

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Kaikkurichi, Pudukkottai -622 303

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# **NAAC DOCUMENTS**



Quality Indicator Frame Work

# Criterion – 2

### **Teaching-Learning and Evaluation**

Submitted by

# IQAC Internal Quality Assurance Cell

Sri Bharathi Engineering College for Women



(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Criteria 2

**Teaching-Learning and Evaluation** 

350

### **Key Indicator- 2.3. Teaching- Learning Process (40)**

# 2021-2022

# PARTICIPATIVE LEARNING CIVIL ENGINEERING

Activity	Number of Students attended	Page No.
Value Added Course (VAC)	40	3
Symposium ,Seminar and Workshop	04	54
TOTAL STUDENTS ATTENDED	44	-



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Criteria 2

**Teaching-Learning and Evaluation** 

350

### **Key Indicator- 2.3. Teaching- Learning Process (40)**

# 2021-2022

# CIVIL ENGINEERING PARTICIPATIVE LEARNING VALUE ADDED COURSE



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

#### **DEPARTMENT OF CIVIL ENGINEERING**

#### ACADEMIC YEAR 2021-2022 / ODD SEMESTER

Date: 4/8/2021

#### **DEPARTMENT CIRCULAR**

It is informed that Value added course organized by the Department of Civil Engineering for all Second, Third & Final year Civil Engineering students on **"Development & Application of Special Concrete"** in association with **T.R.M Constructions** from 9.8.2021 to 13.8.2021. Certificates will be issued to the eligible participants at the end of the Course. The following resource person will handle the session.

S.No.	Name of the Course	<b>Resource Person</b>
1.	Development & Application of Special Concrete	Mrs.S.Thamizh Thendral, M.E., Structural Engineer, T.R.M Constructions, Trichy.

R. HoD/Civit 82

HOD / CIVIL SRI BHARATHI ENGINEERIN COLLEGE FOR WOMEN KANKKURICHI PUDULING TIMI - C22 003

Cc:

- Principal's Office
- IQAC Coordinator
- Class In charges II, III & IV-year of Civil Engineering
- II, III & IV-year Civil Engineering Students
- Notice Board

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / ODD SEMESTER

### Value Added Course on "Development & Application of Special Concrete"

#### **SYLLABUS**

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Introduction about Normal concrete and Special concrete	3	09.08.2021
2	Concreting in cold and hot weather	3	09.08.2021
3	Self-compacting and fiber reinforced concretes and its applications	3	10.08.2021
4	Basic understanding of high strength concrete, mass concrete and shotcrete	3	10.08.2021
5	Preplaced aggregate concrete and light weight aggregate concrete	3	11.08.2021
6	Underwater anti-washout concrete, micro-concrete	3	11.08.2021
7	Expansive concrete and its applications	3	12.08.2021
8	Roller compacted concrete and its applications	3	12.08.2021
9	Concrete using recycled aggregate and its applications	3	13.08.2021
10	Mix design and applications of fly ash concrete	3	13.08.2021
	Total Hours	30	-

**VAC** Coordinator

HOD / CIVIL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt,



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#### **DEPARTMENT OF CIVIL ENGINEERING**

### ACADEMIC YEAR 2021-2022 (ODD SEM) STUDENTS PARTICIPATION LIST-VAC PROGRAM DEVELOPMENT & APPLICATION OF SPECIAL CONCRETE

(Ly)	D\GoH	Coordinator	DVA.		
S.NO	REG.NO	NAME OF THE STUDENT	YEAR/BRANCH		
R WOM HOH	VA BOBLLOO- EDAMAA				
1	912620103001	ASWINI T	II/CIVIL		
2	912620103002	GEETHA M	II/CIVIL		
3	912620103003	KEERTHI S	II/CIVIL		
4	912620103004	SUBATHRA S	II/CIVIL		
5	912620103301	BHAVANI S	· II/CIVIL		
6	912620103302	MEGALA V	II/CIVIL		
7	912619103001	AJITHA T	III/CIVIL		
8	912619103002	ARULJENIFAR C	III/CIVIL		
9	912619103003	DIVYA V	III/CIVIL		
10	912619103004	MANGAIYARKARASI G	III/CIVIL		
11	912619103005	MUTHULAKSHMI S	III/CIVIL		
12	912619103006	PRAVEENA S	III/CIVIL		
13	912619103007	PRIYADHARSHINI K	III/CIVIL		
14	912619103009	RAGAVI V	III/CIVIL		
15	912619103301	LILLY JOHN J	III/CIVIL		
16	912619103302	BHUVANI S	III/CIVIL		
17	912618103005	MEENACHI K	IV/CIVIL		

STHILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

18	912618103008	SATHYA M	IV/CIVIL
19	912618103009	SRIVIDHYA S	IV/CIVIL
20	912618103010	UMAMAHESWARI K	IV/CIVIL

TRANSFERRENCESS MERICAN STRATES STRATES

VAC Coordinator HoD/Civ HOD ! CITL • SRI BHARATH! ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303 Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kalkkurchi - 622 303, Pudukkottai Dt.

OK-S: THILAGAVATHI M.E., Ph.D. PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Katkkurchi - 622 303, Pudukkaitai Di

# Minister Conception

### SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 (ODD SEM)

### ATTENDANCE SHEET FOR VALUE ADDED COURSE- DEVELOPMENT & APPLICATION OF SPECIAL CONCRETE

S.NO	REG.NO	NAME OF THE	YEAR/	DATE: 09.08.21			DATE: 10.08.21		DATE: 11.08.21		DATE: 12.08.21		TE: 8.21	NO OF SESSIONS	SIGNATURE OF THE
		STUDENT	BRANCH	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED	STUDENT
1	912620103001	ASWINI T	II/CIVIL	1	ţ	1	ţ	1	1	1	1	1	7	10	T.Aswini
2	912620103002	GEETHA M	II/CIVIL	1	1	1	1	1	1	1	1	1	1	10	Mogentha
3	912620103003	KEERTHI S	II/CIVIL	1	1	1	a	1	1	1	1	1	1	9	g. Koathi
4	912620103004	SUBATHRA S	II/CIVIL	1	1	1	1	1	1	1	1	1	1	10	g-Sabodha
5	912620103301	BHAVANI S	II/CIVIL	1	1	1	1	1	1	1	1	1	a	9	SB
6	912620103302	MEGALA V	II/CIVIL	1	1	1	1	1	1	1	1	1	1	10	v.megl.
7	912619103001	АЈІТНА Т	III/CIVIL	1	1	1	1	1	,	1	1	1	1	10	AJitha
8	912619103002	ARULJENIFAR C	III/CIVIL	1	1	1	1	1	1	1	1	1	1	10	De
9	912619103003	DIVYA V	III/CIVIL	1	a	1	1	1	1	,	a	1	,	8	Dung
10	912619103004	MANGAIYARKARASI G	III/CIVIL	1	1	1	a	1	1	1	1	1	a	8	Marleaiyard
11	912619103005	MUTHULAKSHMI S	III/CIVIL S	THI	LAG	VAT	HIM	EJ.PI	.D.,	1	1	j	1	10	Men
		CYPZ	t		LEGE	FOR	GINE	EN		1		/1	_/		+

Kalkkurchi - 622 303, Pudukkottai DL

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12	912619103006	PRAVEENA S	III/CIVIL	1	1	1	a	1	1	r	r	1	1	9	Recauciena
13	912619103007	PRIYADHARSHINI K	III/CIVIL	1	1	1	1	1	1	1	1	1	1	10	Raingen
14	912619103009	RAGAVI V	III/CIVIL	1	1	1	1	1	1	1	1	1	1	to 1	Raeani
15	912619103301	LILLY JOHN J	III/CIVIL	1	1	1	1	1	1	1	1	1	1	10	Juh
16	912619103302	BHUVANI S	III/CIVIL	1	a	1	1	1	1	1	a	1	1	8	Bent
17	912618103005	MEENACHI K	IV/CIVIL	1	1	1	1	1	1	1	1	1	1	(0	Meenatel
18	912618103008	SATHYA M	IV/CIVIL	1	1.	1	1	1	1	1	1	1	1	10	Sattya
19	912618103009	SRIVIDHYA S	IV/CIVIL	1	1	1	1	1	1	1	1	1	1	10	Seient.
20	912618103010	UMAMAHESWARI K	IV/CIVIL	1	1	1	1	1	a	1	1	1	1	9	Cemanei

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**VAC** Coordinator

HoD/Civil HOD / CIVIL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI PUDUKKOTTAI - 622 303

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

		-	Report or	ı Va	lue	Add	led Cou	rse		
Title:	Develo	opme	nt & Applicat							
Resource F	Person:	Sen	.S.Thamizh T ior Engineer, .M Construct hy.		lral, N	И.Е.,				
Date of con	nduct fro	m :	09.08.2021	,	To:	13.08	.2021	Duration:	30 H	lours
Organized	Departm	nent :	CIVIL ENG	INEE	ERIN	G		•		
Participant	Year:	2, 3, 4	Semester:	ODI	)		No. of Stud	lents Registe	ered :	20
Venue:	First Flo	or-L	ecture Hall:30							
0	utcome o	of Valu	e Added Course	(VAC	C): At	the end	l of the cour	se, Student ca	an able	e to
<ul> <li>Des</li> <li>Exp</li> <li>Get</li> <li>Illucon</li> <li>No. of</li> </ul>	scribe Se plain hig knowled strate un npacted o	lf-com h stren dge on derwa concre succes	fference betwee npacting and fib ogth concrete, m preplaced agg ter anti-washou te, concrete usin ssfully complete	er reir ass co regate t conc ng rec	nforce oncrete conci rete; 1 ycled	d conc e and s rete an nicro-c aggreg	retes. hotcrete. d light weig concrete, exp ate.	ht aggregate pansive conc	rete, r	oller
				Assess	sment	Proces	S			
<ul> <li>Students securing more than 60% on total score and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted</li> <li>Total Score = (0.5 *Attendance in VAC out of 100 percentage + 0.5 *Test mark in VAC out of 100 marks)</li> </ul>										
V	VAC Coordinator R.G. HoD/Civil HOD/CiVIL Principal PRINCIPAL							IPAL		
	YL.		Dr. S.THILAGAVATHI M.E.,Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING Dr. S.THILAGAVATHI M.E.,Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING							

COLLEGE FOR WOMEN Kalkkurchi - 622 303, Pudukkottai Dt.



# **TRM CONSTRUCTION**

**Green Nest Homes** 

O.A.I.R Complex, JS Garden, Melavaladi, Lalgudi Main Road, Trichy - 621 218 Er. T. MURUGANANDHAM B.E., Licenced Building Surveyor & Consultant

### **CERTIFICATE OF PARTICIPATION**

THIS CERTIFICATE IS PROUDLY PRESENTED TO

UMAMAHESWARI K, B.E-CIVIL ENGINEERING, IV YEAR

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

for successfully completing the

Value Added Courses on

"Development & Application of Special Concrete" from 09.08.2021 to 13.08.2021.

T. Ymeymather

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

Structural Engineeer, TRM Constructions.



# TRM CONSTRUCTION

**Green Nest Homes** 

O.A.I.R Complex, JS Garden, Melavaladi, Lalgudi Main Road, Trichy - 621 218 Er. T. MURUGANANDHAM B.E., Licenced Building Surveyor & Consultant

### **CERTIFICATE OF PARTICIPATION**

THIS CERTIFICATE IS PROUDLY PRESENTED TO

DIVYA V, B.E-CIVIL ENGINEERING, III YEAR

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN.

for successfully completing the

Value Added Courses on

"Development & Application of Special Concrete" from 09.08.2021 to 13.08.2021.

Kaikkurchi - 622 303, Pudukkottai Dt.

T. yngmithe Dr. S. THILAGAVATHI M.E., Ph.D.,-PRINCIPAL **\$RI BHARATHI ENGINEERING** COLLEGE FOR WOMEN

Structural Engineeer, **TRM Constructions.** 



# **TRM CONSTRUCTION**

**Green Nest Homes** 

O.A.I.R Complex, JS Garden, Melavaladi, Lalgudi Main Road, Trichy - 621 218 Er. T. MURUGANANDHAM B.E., Licenced Building Surveyor & Consultant

## CERTIFICATE OF PARTICIPATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

BHAVANI S, B.E-CIVIL ENGINEERING, II YEAR

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN.

for successfully completing the

Value Added Courses on

"Development & Application of Special Concrete" from 09.08.2021 to 13.08.2021.

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S.THILAGAVATHI M.E., Ph.D PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

Structural Engineeer, TRM Constructions. SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu - 622 303, India

#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / ODD SEMESTER

Name of the Student :

Year/Sem:

#### **AU Register Number:**

Value Added Course on "Development & Application of Special Concrete"

#### **MCQ QUESTIONS** (25X4 = 100 Marks)

- 1. The water cement ratio for Ferro-cement mix should be a) Less than 0.35 c) Between 0.40 to 0.50 b) Between 0.35 to 0.40 d) Between 0.50 to 0.60
- 2. The volume of reinforcement in Ferro-cement varies between a) 1-2% c) 5-8%
  - b) 2-5% d) 8-10%

3. Shotcrete differs from conventional concrete with regard to

- a) Material, proportions and void system c) Application procedure
- b) Compaction d) All of the above
- 4. Which of the following fibres give the highest improvement in the impact strength of fibre reinforced concrete?
  - a) Glass Fibers b) Polypropylene, nylon, and other organic fibers
- c) Carbon fibers d) Asbestos fibers
- 5. Aerated concrete is produced by addition of
  - a) Sodium silicate b) Copper sulphate

c) Aluminium powder d) Zinc

6. Lightweight concrete has all the following beneficial characteristic except, a) High thermal insulation c) Excellent fire resistance b) High sound insulation d) Reduced drying shrinkage

- 7. The cement concrete, from which entrained air and excess water are removed after placing it in position, is called
  - a) Vacuum concrete
  - b) LWC

c) Prestressed concrete d) Sawdust concrete

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0.		rength 3000 psi is pounds per cubic
	yard.	
	a) 400-510 b) 440-560	c) 530-660 d) 630-750
0		
9.	The light-weight concrete is prepared by	a) Miving Al in the concrete
	specified proportion in the concrete	c) Mixing Al in the concrete
	b) Using coke-breeze, slag as aggregate in the concrete	d) Mixing Fe in the concrete
10.	Aerated Concrete is	Value # dded Course co #D avel
	<ul><li>a) Very heavy weight</li><li>b) Heavy weight</li></ul>	<ul><li>c) Medium weight</li><li>d) Light weight</li></ul>
11.	No fines concrete is manufactured by	
	a) By adding no fines materials from normal concrete	c) By reducing its strength
	b) By eliminating no fines materials from normal concrete	d) By increasing its strength
12	Density of no fines concrete with light weight as	
12.	a) 1600-1900	c) >2500
	b) <300	d) >300
10		and enablighter and another state of the second
13.	What is the value of modulus of elasticity for Su	
	<ul><li>a) 60-115 MPa and a solution of the second second</li></ul>	c) 35-50 GPa d) 500 GPa
376	មិននៅក្នុងប្រទេស សេចក្តីស្នាក់ស្នាក់ស្នាក់ស្នាក់ស្នាក់ស្នាក់ស្នាក់ស្នាក់ស្នាក់ស្នាក់ និង សេចក្តីស្នាក់នៅ អ៊ីន	
14.	Diameter of Round Steel Fiber lies in the range	
	a) 0.3 - 0.5 b) 0.25 - 0.75	c) 0.155 - 0.41 d) 0.25 - 0.90
	b) 0.25 - 0.75	u) 0.25 - 0.90
15.		ollowing for compressive strength of high strength
	a) 10MPa	c) 30MPa
	b) 20MPa	d) 40MPa
16	Maximum size of aggregates are used to produ	ce 70MPa compressive strength is
	a) 20-30 mm	c) 30-40 mm
	b) 10-20 mm	d) 40-50 mm
17.	Use of HSC in column	
	a) It increase the size of the column	c) Doesn't affect
	b) It decrease the size of the column	d) Decrease the strength
		->
	OLS.THILAGAVATHI M.E.Ph.D.	Dr. S. THILAGAVATH! M.E., Ph.D.,
	PRINCIPAL	SRI BHARATHI ENGINEERING
	SRI RHARATHI ENGINE	SRIBHAKATHIENGINEERING
	COLLEGE FOR WOMEN	COLLEGE FOR WOMEN

<ul><li>18. What is the normal time to get uniform mixing?</li><li>a) 30 seconds</li><li>b) 2 or more minutes</li></ul>	c) 1 minutes
b) 2 of more minutes	d) 24 hours
19. Which one is not used as air entraining agents?	
a) Alumina	c) Fats
b) Natural resins	d) Oil
	u) Oli
20. Aerated concrete is made in the density of appro-	$kg/m^3$ .
a) 50	c) 250
b) 150	d) 350
21. What does the Standard Consistency Test mean?	
a) The amount of water required to make a standard or typical consistency cement paste	c) It is used to determine the quality of cement
b) It is used to determine the quality of aggregates	d) None of the above
22. Which of the following cement is used in sewa	age and water treatment plants?
a) Sulphate Resisting Cement	c) Low Heat Cement
b) Quick Setting Cement	d) Rapid Hardening Cement
23. Which of the following defines high strength con	acrete?
a) Tensile strength	c) Both (a) and (b)
b) Compressive strength	d) Neither (a) nor (b)
24. Creep is	
a) Time dependent	c) Pressure dependent
b) Time and pressure dependent	d) Time and Temperature dependent
25. The type of aggregates not suitable for high strer tension, is	gth concrete and for pavements subjected to
a) Rounded aggregate	c) Irregular aggregate

b) Irregular aggregate

c) Irregular aggregated) Flaky aggregate

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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / ODD SEMESTER

### Value Added Course on "Development & Application of Special Concrete"

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

#### ANSWER KEY

Dr. S.THILAGAVATH! M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai DL

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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / ODD SEMESTER

Name of the Student : Ko Uma Maheswavi

Year/Sem: 1V / VII

### AU Register Number: 912618103010

Value Added Course on "Development & Application of Special Concrete"

#### MCQ QUESTIONS (25X4 = 100 Marks)

- 1. The water cement ratio for Ferro-cement mix should be a) Less than 0.35 c) Between 0.40 to 0.50 (b) Between 0.35 to 0.40 d) Between 0.50 to 0.60
- 2. The volume of reinforcement in Ferro-cement varies between (a) 1-2% (c) 5-8% b) 2-5% d) 8-10%

3. Shotcrete differs from conventional concrete with regard to

- a) Material, proportions and void system c) Application procedure
- b) Compaction

- (d) All of the above
- 4. Which of the following fibres give the highest improvement in the impact strength of fibre reinforced concrete?
  - (a) Glass Fibers

b) Polypropylene, nylon, and other organic fibers

- c) Carbon fibers d) Asbestos fibers
- 5. Aerated concrete is produced by addition of a) Sodium silicate
  - b) Copper sulphate

(c)Aluminium powder (D)Zinc

6. Lightweight concrete has all the following beneficial characteristic except,

- (b) High sound insulation
- a) High thermal insulation c) Excellent fire resistance
  - d) Reduced drying shrinkage
- 7. The cement concrete, from which entrained air and excess water are removed after placing it in position, is called
  - (a) Vacuum concrete
  - b) LWC

c) Prestressed concrete d) Sawdust concrete

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a) 400-510	c) 530-660
<b>(b)</b> 440-560	(d) 630-750
9. The light-weight concrete is prepared by	
a) Mixing Portland cement with sawdust in specified proportion in the concrete	c) Mixing Al in the concrete
b Using coke-breeze, slag as aggregate in the concrete	d) Mixing Fe in the concrete
10. Aerated Concrete is	
a) Very heavy weight b) Heavy weight	c) Medium weight (d)Light weight
<u>10NS (25X4 = 100 Marks)</u>	
11. No fines concrete is manufactured by	a) Dry noducing its strongth
a) By adding no fines materials from normal concrete	c) By reducing its strength
By eliminating no fines materials from normal concrete	d) By increasing its strength
12. Density of no fines concrete with light weight a	aggregate vary from kg/m <sup>3</sup> .
a) 1600-1900	c) >2500
<b>(b)</b> <300	d) >300
12. What is the value of modulus of electicity for S	Jule hue in filtared apparents?
<ul><li>13. What is the value of modulus of elasticity for S</li><li>a) 60-115 MPa</li></ul>	©) 35-50 GPa
(b) 10-16 MPa	d) 500 GPa
14. Diameter of Round Steel Fiber lies in the range	e of mm.
a) 0.3 - 0.5	c) 0.155 - 0.41 coodificeratio
(b) 0.25 - 0.75 and schedda (b) com	d) 0.25 - 0.90
15. What could be the possible answer among the t	following for compressive strength of high stren
concrete?	
a) 10MPa	c) 30MPa
b) 20MPa	(d) 40MPa stadulus 19000.0 (d
ng beneficial characteristic except.	6. Lightweight concrete has all the following
<ol> <li>Maximum size of aggregates are used to prod         <ul> <li>(a) 20-30 mm</li> </ul> </li> </ol>	c) 30-40 mm
b) 10-20 mm	(a) 40-50 mm
17. Use of HSC in column	position, is called
a) It increase the size of the column	c) Doesn't affect
(b) It decrease the size of the column	d) Decrease the strength

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai DL

<ul> <li>18. What is the normal time to get uniform mixing?</li> <li>a) 30 seconds</li> <li>b) 2 or more minutes</li> </ul>	c) 1 minutes d) 24 hours
19. Which one is not used as air entraining agents?	
(a) Alumina	c) Fats
b) Natural resins	d) Oil
20. Aerated concrete is made in the density of approximately	$kg/m^3$ .
a) 50	© 250 Kg/m .
b) 150	d) 350
21. What does the Standard Consistency Test mean?	
(a) The amount of water required to make a standard or typical consistency cement paste	c) It is used to determine the quality of cement
b) It is used to determine the quality of aggregates	d) None of the above
22. Which of the following cement is used in sew	age and water treatment plants?
a Sulphate Resisting Cement	c) Low Heat Cement
b) Quick Setting Cement	d) Rapid Hardening Cement
23. Which of the following defines high strength co	ncrete?
a) Tensile strength	c) Both (a) and (b)
(b) Compressive strength	d) Neither (a) nor (b)
24. Creep is	
(a) Time dependent	c) Pressure dependent
b) Time and pressure dependent	(d) Time and Temperature dependent
25. The type of aggregates not suitable for high strer tension, is	ngth concrete and for pavements subjected to
(a) Rounded aggregate	c) Irregular aggregate
b) Irregular aggregate	d) Flaky aggregate
A	-37

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / ODD SEMESTER

Name of the Student : V. Ragaus AU Register Number: 9126 19103009

Year/Sem: IU / V

Value Added Course on "Development & Application of Special Concrete"

#### MCQ QUESTIONS (25X4 = 100 Marks)

1. The water cement ratio for Ferro-cemer	nt mix should be
a) Less than 0.35	c) Between 0.40 to 0.50
(b) Between 0.35 to 0.40	d) Between 0.50 to 0.60

2.	The volume of reinforcement in Ferro-cen	ment varies between
	a) 1-2%	<b>(</b> )5-8%
	b) 2-5%	d) 8-10%

3. Shotcrete differs from conventional concrete with regard to

a) Material, proportions and void system

b) Compaction

c) Application procedure (d) All of the above

4. Which of the following fibres give the highest improvement in the impact strength of fibre reinforced concrete?

a) Glass Fibers

b) Polypropylene, nylon, and other organic fibers

c) Carbon fibersd) Asbestos fibers

5. Aerated concrete is produced by addition ofa) Sodium silicateb) Copper sulphate

(C)Aluminium powder d) Zinc

6. Lightweight concrete has all the following beneficial characteristic except, a) High thermal insulation

(b) High sound insulation

Excellent fire resistance d) Reduced drying shrinkage

- 7. The cement concrete, from which entrained air and excess water are removed after placing it in position, is called \_\_\_\_\_
  - a) Vacuum concrete
  - Б) LWC

c) Prestressed concreted) Sawdust concrete

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<ul><li>17. Use of HSC in column</li><li>a) It increase the size of the column</li></ul>	c) Doesn't affect
<ul> <li>16. Maximum size of aggregates are used to produce a 20-30 mm</li> <li>b) 10-20 mm</li> </ul>	<ul> <li>ce 70MPa compressive strength is</li> <li>c) 30-40 mm</li> <li>d) 40-50 mm</li> </ul>
b) 20MPa	(d) 40MPa
<ul><li>15. What could be the possible answer among the for concrete?</li><li>a) 10MPa</li></ul>	c) 30MPa
a) 0.3 - 0.5 (b) 0.25 - 0.75	c) 0.155 - 0.41 d) 0.25 - 0.90
14. Diameter of Round Steel Fiber lies in the range	of mm.
<ul><li>13. What is the value of modulus of elasticity for Su</li><li>a) 60-115 MPa</li><li>b) 10-16 MPa</li></ul>	diphur infiltered concrete? (a) 35-50 GPa d) 500 GPa
	d) >300
<ul><li>12. Density of no fines concrete with light weight as</li><li>a) 1600-1900</li></ul>	c) >2500
By eliminating no fines materials from normal concrete	d) By increasing its strength
<ul><li>11. No fines concrete is manufactured by</li><li>a) By adding no fines materials from normal concrete</li></ul>	c) By reducing its strength
b) Heavy weight	d Light weight
<ul><li>10. Aerated Concrete is</li><li>a) Very heavy weight</li></ul>	c) Medium weight
specified proportion in the concrete b) Using coke-breeze, slag as aggregate in the concrete	d) Mixing Fe in the concrete
<ul><li>9. The light-weight concrete is prepared by</li></ul>	c) Mixing Al in the concrete
<b>(b)</b> 440-560	d) 630-750
a) 400-510	c) 530-660

<ul><li>18. What is the normal time to get uniform mixing?</li><li>a) 30 seconds</li></ul>	c) 1 minutes
(b) 2 or more minutes	d) 24 hours
19. Which one is not used as air entraining agents?	
(a) Alumina	c) Fats
b) Natural resins	Oil Oil
20. Aerated concrete is made in the density of appr	ox $kg/m^3$ .
a) 50	c) 250
b) 150	350
21. What does the Standard Consistency Test mean	?
(a) The amount of water required to make a standard or typical consistency cement paste	c) It is used to determine the quality of cement
b) It is used to determine the quality of aggregates	d) None of the above
22. Which of the following cement is used in sew	vage and water treatment plants?
(a) Sulphate Resisting Cement	c) Low Heat Cement
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23. Which of the following defines high strength co	oncrete?
a) Tensile strength	c) Both (a) and (b)
b)Compressive strength	d) Neither (a) nor (b)
24. Creep is	
a) Time dependent	c) Pressure dependent
b) Time and pressure dependent	d) Time and Temperature dependent
25. The type of aggregates not suitable for high stre tension, is	ngth concrete and for pavements subjected to
a Rounded aggregate	c) Irregular aggregate
b) Irregular aggregate	d) Flaky aggregate

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kalkkurchi - 622 303, Pudukkottai Dt. SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India DEPARTMENT OF CIVIL ENGINEERING <u>ACADEMIC YEAR 2021-2022 / ODD SEMESTER</u>

Name of the Student : M. Gjeetha

Year/Sem: 11/11)

### AU Register Number: 9 1269010300 2

Value Added Course on "Development & Application of Special Concrete"

#### MCQ QUESTIONS (25X4 = 100 Marks)

- 1. The water cement ratio for Ferro-cement mix should bea) Less than 0.35c) Between 0.40 to 0.50b) Between 0.35 to 0.40d) Between 0.50 to 0.60
- 2. The volume of reinforcement in Ferro-cement varies between
  a) 1-2%
  b) 2-5%
  c) 5-8%
  d) 8-10%
- 3. Shotcrete differs from conventional concrete with regard to

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b) Compaction

c) Application procedure (d) All of the above



- 4. Which of the following fibres give the highest improvement in the impact strength of fibre reinforced concrete?
  - (a) Glass Fibers

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Aluminium powderd) Zinc

6. Lightweight concrete has all the following beneficial characteristic except,

a) High thermal insulation(b) High sound insulation

- c) Excellent fire resistance
- d) Reduced drying shrinkage
- 7. The cement concrete, from which entrained air and excess water are removed after placing it in position, is called \_\_\_\_\_
  - ( a) Vacuum concrete b) LWC

c) Prestressed concrete (d) Sawdust concrete

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c) 530-660 d) 630-750
I WINN MATRICE.
A LANGIN L ST WALL
c) Mixing Al in the concrete
he opposition in the
d) Mixing Fe in the concrete
ALL Register Numbers Ft 53 denies
c) Medium weight
(d) Light weight
c) By reducing its strength
(d) By increasing its strength
ggregate vary from kg/m <sup>3</sup> .
c) >2500
d) >300
estimation of the subscription is a manufactory of the
ulphur infiltered concrete?
(c) 35-50 GPa
d) 500 GPa
Contraction of the second s
ofmm.
c) 0.155 - 0.41 d) 0.25 - 0.90
d) 0.25 - 0.90
ollowing for compressive strength of high strength
c) 30MPa
(d) 40MPa
rolini ndisingan ang ang ang ang ang ang ang ang ang
ace 70MPa compressive strength is
c) 30-40 mm
d) 40-50 mm
a) Decemit effect
<ul><li>c) Doesn't affect</li><li>d) Decrease the strength</li></ul>
a) Decrease the succession
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DI.S.THILAGAVATHIM.E.,P
PRINCIPAL
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COLLEGE FOR WOMEN Kalkkurohi - 622 303, Pudukköttai DL

<ul> <li>18. What is the normal time to get uniform mixing?</li> <li>a) 30 seconds</li> <li>b) 2 or more minutes</li> </ul>	<ul><li>c) 1 minutes</li><li>d) 24 hours</li></ul>
19. Which one is not used as air entraining agents?	
(ā) Alumina	c) Fats
b) Natural resins	d) Oil
20. Aerated concrete is made in the density of appr	$kg/m^3$ .
a) 50	c) 250
b) 150	<b>(1)</b> 350
21. What does the Standard Consistency Test mean	9
a) The amount of water required to make a	c) It is used to determine the quality of cement
standard or typical consistency cement paste	by this used to determine the quanty of cement
b) It is used to determine the quality of aggregates	d) None of the above
22. Which of the following cement is used in sev	vage and water treatment plants?
(a)Sulphate Resisting Cement	c) Low Heat Cement
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a) Tensile strength	c) Both (a) and (b)
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24. Creep is	
(a) Time dependent	a) Processor demandant
b) Time and pressure dependent	c) Pressure dependent
b) This and pressure dependent	(1) Time and Temperature dependent
25. The type of aggregates not suitable for high stre tension, is	ength concrete and for pavements subjected to
a) Rounded aggregate	c) Irregular aggregate
b) Irregular aggregate	d) Flaky aggregate

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Pr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING GOLLEGE FOR WOMEN Kalikkurchi • 622 303, Pudukkoțtal Dt.



Dr.S.THILAGAVATHIM.E.,Ph

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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 (ODD SEM)

### MARK SHEET FOR VALUE ADDED COURSE- DEVELOPMENT & APPLICATION OF SPECIAL CONCRETE

	912018103008	SAMA AN	10310.11	ATTENDAN	ICE DETAILS	VAC-M	CQ TEST	OVERALL
S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	No of Sessions Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	MARK(100) (50% of A + 50% of B)
1	912620103001	ASWINI T	II/CIVIL	10	100	20	80	90
2	912620103002	GEETHA M	II/CIVIL	10	100	21	84	92
3	912620103003	KEERTHI S	II/CIVIL	9	90	19	76	83
4	912620103004	SUBATHRA S	II/CIVIL	10	100	22	88	94
5	912620103301	BHAVANI S	. II/CIVIL	9	90	16	64	77
6	912620103302	MEGALA V	II/CIVIL	10	100	17	68	84
7	912619103001	АЈІТНА Т	III/CIVIL	10	100	18	72	86
8	912619103002	ARULJENIFAR C	III/CIVIL	S.THILAGAV	ATHI NO. Ph.D	22	88	94

Kalkkurchi - 622 303, Pudukköttai Dt.

		ARCUENIFAROY		- rulleov		37	88	01 177
9	912619103003	DIVYA V	III/CIVIL	8	80	16	64	72
10	912619103004	MANGAIYARKARASI G	III/CIVIL	8	80	16	64	72
11	912619103005	MUTHULAKSHMI S	III/CIVIL	10	100	23	92	96
12	912619103006	PRAVEENA S	III/CIVIL	9	90	20	80	85
13	912619103007	PRIYADHARSHINI K	III/CIVIL	10	100	22	88	94
14	912619103009	RAGAVI V	III/CIVIL	10	100	23	92	96
15	912619103301	LILLY JOHN J	III/CIVIL	10	100	21 .	84	92
16	912619103302	BHUVANI S	III/CIVIL	8	80	17	68	74
17	912618103005	MEENACHI K	IV/CIVIL	10	100	20	80	.90
18	912618103008	SATHYA M	IV/CIVIL	10	100	22	88	94
19	912618103009	SRIVIDHYA S	IV/CIVIL	10	100	23	92	96
20	912618103010	UMAMAHESWARI K	IV/CIVIL	9	90	18	72	81

VAC Coordinator Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL **SRI BHARATHI ENGINEERING** COLLEGE FOR WOMEN Kalkkurchi - 622 303, Pudukkottai Dt.

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#### **DEPARTMENT OF CIVIL ENGINEERING**

#### ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Date: 02/03/2022

#### **DEPARTMENT CIRCULAR**

Certificate course offered by the Department of Civil Engineering for all Second, Third & Final year Civil Engineering students on **"Remote Sensing and GIS in Civil Engineering"** in our College campus from 07.03.2022 to 11.03.2022. Certificates will be issued to the eligible participants at the end of the Course.

S.No.	Name of the Course	Resource Person
	Remote Sensing and GIS in Civil	<ul><li>1.Mrs. P. Dennis Flora,</li><li>Assistant Professor,</li><li>Department of Civil Engineering.</li><li>Sri Bharathi Engineering College for Women,</li><li>Kaikkurichi, Pudukkottai.</li></ul>
1.	1. GIS in Civil Engineering	2.Ms.G.Gayathri, Assistant Professor, Department of Civil Engineering. Sri Bharathi Engineering College for Women, Kaikkurichi, Pudukkottai.

HoD/Civil<sup>2|3|22</sup>

HOD / ČÍVIL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI. PUDUKKOTTAI - 622 303

Cc:

- Principal's Office
- IQAC Coordinator
- Class In charges II, III & IV-year of Civil Engineering
- II, III & IV-year Civil Engineering Students
- Notice Board

Dr. S. THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

### Certificate Course on "Remote Sensing and GIS in Civil Engineering"

#### **SYLLABUS**

S.NO	TOPIC COVERED	DURATION (in hours)	DATE	RESOURCE PERSON
1	Historical Components of Remote Sensing Principles & methods of remote sensing - Active and Passive remote sensing - Remote Sensing platforms	3	07.03.2022	Mrs. P. Dennis Flora
2	Geosynchronous based on purpose Earth Resources satellites, communication satellite Weather satellites Spy satellites Sensors Description of sensor in landscape, spot, IRS series and current satellites	3	07.03.2022	Ms.G.Gayathri
3	Characteristics of Digital satellite image enhancement Filtering Applications of Aerial photographs and satellite imageries	3	08.03.2022	Mrs. P. Dennis Flora
4	GIS – Components of GIS – Hardware, Software and Organisational Context – Data – Spatial and NonSpatial – Maps	3	08.03.2022	Ms.G.Gayathri
5	Types of Maps – Projection – Types of Projection - Data Input – Digitizer, Scanner – Editing – Raster and Vector data structures	3	09.03.2022	Mrs. P. Dennis Flora
6	updating information on road networks and other urban infrastructure	3	09.03.2022	Ms.G.Gayathri
7	Preparation of housing typologies	3	10.03.2022	Mrs. P. Dennis Flora
8	Analysis of watersheds, Landscape development	3	10.03.2022	Ms.G.Gayathri
9	3D modeling, Infrastructure modeling and Environmental impact assessment	3	11.03.2022	Mrs. P. Dennis Flora
10	Analysis using Raster and Vector data – Retrieval, Reclassification, Overlaying, Buffering – Data Output – Printers and Plotters	3	11.03.2022	Ms.G.Gayathri
	Total Hours	30	-	

**VAC** Coordinator

HOD / CI 111 SRI BHARATH! ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI. Dr. S.THILAGAVATHI M.E., Ph.D.,

PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

#### **DEPARTMENT OF CIVIL ENGINEERING**

#### ACADEMIC YEAR 2021-2022 (EVEN SEM)

#### STUDENTS PARTICIPATION LIST-CERTIFICATE COURSE REMOTE SENSING AND GIS IN CIVIL ENGINEERING

Recipion	1	e Coordenator	Color
S.NO	REG.NO	NAME OF THE STUDENT	YEAR/BRANCH
1	912620103001	ASWINI T	II/CIVIL
2	912620103002	GEETHA M	II/CIVIL
3	912620103003	KEERTHI S	II/CIVIL
4	912620103004	SUBATHRA S	II/CIVIL
5	912620103301	BHAVANI S	II/CIVIL
6	912620103302	MEGALA V	II/CIVIL
7	912619103001	АЈІТНА Т	III/CIVIL
8	912619103002	ARULJENIFAR C	III/CIVIL
9	912619103003	DIVYA V	III/CIVIL
10	912619103004	MANGAIYARKARASI G	III/CIVIL
11	912619103005	MUTHULAKSHMI S	III/CIVIL
12	912619103006	PRAVEENA S	III/CIVIL
13	912619103007	PRIYADHARSHINI K	III/CIVIL
14	912619103009	RAGAVI V	III/CIVIL
15	912619103301	LILLY JOHN J	III/CIVIL
16	912619103302	BHUVANI S	III/CIVIL
17	912618103005	MEENACHI K	IV/CIVIL
18	912618103008	SATHYA M	IV/CIVIL

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0	19	912618103009	SRIVIDHYA S	IV/CIVIL
	_ 20	912618103010	UMAMAHESWARI K	IV/CIVIL

DEFARTMENT OF COMPENSIONERRING

**Course** Coordinator

n/covn

11/210/11

R. K. HoD/Civil

HOD / CIVIL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudanaotial Dt.

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Dr. S. THILAGAVATHI'M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkolai DL



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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 (EVEN SEM)

### ATTENDANCE SHEET FOR CERTIFICATE COURSE - REMOTE SENSING AND GIS IN CIVIL ENGINEERING

S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	DATE: 07.03.22		DATE: 08.03.22		DATE: 09.03.22		DATE: 10.03.22		DATE: 11.03.22		NO OF SESSIONS	SIGNATURE OF
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED	THE STUDENT
1	912620103001	ASWINI T	II/CIVIL	1	1	1	a	1	1	1	1	1	1	9	T.ASWINI
2	912620103002	GEETHA M	II/CIVIL	1	a	1	a	1	1	1	1	1	1	8	M. Grmtha
3	912620103003	KEERTHI S	II/CIVIL	1	1	13	1	1	1	1	a	1	1	9	S. Kouthi
4	912620103004	SUBATHRA S	II/CIVIL	1	1	1	p.	1	1	1	1	1	1	10	S. Subathra.
5	912620103301	BHAVANI S	II/CIVIL	1	1	1	h		1	1	1	1	a	9	B
6	912620103302	MEGALA V	II/CIVIL	i	1	1	1	î	1	1	1	1	1	10	V. megf.
7	912619103001	AJITHA T	III/CIVIL	1	1	;	1	1	1	1	1	,	1	10	Afitha
8	912619103002	ARULJENIFAR C	III/CIVIL	1	a	)	1	1	;	1	1	1	1	9	A
9	912619103003	DIVYA V	III/CIVIL	i	1	1	a	1	)	1	a	,	1	8	Dunia
10	912619103004	MANGAIYARKARASI G	III/CIVIL	1	1	1	1	1	a	1	1	1	1	9	Alankaiyorteran
11	912619103005	MUTHULAKSHMI S	PII SRIBHAD	AGA	VATH	IIM.E	., þn.	o./	1	1	1	1	1	10	Ment
•	<	AST	SRI BHAF COLLE Kaikkurchi	EGEE	OP IN	NEEP	RING				,			l .	+

			SRIBHAD										Salandaria		
12	912619103006	PRAVEENA S	III/CIVIL	1	ŗ	1		)	P.	1	1	ľ	r	10	Perauceena
13	912619103007	PRIYADHARSHINI K	III/CIVIL	1	1	1	1	1	1	1	1	1	a	9	Reinja
14	912619103009	RAGAVI V	III/CIVIL	1	1	1	a	ŗ	1	1	1	1	1	9	Rabiari
15	912619103301	LILLY JOHN J	III/CIVIL	1	a	1	1	1	a	1	1	1	1	8	Inha
16	912619103302	BHUVANI S	III/CIVIL	1	1	1	p	1	1	1	a	1	1	9	Bhump
17	912618103005	MEENACHI K	IV/CIVIL	1	1	1	1	1	1	1	1	1	1	10	preenatch
18	912618103008	SATHYA M	IV/CIVIL	1	1	1	a	1	1	1	1	1	1	9	Sathya
19	912618103009	SRIVIDHYA S	IV/CIVIL	1	1	1	1	1	1	1	1	1	1	10	Saint
20	912618103010	UMAMAHESWARI K	IV/CIVIL	1	1	1	1	1	r	1	1	1	1	10	Comantei

COLLEGE FOR WOMEN Kalkkurdji - 622 303, Pudukkoltal DL

n **Course Coordinator** 

R.G HoD/Civil HOD / CIVIL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN (Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

### **Report on Certificate Course**

				POIL	UII	~~			Cou					
Title:	Remo	ote Ser	ensing and GIS in Civil Engineering											
Resource 1	Person	Mrs	. P. D	P. Dennis Flora,					Ms.G.Gayathri,					
itesource i	015011.	Ass	istant Professor,						Assistant Professor,					
	Depa					Engin	eering	.						
Date of co		3.2022 To: 11.03.												
Organized	CIVI	L ENG	EERIN	IG		1								
Participant	4 Sei	Semester: EVEN No. of Students Registered							ered :	20				
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infi	rastructu	ire, Co	llection	n and an	alysi	is of da	ita on p	oop	ulation o	density, distr	ibution	n and growth,		
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<	Dr.	S:THI		VATHI	M.E	,Ph.D.,								
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# DEPARTMENT OF CIVIL ENGINEERING CERTIFICATE OF PARTICIPATION

This is Certify that Ms. SATHYA M, B.E - Civil Engineering, IV year has successfully completed the Certificate Course on "Remote Sensing and GIS in Civil Engineering" conducted from 7<sup>th</sup> March 2022 to 11<sup>th</sup> March 2022 (5 days) during the Academic year 2021-2022.

**Course Coordinator** 

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kalkkurchi - 622 303, Pudukkottai Dt.



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

## DEPARTMENT OF CIVIL ENGINEERING CERTIFICATE OF PARTICIPATION

This is Certify that Ms. LILLY JOHN J, B.E - Civil Engineering, III year has successfully completed the Certificate Course on "Remote Sensing and GIS in Civil Engineering" conducted from 7<sup>th</sup> March 2022 to 11<sup>th</sup> March 2022 (5 days) during the Academic year 2021-2022.

**Course Coordinator** 

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## DEPARTMENT OF CIVIL ENGINEERING

#### **CERTIFICATE OF PARTICIPATION**

This is Certify that Ms. MEGALA V, B.E. Civil Engineering, II year has successfully completed the Certificate Course on "Remote Sensing and GIS in Civil Engineering" conducted from 7<sup>th</sup> March 2022 to 11<sup>th</sup> March 2022 (5 days) during the Academic year 2021-2022.

**Course Coordinator** 

PRINCIPAL PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai DL

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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

#### Name of the Student :

Year/Sem:

#### **AU Register Number:**

Certificate Course on "Remote Sensing and GIS in Civil Engineering"

#### MCQ QUESTIONS (25X4 = 100 Marks)

c) USA

d) Russia

 LANDSAT is a satellite series of a) Canada

b) European Union

2. What is SAR ?a) Synthetic Array Radarb) Synthetic Aperture Radar

c) Synthetic Apron Radard) None of the above

- 3. LISS is an example of \_\_\_\_\_
  - a) Active Sensorb) Passive Sensor

c) Both Active and Passive Sensor

d) None of the above

4. In \_\_\_\_\_\_ type of remote sensing, the Sun is primary source of energy.

a) Activeb) Passive

c) Both A and B

d) Cannot say

- 5. \_\_\_\_\_ reflection occurs when all of energy is directed away from surface in a single direction.
  - a) Mirror likeb) Specular

c) Both A and Bd) None of the above

- 6. Diffuse reflection occurs when all the enrgy is reflected \_\_\_\_\_\_ in all direction.
  a) Randomly
  b) Uniformly
  c) Cannot say
  d) None of the above
- 7. The fact that sky appears to be blue is due to \_\_\_\_\_\_a) Rayleigh scatteringb) Mie scattering

c) Non selective scatteringd) All of above

	thus, are useful to remote sensors	th are not severely influenced by atmospheric absorption and are called
	a) Special bands of EM spectrum	c) Radio waves
	b) Atmospheric Windows	d) None of the above
9.		$\mu$ m clouds and snow have same reflectance and hence difficult
	to differentiate.	
	a) 0.3 - 3.0	c) 0.03 - 0.1
	b) 0.5 - 6.0	d) None of above
10	. In soil, reflectance	with presence of moisture, surface roughness or organic
	content. is equal to	
	a) increases	c) remains same
	b) decreases	d) None of above
11	are devices on which	camera or sensors are mounted for viewing earth to get image or
	photographs.	
	a) Plate forms	c) Radio antenna
	b) Mounting	d) None of the above
12	is one of most comm	on land based plate form
12	a) Hand held	c) Cherry Picker
	b) wireless antenna	d) All of above
13	are the orbits having of	distance in between 2000 km to 36000 km from surface of the
	Earth.	Blund Stants Sur Streame networks and Stants and
	a) Low Earth orbit	c) Geostationary orbit
	b) Medium Earth orbit	d) Crosses
14	types of orbit matches	s with the earth rotation inclined at some angle w.r.t. equator of
	earth, generally not more than 45	•
	a) Sun synchronous	c) Far Earth
	b) Geo synchronous	d) None of the above
15	5. GLONASS is satellite system de	veloped by
10	a) Russia	c) USA
	b) Germany	d) China
		at Revierdh Contrection
16	5 orbit have their axis of	of rotation aligned to North - South pole of the earth.
	a) Sun synchronous	c) Geostationary
	b) Polar	d) None of the above
		$\sim$
	BMIHTAVADA UHT 2 10	Dr.S.THILAGAVATHIM.E., Ph.D.,
	PRINCIPAL	PRINCIPAL
	SRI BHARATHI ENGINEERI	SRI BHARATHI ENGINEERING

COLLEGE FOR WOMEN Kalikurohi - 622 303, Pudukatai DL

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SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kalkkurchi - 622 303, Pudukkottai Dt.

a) Zara b) Gagarin	<ul><li>c) Molniya</li><li>d) None of the above</li></ul>
18. Which vehicle was used in the launching and	
a) PSLV - C45	c) GSLV - 4
b) PSLV - C48	d) GSLV - 6
19. EM energy can detected /recorded by	
a) Photographic system	c) Both A and B
b) Electronic system	d) None of the above
20. NOAA stands for	
a) National Office for Airborne Administration	on c) National Oceanography and Atmospheric
	Activity
b) National Oceanic and Atmospheric Administration	d) None of the above
1. IKONOS was launched and managed by	
a) Roscosmos	c) Space imaging Inc.
b) NASA	d) CSA
22. Geostationary Operational Environmental Sat	ellite (GOES) was lauched by
a) Roscosmos	c) NOAA
b) NASA	d) ISRO
3. Airborne Visible Infrared Imaging Spectrome	eter (AVIRIS) is developed by
a) ITRES Research Ltd	
b) Jet Propulsion Lab	c) NASA
b) set i topuision Lab	d) Roscosmos
4. Recently, was developed by	by ITRES Research ltd. of Canada
a) AVHRR	c) Vis NIR
b) CASI - 2	d) All of the above
> Most of state of ort [ i] AD systems uses	
2) 0.0 and 1.55	
<ul> <li>25. Most of state of art LiDAR system uses</li> <li>a) 0.9 and 1.55</li> <li>b) 0.98 and 1.54</li> </ul>	c) 0.89 and 1.62 d) All of the above

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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

#### Certificate Course on "Remote Sensing and GIS in Civil Engineering"

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

#### **ANSWER KEY**



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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Name of the Student : V. Megala

AU Register Number: 912620103302

Year/Sem: 11 / 1

Kaikkurchi - 622 303, Pudukkottai Dt.

Certificate Course on "Remote Sensing and GIS in Civil Engineering"

#### MCQ QUESTIONS (25X4 = 100 Marks)

1. LANDSAT is a satellite series of (a) Canada (c) USA b) European Union d) Russia 2. What is SAR? a) Synthetic Array Radar c) Synthetic Apron Radar (b) Synthetic Aperture Radar (d) None of the above 3. LISS is an example of a) Active Sensor c) Both Active and Passive Sensor (b) Passive Sensor d) None of the above 4. In \_\_\_\_\_\_ type of remote sensing, the Sun is primary source of energy. a) Active c) Both A and B (b) Passive d) Cannot say reflection occurs when all of energy is directed away from surface in a single 5. direction. a) Mirror like c) Both A and B b) Specular d) None of the above 6. Diffuse reflection occurs when all the enrgy is reflected in all direction. a) Randomly c) Cannot say (b) Uniformly d) None of the above 7. The fact that sky appears to be blue is due to (a) Rayleigh scattering c) Non selective scattering b) Mie scattering d) All of above Dr. S.THI M.E., Ph.D., BHARATHI ENGINEERING **COLLEGE FOR WOMEN** 

8. Those areas of the spectrum which are not severely influenced by atmospheric absorption and thus, are useful to remote sensors are called a) Special bands of EM spectrum c) Radio waves (b) Atmospheric Windows d) None of the above 9. In wavelength from µm clouds and snow have same reflectance and hence difficult to differentiate. a) 0.3 - 3.0 c) 0.03 - 0.1b) 0.5 - 6.0 d) None of above 10. In soil, reflectance with presence of moisture, surface roughness or organic content. is equal to a) increases c) remains same (b) decreases d) None of above 11. ----- are devices on which camera or sensors are mounted for viewing earth to get image or photographs. (a) Plate forms c) Radio antenna b) Mounting d) None of the above 12. ----- is one of most common land based plate form. a) Hand held (c) Cherry Picker b) wireless antenna d) All of above 13. ----- are the orbits having distance in between 2000 km to 36000 km from surface of the Earth. a) Low Earth orbit c) Geostationary orbit (b) Medium Earth orbit d) Crosses 14. ----- types of orbit matches with the earth rotation inclined at some angle w.r.t. equator of earth, generally not more than 45°. a) Sun synchronous c) Far Earth b) Geo synchronous d) None of the above 15. GLONASS is satellite system developed by a) Russia c) USA (b) Germany d) China 16. ----- orbit have their axis of rotation aligned to North - South pole of the earth. a) Sun synchronous c) Geostationary d) None of the above b) Polar S.THILAGAVATHI M.E., Ph.D., 147:2 10

Kalkkurchi - 622 303, Pudukhčital Di

COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukköttai DJ.

<ul><li>17. Which of following highly elliptical orbit (HECa) Zara</li><li>b) Gagarin</li></ul>	D) was developed by Soviet Union ? (c) Molniya (d) None of the above
<ul> <li>18. Which vehicle was used in the launching and p</li> <li>a) PSLV - C45</li> <li>b) PSLV - C48</li> </ul>	rojection of RISAT - 2BR1 ? c) GSLV - 4 d) GSLV - 6
19. EM energy can detected /recorded by	
<ul><li>a) Photographic system</li><li>b) Electronic system</li></ul>	(c) Both A and B d) None of the above
<ul> <li>20. NOAA stands for</li></ul>	c) National Oceanography and Atmospheric Activity d) None of the above
21 IKONOS was laws to the table	
<ul><li>21. IKONOS was launched and managed by</li><li>a) Roscosmos</li></ul>	0
b) NASA	© Space imaging Inc. d) CSA
22. Geostationary Operational Environmental Satel	ite (GOES) was lauched by
a) Roscosmos b) NASA	c) NOAA d) ISRO
23. Airborne Visible Infrared Imaging Spectromete	r (AVIRIS) is developed by
a) ITRES Research Ltd	(c) NASA d) Roscosmos
24. Recently, was developed by	ITRES Research ltd. of Canada
a) AVHRR b)CASI - 2	<ul><li>c) Vis NIR</li><li>d) All of the above</li></ul>
25. Most of state of art LiDAR system uses	um and um wavelengths
(a) 0.9 and 1.55	c) 0.89 and 1.62
b) 0.98 and 1.54	d) All of the above

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#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Name of the Student : Southya. M

Year/Sem: 1V

AU Register Number: 912618103008

Certificate Course on "Remote Sensing and GIS in Civil Engineering"

#### MCQ QUESTIONS (25X4 = 100 Marks)

(c) USA

d) Russia

- LANDSAT is a satellite series of

   a) Canada
   b) European Union
- 2. What is SAR ?a) Synthetic Array Radarb) Synthetic Aperture Radar
- LISS is an example of \_\_\_\_\_
   a) Active Sensor
   (b) Passive Sensor

c) Synthetic Apron Radard) None of the above

c) Both Active and Passive Sensord) None of the above

4. In \_\_\_\_\_\_ type of remote sensing, the Sun is primary source of energy.
a) Active
b) Passive
c) Both A and B
d) Cannot say

5. \_\_\_\_\_ reflection occurs when all of energy is directed away from surface in a single direction.

a) Mirror likeb) Specular

c) Both A and Bd) None of the above

in all direction.

c) Cannot sayd) None of the above

c) Non selective scatteringd) All of above

8. Those areas of the spectrum which are not severely influenced by atmospheric absorption and thus, are useful to remote sensors are called a) Special bands of EM spectrum c) Radio waves **(b)** Atmospheric Windows d) None of the above 9. In wavelength from µm clouds and snow have same reflectance and hence difficult to differentiate. (a) 0.3 - 3.0 c) 0.03 - 0.1 b) 0.5 - 6.0 d) None of above with presence of moisture, surface roughness or organic 10. In soil, reflectance content. is equal to a) increases c) remains same (b) decreases d) None of above 11. ----- are devices on which camera or sensors are mounted for viewing earth to get image or photographs. a) Plate forms c) Radio antenna b) Mounting d) None of the above 12. ----- is one of most common land based plate form. (a) Hand held c) Cherry Picker b) wireless antenna d) All of above 13. ----- are the orbits having distance in between 2000 km to 36000 km from surface of the Earth. a) Low Earth orbit c) Geostationary orbit (b) Medium Earth orbit d) Crosses 14. ----- types of orbit matches with the earth rotation inclined at some angle w.r.t. equator of earth, generally not more than 45°. a) Sun synchronous c) Far Earth (b) Geo synchronous d) None of the above 15. GLONASS is satellite system developed by a) Russia c) USA d) China b) Germany 16. ----- orbit have their axis of rotation aligned to North - South pole of the earth. c) Geostationary a) Sun synchronous d) None of the above b) Polar Dr. S:TM Ph.D. COLLEGE FOR WOMEN

Kaikkurchi - 622 303, Pudukköttai DL

a) Zara b) Gagarin d) None of the above	
<ul> <li>18. Which vehicle was used in the launching and projection of RISAT - 2BR1 ?</li> <li>a) PSLV - C45</li> <li>b) PSLV - C48</li> <li>c) GSLV - 4</li> <li>d) GSLV - 6</li> </ul>	
19. EM energy can detected /recorded bya) Photographic systemb) Electronic systemd) None of the above	
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<ul> <li>22. Geostationary Operational Environmental Satellite (GOES) was lauched by</li> <li>a) Roscosmos</li> <li>b) NASA</li> <li>c) NOAA</li> <li>d) ISRO</li> </ul>	·
<ul> <li>23. Airborne Visible Infrared Imaging Spectrometer (AVIRIS) is developed by</li> <li>a) ITRES Research Ltd</li> <li>b) Jet Propulsion Lab</li> <li>c) NASA</li> <li>d) Roscosmos</li> </ul>	
24. Recently,	
<ul> <li>25. Most of state of art LiDAR system usesµm andµm wavelengths.</li> <li>(a) 0.9 and 1.55</li> <li>(b) 0.98 and 1.54</li> <li>(c) 0.89 and 1.62</li> <li>(d) All of the above</li> </ul>	•

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#### DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2021-2022 / EVEN SEMESTER

Name of the Student :

Priyadharshoni. K.

Year/Sem: /!

AU Register Number: 912619103007

Certificate Course on "Remote Sensing and GIS in Civil Engineering"

#### MCQ QUESTIONS (25X4 = 100 Marks)

c) USA

d) Russia

- LANDSAT is a satellite series of a) Canada
   b) European Union
- 2. What is SAR ?a) Synthetic Array Radarb) Synthetic Aperture Radar
- LISS is an example of
   a) Active Sensor
   b) Passive Sensor

c) Both Active and Passive Sensord) None of the above

c) Synthetic Apron Radard) None of the above

4. In \_\_\_\_\_\_ type of remote sensing, the Sun is primary source of energy.
a) Active
(b) Passive
(c) Both A and B
(d) Cannot say



5. \_\_\_\_\_ reflection occurs when all of energy is directed away from surface in a single direction.

a) Mirror likeb) Specular

(c) Both A and B d) None of the above

6. Diffuse reflection occurs when all the enrgy is reflected \_\_\_\_\_\_ in all direction.
a) Randomly
b) Uniformly
c) Cannot say
d) None of the above

c) Non selective scatteringd) All of above

thus, are useful to remote sensors are calle	
a) Special bands of EM spectrum	c) Radio waves d) None of the above
UJ Atmospherie Windows	d) None of the above
9. In wavelength from µm cloud	ds and snow have same reflectance and hence difficult
to differentiate.	Same of the Striders : 18 21 - 18 20 - 18
(a) 0.3 - 3.0	c) 0.03 - 0.1
b) 0.5 - 6.0	d) None of above
10. In soil, reflectance wit	h presence of moisture, surface roughness or organic
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(a) Plate forms	c) Radio antenna
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13 are the orbits having distance	in between 2000 km to 36000 km from surface of the
Earth.	
a) Low Earth orbit	c) Geostationary orbit
(b) Medium Earth orbit	d) Crosses
-	
14 types of orbit matches with the	e earth rotation inclined at some angle w.r.t. equator of
	e earth rotation inclined at some angle w.r.t. equator of
earth, generally not more than 45°.	
	e earth rotation inclined at some angle w.r.t. equator of c) Far Earth d) None of the above
earth, generally not more than 45°. a) Sun synchronous	c) Far Earth
earth, generally not more than 45°. a) Sun synchronous	c) Far Earth d) None of the above
earth, generally not more than 45°. a) Sun synchronous b) Geo synchronous	c) Far Earth d) None of the above
<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed by the system develope</li></ul>	<ul> <li>c) Far Earth</li> <li>d) None of the above</li> </ul>
<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed to a) Russia</li> </ul>	<ul> <li>c) Far Earth</li> <li>d) None of the above</li> <li>by</li> <li>c) USA</li> <li>d) China</li> </ul>
<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed to a) Russia</li> <li>b) Germany</li> </ul>	<ul> <li>c) Far Earth</li> <li>d) None of the above</li> <li>by</li> <li>c) USA</li> <li>d) China</li> <li>on aligned to North - South pole of the earth.</li> <li>(c) Geostationary</li> </ul>
<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed to a) Russia</li> <li>b) Germany</li> <li>16 orbit have their axis of rotation</li> </ul>	<ul> <li>c) Far Earth</li> <li>d) None of the above</li> <li>by</li></ul>
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<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed to a) Russia</li> <li>b) Germany</li> <li>16 orbit have their axis of rotation a) Sun synchronous</li> </ul>	c) Far Earth d) None of the above by c) USA d) China on aligned to North - South pole of the earth. c) Geostationary d) None of the above
<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed to a) Russia</li> <li>b) Germany</li> <li>16 orbit have their axis of rotation a) Sun synchronous</li> </ul>	<ul> <li>c) Far Earth</li> <li>d) None of the above</li> <li>by</li></ul>
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<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed to a) Russia</li> <li>b) Germany</li> <li>16 orbit have their axis of rotation a) Sun synchronous</li> </ul>	c) Far Earth d) None of the above by
<ul> <li>earth, generally not more than 45°.</li> <li>a) Sun synchronous</li> <li>b) Geo synchronous</li> <li>15. GLONASS is satellite system developed to a) Russia</li> <li>b) Germany</li> <li>16 orbit have their axis of rotation a) Sun synchronous</li> <li>b) Polar</li> </ul>	<ul> <li>c) Far Earth</li> <li>d) None of the above</li> <li>by</li></ul>

<ul><li>17. Which of following highly elliptical orbit (HE a) Zara</li><li>b) Gagarin</li></ul>	<ul> <li>O) was developed by Soviet Union ?</li> <li>O) Molniya</li> <li>d) None of the above</li> </ul>
<ul> <li>18. Which vehicle was used in the launching and p</li> <li>a) PSLV - C45</li> <li>b) PSLV - C48</li> <li>19. EM energy can detected /recorded by</li> </ul>	orojection of RISAT - 2BR1 ? c) GSLV - 4 d) GSLV - 6
a) Photographic system b) Electronic system	C Both A and B d) None of the above
<ul> <li>20. NOAA stands for</li></ul>	c) National Oceanography and Atmospheric Activity d) None of the above
<ul><li>21. IKONOS was launched and managed by</li><li>a) Roscosmos</li><li>b) NASA</li></ul>	©Space imaging Inc. d) CSA
<ul> <li>22. Geostationary Operational Environmental Satell</li> <li>a) Roscosmos</li> <li>ASA</li> </ul>	ite (GOES) was lauched by c) NOAA d) ISRO
23. Airborne Visible Infrared Imaging Spectrometer	r (AVIRIS) is developed by
a) ITRES Research Ltd b) Jet Propulsion Lab	c) NASA d) Roscosmos
<ul> <li>24. Recently, was developed by a) AVHRR</li> <li>b) CASI - 2</li> </ul>	ITRES Research ltd. of Canada c) Vis NIR d) All of the above
<ul> <li>25. Most of state of art LiDAR system usesμ</li> <li>a) 0.9 and 1.55</li> <li>b) 0.98 and 1.54</li> </ul>	m and μm wavelengths. c) 0.89 and 1.62 d) All of the above

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#### DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2021-2022 (EVEN SEM)

MARK SHEET FOR CERTIFICATE COURSE- REMOTE SENSING AND GIS IN CIVIL ENGINEERING

		ZANAXAM	1/18/34/10	ATTENDAN	CE DETAILS	CC-MC	CQ TEST	OVERALL
S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	No of Sessions Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	MARK(100) (50% of A + 50% of B)
12	912620103001	ASWINI T	II/CIVIL	9	90	19	76	83
2	912620103002	GEETHA M	II/CIVIL	8	100	22	88	94
3	912620103003	KEERTHI S	II/CIVIL	9	100	20	80	90
4	912620103004	SUBATHRA S	II/CIVIL	10	100	22	88	94
5	912620103301	BHAVANI S 2000 2 .	II/CIVIL	9	80	18	72	76
6	912620103302	MEGALA V	II/CIVIL	10	90	19	76	83
7	912619103001	АЈІТНА Т	III/CIVIL	10	100	19	76	88
8	912619103002	ARULJENIFAR C	III/CIVIL D		VATHIM.E.,Ph.	D., 22	88	89
		(YL-)	57	COLLEGE	<mark>LENGINEERING</mark> FOR WOMEN 303, Pudukkojtal DL		1	

					VATHUM.E., PA ICIPAL		88	80
9	912619103003	DIVYA V	III/CIVIL	8	80	17	68	74
10	912619103004	MANGAIYARKARASI G	III/CIVIL	9	90	19	76	83
11	912619103005	MUTHULAKSHMI S	III/CIVIL	10	100	23	92	96
12	912619103006	PRAVEENA S	III/CIVIL	10	90	20	80	85
13	912619103007	PRIYADHARSHINI K	III/CIVIL	9	100	22	88	94
14	912619103009	RAGAVI V	III/CIVIL	. 9	100	22	88	94
15	912619103301	LILLY JOHN J	III/CIVIL	8	90	19	76	83
16	912619103302	BHUVANI S	III/CIVIL	9	80	18	72	76
17	912618103005	MEENACHI K	IV/CIVIL	10	90	19	76	83
18	912618103008	SATHYA M	IV/CIVIL	9	100	20	80	90
19	912618103009	SRIVIDHYA S	IV/CIVIL	10	100	22	88	94
20	912618103010	UMAMAHESWARI K	IV/CIVIL	10	90	18	72	81

Course Coordinator Dr. S.THILAGAVATHIM.E., Ph.D., PRINCIPAL SRIBHARATHLENGINEERING COLLEGE FOR WOMEN Kalkkurchi - 622 303 Pudukköttai Dt.

K.R HOD/CIVIL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303



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Criteria 2

**Teaching-Learning and Evaluation** 

350

## **Key Indicator- 2.3. Teaching- Learning Process (40)**

## 2021-2022

## **CIVIL ENGINEERING**

## PARTICIPATIVE LEARNING

## SYMPOSIUM, SEMINAR AND WORKSHOP



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#### **DEPARTMENT OF CIVIL ENGINEERING**

List of Civil Engineering Students Attended

Symposium/Workshop/Seminar/Conference-Participative learning

Academic Year 2021-2022

S.No	Register No	Student Name	Year/Sem	Name of the Learning Method	
1	912618103008	Sathya M	IV/VII	Seminar	
2	912618103009	Srividhya S	IV/VII		
3	912618103008	Sathya M	IV/VII		
4	912618103009	Srividhya S	IV/VII	Symposium	

Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

HOD / CIVIL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303

## CARE COLLEGE OF ENGINEERING COLLEGE OF ENGINEERING

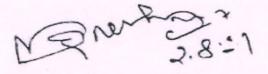
THIS IS TO CERTIFY THAT SATHYA OF SRI BHARAHI ENGINEERING COLLEGE FOR WOMEN HAS SECURED 1 PLACE IN THE EVENT AFFIX IN HESTIA'21,A NATIONAL LEVEL ONLINE TECHNICAL SYMPOSIUM, ON 18 OCTOBER 2021 BY THE DEPARTMENT OF CIVIL ENGINEERING.

U. Smesh **BENJAMIN SHAH** HOD CIV Dr. S.THILAGAVATHI M.E., Ph.D., PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt

# CARE

## CERTIFICATE OF MERIT

THIS IS TO CERTIFY THAT SRIVIDHYA OF SRI BHARADHI ENGINEERING COLLEGE FOR WOMEN HAS SECURED 1 PLACE IN THE EVENT MASTER MIND IN HESTIA'21, A NATIONAL LEVEL ONLINE TECHNICAL SYMPOSIUM, ON 18 OCTOBER 2021 BY THE DEPARTMENT OF CIVIL ENGINEERING.



**BENJAMIN SHAH** 



HOD CIVIL

U.S.

Dr. S.THII

ME Ph D

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Kaikkurchi - 622 303. Pudukkottai Dt



### SRI RANGANATHAR INSTITUTE OF ENGINEERING AND TECHNOLOGY

Athipalayam, Coimbatore – 641 110

Approved by AICTE & Affiliated to Anna University, Chennai

## Department of Civil Engineering







150 9001:2015

#### CERTIFICATE OF PARTICIPATION

This is to certify that, Ms.M.sathya of Sri bharathi engineering College for women has Participated in the NATIONAL LEVEL WEBINAR on "DISASTER MANAGEMENT AND MITIGATION PLAN IN HIGHWAY" Organized by Department of Civil Engineering, Sri Ranganathar Institute of Engineering and Technology, Coimbatore on 24-10-2021.

Mr. K. KARTHIKEYAN HOD - CIVIL

Dr. H. GANESAN

Dr. H. GANESAN DEAN

Dr. K. P. ARUL SHRI PRINCIPAL



This is to certify that, Ms.SRIVIDHYA.S of Sri bharathi engineering college for women Participated in the NATIONAL LEVEL WEBINAR on "DISASTER MANAGEMENT AND MITIGA" PLAN IN HIGHWAY "Organized by Department of Civil Engineering, Sri Ranganathar Institute Engineering and Technology, Coimbatore on 24-10-2021.

Mr. K. KARTHIKEYAN HOD - CIVIL

Dr. H. GANESAN

DEAN

Dr. K. P. ARUI PRINCIPA