURSE

"Geoenvironmental Engineering and Remediation"

From 10.12.2018 to 14.12.2018 (5 days)

Duration: 30 Hours

Academic Year: 2018-2019/EVEN

Date of Test: 14.12.2018

1	b	6	Ъ	11	С	16	d	21	ь
2	d	7	b	12	С	17	ь	22	b
3	b	8	d	13	С	18	c	23	С
4	С	9	ь	14	b	19	a	24	d
5	С	10	Ъ	15	a	20	С	25	a

VAC Coordinator

Dr.M.VIJAYAKUMAR ME., Ph.D., PRINCIPAL

SASURIE COLLEGE OF ENGINEERING, Vijayamangalam - 638 056, Tirupur (Dt).



TEST QUESTION PAPER - VALUE ADDED COURSE

"Geoenvironmental Engineering and Remediation"

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Date of Test: 14.12.2018

MULTIPLE CHOICE QUESTIONS (25 X 1 = 25 Marks)

Name of the Student: P. Mahandiran

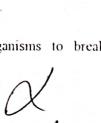
Year/Sem: III / IV

AU Register Number: 7324 16 103012

Answer all the questions:

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Electrokinetic remediation



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IF COLLEGE OF EN

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May

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ASSESMENT SHEET - VALUE ADDED COURSE

"Geoenvironmental Engineering and Remediation"

From 10.12.2018 to 14.12.2018 (5 days)

Duration: 30 Hours

Academic Year: 2018-2019/ EVEN

	Reg No.	Name of the Student		Attenda	nce Details	VAC-MO	OVERALL Score	
S.No			Year/ Branch	No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	(100) (50% of A + 50% of B)
1.	732417103001	BASKARAN K	II/CIVIL	27	90	19	76	83
2.	732417103002	GAYATHRI N	II/CIVIL	30	100	20	80	90
3.	732417103003	GOWTHAM P	II/CIVIL	24	80	21	84	82
4.	732417103004	LAVANYA M	II/CIVIL	27	90	18	72	81
5.	732417103005	NAVEENA S	II/CIVIL	30	100	21	84	92
6.	732417103006	NIVETHA S	II/CIVIL	27	90	19	76	83
7.	732417103007	SANGAR G	II/CIVIL	30	100	19	76	88
8.	732417103008	SURYA N	II/CIVIL	27	90	19	76	83
9.	732417103009	THARUNKUMAR J	II/CIVIL	30	100	20	80	90
10.	732417103010	VAISHNAVI P	II/CIVIL	24	80	21	84	82
11.	732417103011	VALLARASU M	II/CIVIL	27	90	18	72	81
12.	732417103012	VIJAYS	ĮI/CIVIL	30	100	21	84	92
13.	732416103003	ARUN KUMAR B	III/CIVIL	27	90	19	76	83



ASSESMENT SHEET - VALUE ADDED COURSE

	Reg No.	Name of the Student		Attenda	Attendance Details		VAC-MCQ TEST	
S.No			Year/ Branch	No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	Score (100) (50% of A + 50% of B)
14.	732416103004	BHARATHI S K	III/CIVIL	30	100	19	76	88
15.	732416103005	BISMIYA BASHEER	III/CIVIL	27	90.	19	76	83
16.	732416103006	CHANDHRU L	III/CIVIL	24	80	21	84	82
17.	732416103007	CHANDRU K M	III/CIVIL	30	100	18	72	86
18.	732416103008	ELLAPPARAJ P	III/CIVIL	24	80	20	80	80
19.	732416103009	HARISH P	III/CIVIL	30	100	19	76	88
20.	732416103010	KURALARASAN S	III/CIVIL	30	100	19	76	88
21.	732416103011	MAGESHWARAN M	III/CIVIL	30	100	18	72	86
22.	732416103012	MAHENDIRAN P	III/CIVIL	27	90	19	76	83
23.	732416103013	MANIMARAN V	III/CIVIL	30	100	19	76	88
24.	732416103015	PRAVEENA T	III/CIVIL	24	80	20	80	80
25.	732416103016	RANJITHKUMAR G	III/CIVIL	30	100	19	76	88
26.	732416103017	RINSHA K P	III/CIVIL	24	80	21	84	82
27.	732416103018	SAKTHISUBRAMANI K	III/CIVIL	30	100	19	76	88
28.	732416103019	SENTHILNATHAN G	III/CIVIL	27	90	19	76	
29.	732416103020	SIVARAMACHANDRAN N	III/CIVIL	24	80	21		83
30.	732416103021	SOUNDARYA S	III/CIVIL	30	100		84	82
31.	732416103022	SUBASH P	III/CIVIL	24	80	18	72	86
32.	732416103023	VIGNESH V NAIR	III/CIVIL	30	100	19	80 76	80



ASSESMENT SHEET - VALUE ADDED COURSE

S.No	Reg No.			Attenda	nce Details	VAC-MO	OVERALL	
		Name of the Student	Year/ Branch	No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	Score (100) (50% of A + 50% of B)
33.	732416103024	VIJAYAPANDI V	III/CIVIL	27	90	19	76	83
34.	732416103025	VIKRAMAN C	III/CIVIL	30	100	20	80	90
35.	732416103301	SATHISH KUMAR S	III/CIVIL	24	80	21	84	82
36.	732416103501	PRIYANKA J	III/CIVIL	27	90	18	72	81
37.	732416103503	PRAVEEN KUMAR A	III/CIVIL	30	100	21	84	92
38.	732416103701	MAYAKARUPPU K	III/CIVIL	27	90	19	76	83
39.	732415103001	AJITH K A	IV/CIVIL	30	100	19	76	88
40.	732415103002	AJITH KANNAN V	IV/CIVIL	30	100	21	84	92
41.	732415103003	AMARESAN E	IV/CIVIL	30	100	19	76	88
42.	732415103005	DEVENDIRAN P	IV/CIVIL	30	100	. 19	76	88
43.	732415103006	GOKULAVANI A	IV/CIVIL	30	100	18	72	86
44.	732415103007	GOPI RAJ G	IV/CIVIL	27	90	19	76	83
45.	732415103008	GOWRIVELMUGUNTHAN AE	IV/CIVIL	30	100	19	76	88
46.	732415103009	GOWTHARAMAN P	IV/CIVIL	24	80	20	80	80
47.	732415103010	INDHUREKA N	IV/CIVIL	30	100	19	76	88
48.	732415103011	KAĻAIVANAN M	IV/CIVIL	24	80	21	84	82
49.	732415103012	KAMALNATH S	IV/CIVIL	30	100	19	76	88
50.	732415103013	KRISHNAROOBINI J	IV/CIVIL	30	100	19	76	88
51.	732415103014	MANORANJITHAM G	IV/CIVIL	30	100	18	72	86





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	Reg No.	Name of the Student		Attendance Details		, VAC-MCQ TEST		OVERALL
S.No			Year/ Branch	No. of Hours Attended	Attendance Score (100) (A)	No. of Correct Answers	MCQ Score (100) (B)	Score (100) (50% of A + 50% of B)
52.	732415103015	MELARASAN V	IV/CIVIL	27	90	19	76	83
53.	732415103017	MUTHURAM K	IV/CIVIL	30	100	20	80	90
54.	732415103018	NARASHIMMAN R	IV/CIVIL	24	80	21	84	82
55.	732415103019	POOVENDHIRAN V	IV/CIVIL	27	90	18	72	81
56.	732415103021	RAMYASRI A	IV/CIVIL	30	100	21	84	92
57.	732415103022	SAMBATH RAJA M	IV/CIVIL	27	90	19	76	83
58.	732415103023	SANTHOSH KUMAR S	IV/CIVIL	30	100	19	76	88.
59.	732415103024	SANTHOSH P	IV/CIVIL	30	100	21	84	92
60.	732415103025	SARAVANAN G	IV/CIVIL	30	100	19	76	88
61.	732415103026	SATHASIVAM M	IV/CIVIL	30	100	19	76	88
62.	732415103027	SELVAGANAPATHY S	IV/CIVIL	30	100	18	72	86
63.	732415103028	SHANMUKASUNDARAM R	IV/CIVIL	27	90	19	76	83
64.	732415103029	SURIYAPANDI K .	IV/CIVIL	30	100	19	76	88
65.	732415103030	SURYA KUMAR S	IV/CIVIL	24	80	20	80	80
66.	732415103031	SWAPNA M	IV/CIVIL	30	100	19	76	88
67.	732415103032	VEERAMANI E	IV/CIVIL	24	80	21	84	82
68.	732415103302	VIGNESH U	IV/CIVIL	30	100	19	76	88

VAC Coordinator

P. Porgina HOD/CIVIL

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