

SRI BHARATHI

ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Kaikkurichi, Pudukkottai -622 303

www.sbec.edu.in

NAAC DOCUMENTS



Quality Indicator Frame Work

Criterion – 1 CURRICULAR ASPECTS

Submitted by

IQAC
Internal Quality Assurance Cell

Sri Bharathi Engineering College for Women

Manufacture of the state of the

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25 KAIKKURUCHI, PUDUKOTTAI – 622 303 DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2021-2022 / ODD SEMESTER

1.2 Academic Flexibility (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:	DEV	VELOPMENT & APPLICATION OF SPECIAL CONCRETE										
	Mrs.S.Thamizh Thendral, M.E.,											
Resource Person: Structural Engineer,												
110500100100	5022	T.R.N	T.R.M Constructions,									
	Trichy.											
Date of cond	uct fro	m:	09.08.202	21	To:	13.08	3.2021	Duration:	30 Hours			
Organized D	epartn	nent :	CIVIL E	NGINEERIN	G			<u>I</u>				
Participant		2/2/4		Compaton	OI)D	No of Ctud	lanta Dagista	20			
Year:	Year: ODD No. of Students Registered: 20											
Venue: Fin	rst Flo	or - Lec	ture Hall	: 30								

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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	Resource Person
1.	Development & Application of Special Concrete	Mrs.S.Thamizh Thendral, M.E., Structural Engineer, T.R.M Constructions, Trichy.

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

HoD/Civin 8 2)
HOD / CIVIL
SRI BHARATHI ENGINEERIN
COLLEGE FOR WOMEN
KARKURICHI
PUDULKO TIMI - C22 303

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

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,



(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) STUDENTS PARTICIPATION LIST-VAC PROGRAM DEVELOPMENT & APPLICATION OF SPECIAL CONCRETE

(ILVP	NOoH :	Coordinator	DVA-
S.NO	REG.NO	NAME OF THE STUDENT	YEAR/BRANCH
HOH!	TA SEPHIOS.		
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

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

VAC Coordinator

SRI BHARATHI 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.

Kalkkurchi - 622 303, Pedukkoltai Dt.



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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/	1 / 1 / 1	TE: 08.21		DATE: 10.08.21		DATE: 11.08.21		DATE: 12.08.21		TE: 08.21	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	1	1	1	1	1	1	1	1	1	10	T. Aswini
2	912620103002	GEETHA M	II/CIVIL	-/	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	9	3. Karthi
4	912620103004	SUBATHRA S	II/CIVIL	1	1	1	1	,	1	1	1	1	1	10	9-Sabodhe
5	912620103301	BHAVANI S	II/CIVIL	1	1	1	1	1	1	1	1	1	a	9	882
6	912620103302	MEGALA V	II/CIVIL	1	1	1	1	1	1	1	1	1	1	10	v.mal
7	912619103001	АЈІТНА Т	III/CIVIL	1	1	1	1	/	,	1	1	1	1	10	A Titha
8	912619103002	ARULJENIFAR C	III/CIVIL	1	1	1	,	1	1	1	1	,	,	10	D
9	912619103003	DIVYA V	III/CIVIL	1	a	1	,	,	1	,	a	,	,	8	Daniel .
10	912619103004	MANGAIYARKARASI G	III/CIVIL	1	1	1	a	1	1	1	1	,	a	8	Marleaiyar
11	912619103005	MUTHULAKSHMI S	III/CI QL	:THI	LAG	LYAT	HIM	E/P	.D.,	1	1	1	1	10	Meno

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

12	912619103006	PRAVEENA S	III/CIVIL	1	1	1	a	1	1	1	1	1	1	9	Boureana
13	912619103007	PRIYADHARSHINI K	III/CIVIL	/	1	1	1	1	1	1	1	1	1	10	Raija
14	912619103009	RAGAVI V	III/CIVIL	1	1	1	1	1	1	1	1	1	1	0	Racari
15	912619103301	LILLY JOHN J	III/CIVIL	1	1	1	1	,	1	1	1	1	1	10	Juhn
16	912619103302	BHUVANI S	III/CIVIL	1	a	1	1	1	*	1	a	1	1	8	Bend
17.	912618103005	MEENACHI K	IV/CIVIL	,	1	1	1	1	1	1	1	1	1	(0	Meendo
18	912618103008	SATHYA M	IV/CIVIL	,	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	Lo	Soient.
20	912618103010	UMAMAHESWARI K	IV/CIVIL	1	1	1	1	1	a	1	1	1	1	9	Cemali

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.



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

Report on Value Added Course

Title:

Development & Application of Special Concrete

Mrs.S.Thamizh Thendral, M.E.,

Resource Person:

Senior Engineer,

T.R.M Constructions,

Trichy.

Date of conduct from: 09.08.2021 To: 13.08.2021 Duration:

30 Hours

Organized Department:

CIVIL ENGINEERING

Participant Year:

2, 3, 4

Semester: ODD

No. of Students Registered:

20

Venue:

First Floor- Lecture Hall:30

Outcome of Value Added Course (VAC): At the end of the course, Student can able to

- Know about Concreting in cold and hot weather.
- Understand the difference between normal concrete and special concrete.
- Describe Self-compacting and fiber reinforced concretes.
- Explain high strength concrete, mass concrete and shotcrete.
- Get knowledge on preplaced aggregate concrete and light weight aggregate concrete.
- Illustrate underwater anti-washout concrete; micro-concrete, expansive concrete, roller compacted concrete, concrete using recycled aggregate.

No. of students successfully completed the VAC course is 20 students based on the following assessment process.

Assessment Process

- 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
- Total Score = (0.5 *Attendance in VAC out of 100 percentage + 0.5 *Test mark in VAC out of 100 marks)

AC Coordinator

SRIBHARATHI ENGINEERING SRIBHARATH COLLEGE FOR WOMEN

KAIKKURICHI. PUDUKKOTTAI - 622 303 COLLEGE FO KAIKKURICHI - 622 303. PUDUKKOTTAI DISTRICT

AGAVATHI M.E., Ph.D.,

SRI BHARATHI ENGINEERI**ng** 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.

Dr. S.THILAGAVATHI M.E., Ph.D.,

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.

Dr. S.THILAGAVATHI M.E., Ph.D.,

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

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.

S.THILAGAVATHI M.E.,Ph.D.

SRI BHARATHI ENGINEERING

COLLEGE FOR WOMEN
Kalkkurchi - 622 303, Pudukkottai Dt.

Structural Engineeer, TRM Constructions.

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DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2021-2022 / ODD SEMESTER

ACADEMIC TEAR 2	2021-2022 / ODD SEWIESTER
Name of the Student:	Year/Sem:
AU Register Number:	
Value Added Course on "Developm	nent & Application of Special Concrete"
MCQ QUESTIO	NS (25X4 = 100 Marks)
1. The water cement ratio for Ferro-cement m	nix 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
undients on Sustainer Asy (p.	a) between 0.50 to 0.00
2. The volume of reinforcement in Ferro-cem	ent varies between
a) 1-2%	
b) 2-5%	d) 8-10%
	0.085-74
3. Shotcrete differs from conventional concre	te with regard to
a) Material, proportions and void system	c) Application procedure
b) Compaction	d) All of the above
	,- 036 1046 MPa
4. Which of the following fibres give the higher	est improvement in the impact strength of fibre
reinforced concrete?	
a) Glass Fibers	c) Carbon fibers
b) Polypropylene, nylon, and other organic	
fibers	
	Tyruma oviula bushe postable answer amang
5. Aerated concrete is produced by addition of	Catalanaa - Catala
a) Sodium silicate	c) Aluminium powder
b) Copper sulphate	d) Zinc
6. Lightweight concrete has all the following l	HTM :
a) High thermal insulation	c) Excellent fire resistance
b) High sound insulation	d) Reduced drying shrinkage
mino Coviu	mm/03/01/dco
7. The cement concrete, from which entrained	air and excess water are removed after placing it in
position, is called	nither to 1 15 to 6 to 10 to 1
a) Vacuum concrete	c) Prestressed concrete
b) LWC	d) Sawdust concrete
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W as discovering to	
OL STHILAGAVATHI M.E.	Dr. S.THILAGAVATHI M.E., Ph.D.,
PRENUE PAR DE LA CONTRE E LA C	PRINCIPAL
SKI BINANAITE INC	SRI BHARATHI ENGINEERING

COLLEGE FOR WOMEN
Kalkkurchi - 622 303, Pudukkottai Dt.

8.	Light weight cement content for compressive stryard.	
	a) 400-510 b) 440-560	c) 530-660 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
11.	No fines concrete is manufactured bya) By adding no fines materials from normal	c) By reducing its strength
	concrete ON ON OR A CONSESSION OF STREET	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 ag	
	a) 1600-1900 b) <300	c) >2500 d) >300
		HOLEMAN AND RESUME STATES AND
13.	What is the value of modulus of elasticity for Su	
	a) 60-115 MPa	c) 35-50 GPa d) 500 GPa
14.	Diameter of Round Steel Fiber lies in the range of	of mm. Perspage becoming
	a) 0.3 - 0.5	c) 0.155 - 0.41 2396 (32810 (4)
	b) 0.25 - 0.75	d) 0.25 - 0.90
15.		llowing for compressive strength of high strength
	a) 10MPa	c) 30MPa
	b) 20MPa	d) 40MPa
16	Maximum size of aggregates are used to produc	ce 70MPa compressive strength is
10.	a) 20-30 mm	c) 30-40 mm
	b) 10-20 mm	d) 40-50 mm
	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
		-51
	Dr. S. THILAGAVATHI M.E., Ph.D.,	Dr. S.THILAGAVATH! M.E.,Ph.D., PRINCIPAL
	SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN	SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN
	Kaikkurchi - 622 303, Pudukkottai Dt.	Kaikkurchi - 622 303, Pudukkottal Dt.

18. What is the normal time to get uniform mi	xing?
a) 30 seconds	c) 1 minutes
b) 2 or more minutes	d) 24 hours
19. Which one is not used as air entraining age	ents?
a) Alumina	c) Fats
b) Natural resins	d) Oil
20. Aerated concrete is made in the density of	approxkg/m ³ .
a) 50	c) 250
b) 150	d) 350
21. What does the Standard Consistency Test 1	mean?
 a) The amount of water required to make a standard or typical consistency cement p 	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	n sewage 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 streng	eth concrete?
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	n strength concrete and for pavements subjected to
tension, is	barreness subjected to
a) Rounded aggregate	c) Irregular aggregate
b) Irregular aggregate	d) Flaky aggregate

Dr. S.THILAGAVATH! M.E., Ph.D.,
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DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2021-2022 / ODD SEMESTER

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

ANSWER KEY

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

Dr. S.THILAGAVATH! 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 : Ko Uma Maheswayi	Year/Sem: V/VI
AU Register Number: 912618103010	concrete
Value Added Course on "Developmen	nt & Application of Special Concrete"
MCQ QUESTIONS	S(25X4 = 100 Marks)
 The water cement ratio for Ferro-cement mix a) Less than 0.35 b) Between 0.35 to 0.40 	should be c) Between 0.40 to 0.50 d) Between 0.50 to 0.60
2. The volume of reinforcement in Ferro-cement (a) 1-2% b) 2-5%	varies between © 5-8% d) 8-10%
 3. Shotcrete differs from conventional concrete v 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 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 ofa) Sodium silicateb) Copper sulphate	(c) Aluminium powder (d) Zinc
6. Lightweight concrete has all the following bena) High thermal insulationb) High sound insulation	eficial characteristic except, c) Excellent fire resistance d) Reduced drying shrinkage
7. The cement concrete, from which entrained air position, is called (a) Vacuum concrete (b) LWC	c) Prestressed concrete d) Sawdust concrete
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PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

8. Light weight cement content for compressive st vard.	trength 3000 psi is pounds per cubic
a) 400-510 b) 440-560	c) 530-660 (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	c) Medium weight
b) Heavy weight	(1) Light weight
11. No fines concrete is manufactured by	
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 as	ggregate vary from kg/m ³ .
a) 1600-1900	c) >2500
(5) <300	d) >300
13. What is the value of modulus of elasticity for Su a) 60-115 MPa (b) 10-16 MPa	alphur infiltered concrete? © 35-50 GPa d) 500 GPa
highest improvement in the impact strength of store	Which of the following fibres give the
14. Diameter of Round Steel Fiber lies in the range	
a) 0.3 - 0.5 gradil modus 3 (c	c) 0.155 - 0.41 and 1 scal D (a)
(b) 0.25 - 0.75 egodil auteode A (b) joinn	d) 0.25 - 0.90
15. What could be the possible answer among the fo	ollowing for compressive strength of high strength
a) 10MPa solveog mulidimul A(15)	c) 30MPa ofsoille muibo? (a
b) 20MPa	d 40MPa
16. Maximum size of aggregates are used to produ	ace 70MPa compressive strength is
(a) 20-30 mm was golyeb besolbed (b)	c) 30-40 mm
b) 10-20 mm	d 40-50 mm
ance air and excess water are removed after placing.	/ The Ament concrete, from which entra
a) It increase the size of the column	c) Doesn't affect
(b) It decrease the size of the column	d) Decrease the strength
(b) it decrease the Size of the column	a) Booteass the shongth
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Or. S.THILAGAVATHI M	Dr. S.THILAGAVATHI M.E., Ph.D.,
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	Kalkkurchi - 622 303, Pudukkottai Dt.

18. What is the normal time to get uniform mixing?a) 30 secondsb) 2 or more minutes	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 appro	kg/m^3 .				
a) 50	(c) 250				
b) 150	(d) 350				
21. What does the Standard Consistency Test mean?					
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 cor	ocrete?				
a) Tensile strength	c) Both (a) and (b)				
(b) Compressive strength	d) Neither (a) nor (b)				
24. Creep is					
a Time dependent	A) D				
b) Time and pressure dependent	c) Pressure dependent				
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 The type of aggregates not suitable for high strentension, is 	gth concrete and for pavements subjected to				
(a) Rounded aggregate	c) Irregular aggregate				
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DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2021-2022 / ODD SEMESTER

Name of the Student: V. Ragavi Year/Sem: 111 / V AU Register Number: 912619103009
AU Register Number: 9126 19103009
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 b) Between 0.35 to 0.40 c) Between 0.40 to 0.50 d) Between 0.50 to 0.60
2. The volume of reinforcement in Ferro-cement varies between a) 1-2% 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? 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 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
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8. Light weight cement content for compressive st	rength 3000 psi is pounds per cubic
yard.	ra, you has seen yo sayonggay.
a) 400-510	c) 530-660
(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
Using coke-breeze, slag as aggregate in the concrete	d) Mixing Fe in the concrete
10. Aerated Concrete is	
a) Very heavy weight	c) Medium weight
b) Heavy weight	d Light weight
11. No fines concrete is manufactured by	
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 ag	
a) 1600-1900 ♠) <300	c) >2500 d) >300
and having each of the services	
13. What is the value of modulus of elasticity for Su	
a) 60-115 MPa	© 35-50 GPa
b) 10-16 MPa	d) 500 GPa
14. Diameter of Round Steel Fiber lies in the range of	of mm.
a) 0.3 - 0.5	c) 0.155 - 0.41
ⓑ 0.25 - 0.75	d) 0.25 - 0.90
15. What could be the possible answer among the fo concrete?	ellowing for compressive strength of high strength
a) 10MPa	c) 30MPa
b) 20MPa	d 40MPa
16. Maximum size of aggregates are used to produce	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
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DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC YEAR 2021-2022 / ODD SEMESTER

Name of the Student: M. Geetha	Year/Sem: 11/11)
AU Register Number: 912690103002	Distance 7
Value Added Course on "Developmen	t & Application of Special Concrete"
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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

S.NO	REG.NO	NAME OF THE STUDENT	YEAR/ BRANCH	ATTENDANCE DETAILS		VAC-MCQ TEST		OVERALL
				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	AJITHA T	III/CIVIL	10	100	18	72	86
8	912619103002	ARULJENIFAR C	III/CIVIL _{Dr.}	S:THILAGAV	ATHI MOE.,Ph.D.	22	88	94

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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(0)	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

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