

Accredited by NAAC with '8+' Grade, 2(f) & 128 Stotus Institution by UGC

IG Valley, Madurai Main Road, Manikandam, Tiruchirappalli - 620012

#### **NAAC DOCUMENTS**

**QUALITY INDICATOR FRAME WORK** 

CRITERION - 1

#### **CURRICULAR ASPECTS**

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL INDRA GANESAN COLLEGE OF ENGINEERING





#### DEPARTMENT OF CIVIL ENGINEERING

#### ACADEMIC YEAR 2019-2020 / EVEN 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 Titl	e: SAFI	TY I	Y IN CONSTRUCTION							
Resource	Person:	Assis Kala Tha	C. KUMAR, stant Engine m Construc njavur, ilnadu	eer,						
Date of conduct from: 20.		20.07.2020	7.2020 To:		24.07.202	0	Duration:	30 Hours		
Organize	d Departr	nent:	DEPART	MENT OF	F CI	VIL ENGI	NEER	ING	1,	
Participant Year: CIV		IL II ,III, Semester: EVEN No. of Students Registered: 44						44		
Venue:	https://m	eet.goo	gle.com/mnd-tpqm-gb (Google Meet)				1			

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Academic Year 2019-2020 - Even Semester

DATE: 15.07.20

#### DEPARTMENT CIRCULAR

Department of Civil Engineering and IQAC of IGCE in association with KALAM CONSTRUCTION is going to organize Value Added Course for all Second, Third and Final year students of CIVIL engineering on "Safety in construction" from 20.07.20 to 24.07.20, though, <a href="https://meet.google.com/mnd-tpqm-gbm">https://meet.google.com/mnd-tpqm-gbm</a> (Google meet link). Certificates will be issued to the eligible participants at the end of the Course.

Resource Person Detail	Mr.K. KUMAR,     Assistant Engineer,     Kalam Construction,     Thanjavur, Tamilnadu
Venue	https://meet.google.com/mnd-tpqm-gb
2: satory.	(Google Meet)

Cc:

- · Principal Table
- IQAC Co-Ordinator
- · HoD/Civil
- · Class In charges II, III & IV-Year
- . II, III & IV-Year Civil Students
- · Office File
- · Notice Board

Dr. G. Balakrishnan, M.E., Ph.D.,

Principal

Indra Ganesan Coilege of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 812.



### Indra Ganesan

#### COLLEGE OF ENGINEERING

Madural Main Road (NH-45B), Manikandam, Trichy-12. Approved by AICTE, NewDelhi & Affiliated to Anna University, Chennai

#### Value Added Course on "SAFETY IN CONSTRUCTION"

#### SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Introduction to construction industry and safety issues in construction	3	20.07.2020
2	Framing of contract conditions on safety and related matters	3	20.07.2020
3	Safety in various construction operations	3	21.07.2020
4	Familiarization with relevant Indian Standards and the National Building Code provisions on construction safety	3	21.07.2020
5	material handling and equipment's-Safety in storage & stacking of construction materials	3	22.07.2020
6	Safety in temporary power supply and fire safety at construction site.	3	22.07.2020
7	Licensing of Contractors, Welfare and Health provisions in the Act and the Rules, Penalties, Rules regarding wages.	3	23.07.2020
8	Code of Practices Preventive measures against Hazards at work places Part 1 & 2	3	23.07.2020
9	Indian standard - trusses, girders and beams	3	24.07.2020
10	Fire hazards and preventing methods	3	24.07.2020
	Total Hours	30	3

VAC Coordinator

Dr. G. Balakrishnan, M.E., Ph.D., Principal

Indra Ganesan Coilege of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012. B) Carron



COLLEGE OF ENGINEERING Madural Main Road (NH-45B), Manikandam, Trichy-12. Approved by AICTE, NewDelhi & Affiliated to Anna University, Chennai

#### Value Added Course- "Safety in construction"

#### STUDENTS PARTICIPATION LIST

S.No.	Reg No	Student Name	Year/ Branch
1	811216103001	AUGUSTIN RAJ J	IV/ CIVIL
2	811216103002	DANISH AHAMED SHAREEF K	IV/ CIVIL
3	811216103003	HARIHARAN M	IV/ CIVIL
4	811216103005	ISHWARYA V	IV/ CIVIL
5	811216103006	JAMES ALPHONES RAJ A	IV/ CIVIL
6	811216103007	KALPANA K	IV/ CIVIL
7	811216103008	KARTHICK K	IV/ CIVIL
8	811216103009	MATHIYAZHAGAN E	IV/ CIVIL
9	811216103010	PREETHA S	IV/ CIVIL
10	811216103011	216103011 SRINANDHINI V P	
11	811216103012	SYED JAMIRDEEN S	IV/ CIVIL
12	811216103013	VIGNESH K	IV/ CIVIL
13	811216103014	YOGESHWARAN T	IV/ CIVIL
14	811216103301	ARAVIND A	IV/ CIVIL
15	811216103302	PRASANTH N R	IV/ CIVIL
16	811216103303	RAJ GOKUL A B	IV/ CIVIL
17	811216103304	THIRUMALAI VASAN T	IV/ CIVIL
18	811216103701	HARIHARAN T	IV/ CIVIL
19	811216103702	MANOJKUMAR.A	IV/ CIVIL
20	811216103703	NAVINKUMAR R	IV/ CIVIL

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-628 012.



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S.No.	Reg No	Student Name	Year/ Branch
1	811217103001	AISHWARIYA.P	III/ CIVIL
2	811217103002	AKASH.S	III/ CIVIL
3	811217103003	AROCKIA RENALDO.J	III/ CIVIL
4	811217103004	AVINASH KUMAR.R	III/ CIVIL
5	811217103005	BALAJI.S	III/ CIVIL
6	811217103006	BALASUBRAMANI.R	III/ CIVIL
7	811217103007	DEEPAN.S.K	III/ CIVIL
8	811217103008	GAYATHRI.A	III/ CIVIL
9	811217103009	KOKILA.P	III/ CIVIL
10	811217103010	MANIKANDAN.G	III/ CIVIL
11	811217103011	MOUNIKA.M	III/ CIVIL
12	811217103012	NAVANEETHAN KRISHNAN.K	III/ CIVIL
13	811217103013	PALANIYAPPAN.N	III/ CIVIL
14	811217103014	SALEEM KHAN.S	III/ CIVIL
15	811217103015	SATHISH KUMAR.S	III/ CIVIL
16	811217103016	THAMARAI SELVI.K	III/ CIVIL
17	811217103301	ARUN PRASATH R	III/ CIVIL
18	811217103302	JOEL FERNANDEZ.R	III/ CIVIL
19	811217103303	SUMITHIRA.R	III/ CIVIL
20	811217103304	THIRUPATHI RAJA.G	III/ CIVIL

Dr. G. Balakrishnan, M.E., Ph.D., Principal Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012.



#### COLLEGE OF ENGINEERING

Madural Main Road (NH-45B), Manikandam, Trichy-12. Approved by AICTE, NewDelhi & Affiliated to Anna University, Chennai

S.No.	Reg No	Name	Year/Branch
1	811218103001	AKASH J	II/ CIVIL
2	811218103002	M. MAHENDRAN	II/ CIVIL
3	811218103003	S MUSARAF ALI	II/ CIVIL
4	811218103004	PRABU J	II/ CIVIL

Dr. G. Balakrishnan, M.E., Ph.D. Principal

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012.

**VAC Coordinator** 



Madurai Main Road (NH-45B), Manikandam, Trichy-12. Approved by AICTE, NewDelhi & Affiliated to Anna University, Chennai

		RF	PORT ON V	ALUE AD	DED CO	DURSE	Ž	
Title:			"Safety in	construct				
Resource Person:		Mr.K. KUM Assistant Eng Kalam Constr Thanjavur, Ta	Dr. G. Ballakrishnan, M.E., Phila Indra Gamesan Coulege of Engineering IG Valley, Madural Main Road Manikandam, Trichy-620 012.					
Date of c	Date of conduct from:		20.07.20		24.07	.24	Duration:	30 Hours
Organize	d Departi	ment:	CIVIL ENGI	NEERING	G			
Participant Year: 2, 3,		2, 3, 4	Semester:	EVEN		No. of	Students Registe	red: 44
Venue:	https://	meet go	ogle.com/mnd-ti	ram-ab(Go	nala maat	1000000		

#### Outcome of Value-Added Course (VAC): At the end of the Course, Students can able to

- Basic terminology in safety, types of injuries, safety pyramid
- Accident patterns, theories of accident-causation
- Planning for safety budget, safety culture
- Introduction to OSHA regulations
- · Role of stakeholders in safety
- Site safety programs Job hazard analysis, accident investigation & accident indicesviolation, penalty
- Safety during construction, alteration, demolition works Earthwork, steel construction, temporary structures, masonry & concrete construction, cutting & welding

#### Assessment Process

Students, who are securing more than 70% 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).

VAC Coordinator

HoD/CIVIL

rincipal



### Indra Ganesan

#### COLLEGE OF ENGINEERING

Madurai Main Road (NH-45B), Manikandam, Trichy-12.
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#### REPORT ON VALUE ADDED COURSE (SAMPLE PHOTOS)

Title:

"Safety in construction"

Mr.K. Kumar,

Resource Person:

Assistant Engineer

Kalam Construction,

Trichy, Tamilnadu

Dr. G. Balakrishnan, M.E., Ph.D.,

Principal

Indra Ganesan College of Engineering IG Valley, Madurai Main Road

Manikandam, Trichy-620 012.

Date of conduct from:

20.07.20

To:

24.07.24

Duration:

30 Hours

Organized Department:

CIVIL ENGINEERING

Participant Year:

2, 3, 4

Semester:

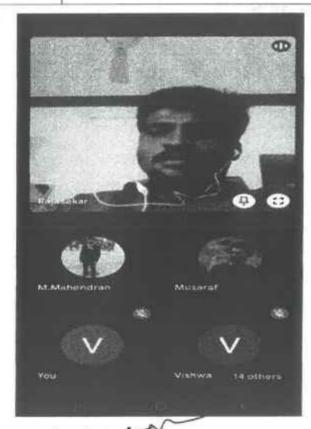
**EVEN** 

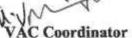
No. of Students Registered:

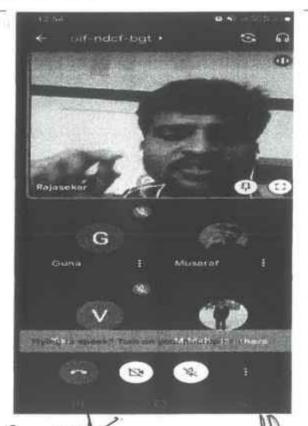
44

Venue:

https://meet.google.com/mnd-tpqm-gb(Google meet link)







B)VN-ANT

Phincipal



#### Academic Year 2019-2020 - Even Semester

Name of the Student:

NYear/Sem:

**AU Register Number:** 

	Value Added Course on	"Safety in constru	uction"			
	MCQ QUESTIONS					
1	. While using ladder one should not lean sid a) 40 cms	E :				
	b) 50 cms	<ul><li>c) 30 cms</li><li>d) 45 cms</li></ul>	Dr. G. Balakrishnan, M.E., Ph.D., Principal Indra Ganesan College of Engineering			
2	Which is the most accepted method of avo    a) Wearing safety equipment	oiding accident?	IG Valley, Madurai Main Road Manikandam, Trichy-620 012. with highly skilled working			
	b) Doing things in one s own way	d) Observing sa	afety precautions related to			
3.	For repair works at high level of multi stor a) As it is more stable	ied buildings need c) As it will no	nd working place le scaffolding is preferred t obstruct traffic at ground			
	b) As it looks better	level d) All of the ab	ove			
4.	Which cost is not include in direct accidents	s costs?				
	a) Medical care expenses for injured	<ul> <li>c) Decrease in n productivity</li> </ul>	noral which affects			
	b) Replacement cost of equipment and material damaged in accidents	d) Fees for legal	counsel			
5.	Sinking fund is					
	The fund for rebuilding a structure when its economic life is over	c) The total sum to be paid to the municipal authorities by the tenants				
	b) Raised to meet maintenance costs	d) A part of the r	noney kept in reserve for itional structures and			
6.	Pre-tender stage requires					
	a) Acquisition of land     b) Selection of site	<ul><li>c) Finalization of</li><li>d) All the above</li></ul>	f alignment of work			

	Department of Ci	ivil Engineering C. G. Balakrishnan, M.E., Ph.D.,
	Academic Year 2019-2	020 - Even Semester Ganesan College of Engineering
7	Select the correct statement.	to Valley Madurai Main Road
	· 마양보이었는데 바양경을 무슨 역시 학생은 4선 (조리스타막길 2014).	Manikandam, Trichy-620 012
	<ul> <li>a) A critical path always begins at the very first event</li> </ul>	c) Critical activities control the project duration
	b) A critical path always terminates at the	d) Critical activity is the one for which
	last event	free float is zero
8.	Free float for any activity is defined as the	difference between
	a) Its earliest finish time and earliest start	c) Its latest finish time and earliest start
	time for its successor activity	time for its successor activity
	b) Its latest start time and earliest start time	d) Its earliest finish time and latest start
		time for its successor activity
9.	In CPM analysis,	
	a) Emphasis is given to activities	c) Activities are represented by arrows
	b) Uncertainties are not allowed	d) All the above
10.	If TL is the latest allowable event occurrence	e time, total activity slack(s), is equal to
	a) LST - EST	c) TL - EFT
	b) LFT - EFT	d) All the above
11.	The constraints in case of resource smoother	ning operation would be
	a) Resources	c) Both resources and project duration time
	b) Project duration time	d) None of the above
12.	The time which results in the least possible of	construction cost of an activity, is known as
	a) Normal time	c) Crash time
	b) Slow time	d) Standard time
13.	Various activities of a project, are shown on	bar charts by
	a) Vertical lines	c) Dots
	b) Horizontal lines	d) Crosses
4.	Total float for any activity is defined as the d	ifference between
	a) Its latest finish time and earliest start time for its successor activity	c) Its latest start time and earliest start time
	b) Its latest start time and earliest finish time	d) Its earliest finish time and earliest start time for its successor activity

15. Pick up the correct statement from the following:

a) Earliest expected time is denoted by  $T_E$ c) Contractual obligation time is denoted by Ts



Madural Main Road (NH-45B), Manikandam, Trichy-12.
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#### Department of Civil Engineering

#### Academic Year 2019-2020 - Even Semester

b) Latest occurrence time is denoted by  $T_L$ 

d) All the above

16. Residential buildings are treated as

- a) Light construction
- b) Heavy construction

- c) Industrial construction
- d) Private construction

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Principal.

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012.

17. Pick up the PERT event from the following:

- a) Digging of foundation started
- b) Digging of foundation completed
- c) Laying of concrete started
- d) All the above

18. The process of incorporating changes and rescheduling or replanning is called

a) Resource levelling

c) Updating

b) Resource smoothening

d) Critical path scheduling

19. Pick up the correct statement from the following:

- a) Programme Evaluation and Review Technique, is event oriented
- b) Programme Evaluation and Review Technique is not event oriented
- c) Critical Path Method is event oriented
- d) Critical Path Method is not event oriented

20. Time and progress chart of a construction, is also known as

a) Bar chart

c) Modified Mile stone chart

b) Gantt chart

d) All the above

 The technique for establishing and maintaining priorities among the various jobs of a project, is known as

- a) Event flow scheduling technique
- c) Slotting technique for scheduling
- b) Critical ratio scheduling
- d) Short interval scheduling

22. A CPM family includes

- a) CPA (Critical Path Analysis)
- c) MCE (Minimum Cost Expenditure)
- b) CPP (Critical Path Plotted)
- d) All the above

23. Critical path

- a) Is always longest
- b) Is always shortest

- c) May be longest
- d) May be shortest



#### Academic Year 2019-2020 - Even Semester

- 24. If a is the optimistic time, b is the pessimistic time and m is most likely time of an activity, the expected time of the activity, is
  - a) (a + m + b)/6

c) (a + 4m + b)/6

b) (a+2m+b)/6

- d) (a + 5m + b)/6
- 25. The most suitable type of equipment for compaction of cohesive soils is
  - a) Smooth-wheeled rollers
- c) Sheep foot rollers

b) Vibratory rollers

d) Tampers

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Manikandam, Trichy-620 912.

VAC Coordinator

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COLLEGE OF ENGINEERING Madural Main Road (NH-45B), Manikandam, Trichy-12. Approved by AICTE, NewDelhi & Affiliated to Anna University, Chennai

#### **Department of Civil Engineering**

#### Academic Year 2019-2020 - Even Semester

Value Added Course on "Safety in construction"

		REPOR	T ON V	ALUE AI	DED C	DURSE			
1	ь	6	d	11	ь	16	a	21	ь
2	đ	7	d	12	b	17	d	22	d
3	d	8	a	13	ь	18	С	23	а
4	с	9	d	14	b	19	a	24	С
5	a	10	d	15	d	20	d	25	c

ANSWER KEY

Dr. G. Balakrishnan, M.E., Ph.D.,

Principal

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 812.

VAC Coordinator

8 My Long

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1) b) 150 cms  2. d) observing. Batery price 100 got masswring abore  3. d) An of the abore	BALATI · S  BALATI · S  BILL 17 103005  ALIANTY PLACE  BALATI · S  BILL 17 103005  Graphy Place  3 19 - CIVIL
gjob maburne ovrel  3. d) An of the above  4. c) Decrease in moral woh  5. a) The fund for rebnile  6. a) The fund for over	in affitts operationally ting a structure when ms
6. d) An of the above	one for each when thee
6. d) Au of the above  7. d) Critical activity. is the finish  The envisor finish	with and earliest start time
9. d) Au of the above	7/14)
10 d) PROJET duration time	25/
13 b) Show time  13 b) Horizontal Linus (X	and larket frish time
4. b) to linest start with	and earlier Junes 212
) teght wontimen	Dr. G. Balakrishnan, M.E., Ph.D., Principal Indra Ganesan College of Engineering
18. 9) An of the above  18. 9) updating X  meganemme, evaluation	IG Valley, Madurai Main Road Manikandam, Trichy-620 012.  **S nat
19. a) event oriented evaluation 20. d) Au of the above	

	16.00 A
Teacher's Signature	
21. b) Caitheal date Structuring ( 22. a) Au the above 23. a) Is aways imagest 24 c) (a+4m+h) /b 2m c) Shup fool Rower	
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22. d) An the above	
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Dr. G. Balakrishnan, M.E., Ph.D.,	
Lista Balanti Standard	
Principal	
Indra Ganesan College of Engineering	
IG Valley, Magurai Main Read	
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1. b, 50cm

2, d, alsowing safety power for orelated to 3.d. All of the above

4 C. Decrease in monal which afters freductivity

5 a. The fund for so building a structure Life is migh

6, d, all the alsour

? d) builted activity is the one for which teget look as seened

3. a) 91s combest times time and combest stant tope for it successon activity

9, dy all the above .

10, dg all the above X

12 b) both recrusice and project duration.

12, b) slow time

13 by Hasizontal lines

14. b) It's latest stant time and santiest of

15, d) all the about

16.0) light construction -,

17, d) All the above.

18, C) updating

19, a) possogramme evaluation from session is cust oriented

20, d) All the allow

21, by stolling technique for schelding

Dr. G. Balakrishnan, M.E., Ph.D.,

Principal

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23,0) Is always longest of 24, C) Ca+4m+b)/6
25, C) Sheep foot stollers.

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IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

211216103003 M. Havi Havian Lith year Civil



1. b). 50 cms

2. d) Observing safaty Precantions related to job, machine and working place.

3. d). All of the above

4. c). Decrease in moral which affects productively

5. a). The fund for rebuilding a structure when its economic life is over.

6. d). All the above

7. d). Contical activity is the one for which

8. a). Its earliest finish time and earliest stort

9.0). All the above .1

10.d). Il the above

11.b). Project obviation tinge.

12. b). Blow time

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Indra Ganesan College of Engineering IG Valley, Madural Main Read Manikandam, Trichy-620 012.

13.6) Horiogontal lines

14 b). Its latest start time and earliest finish

15.0). All the above

16.0%. Light construction

17.0). All the above

18. c). Updating

19. a). Porogoramme evaluation & review Technique is not event oriented.

20. d). All the above

21. b). Contical ratio Scheoluling.

22.d) All the above

23.9). Is always longest

24.0). (a+4m+b)/6

25.c). Theen fool nolleys.

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Principal
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IG Valley, Madural Main Road
Manikandam, Trichy-620 012.



#### STUDENTS PARTICIPATION LIST

#### MARK SHEET FOR VALUE ADDED COURSE PROGRAM - Safety in Construction

	Reg No	Name		Attendar	ice Details	VAC-M	CQ TEST	OVERALL MARK(100)
S.No.			Year/ Branch	No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	(50% of A + 50% of B)
1	811216103001	AUGUSTIN RAJ J	IV/CIVIL	30	100	20	80	90
2	811216103002	DANISH AHAMED SHAREEF K	IV/CIVIL	27	90	21	84	87
3	811216103003	HARIHARAN M	IV/CIVIL	30	100	21	84	92
4	811216103005	ISHWARYA V	IV/CIVIL	27	90	20	80	85
5	811216103006	JAMES ALPHONES RAJ A	IV/CIVIL	30	100	21	84	92
6	811216103007	KALPANA K	IV/CIVIL	30	100	22	88	94
7	811216103008	KARTHICK K	IV/CIVIL	30	100	20	80	90
8	811216103009	MATHIYAZHAGAN E	IV/CIVIL	27	90	21	84	87
9	811216103010	PREETHA S	IV/CIVIL	27	90	19	76	83
10	811216103011	SRINANDHINI V P	IV/CIVIL	27	90	19	76	83
11	811216103012	SYED JAMIRDEEN S	IV/CIVIL	30	100	21	84	92

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Principal
Indra Ganesan College of Engineering
Main Road

IG Valley, Madurai Main Road Manikandam, Trichy-620 012.

	Reg No	Name		Attendar	nce Details	VAC-M	CQ TEST	OVERALL
S.No.			Year/ Branch	No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	MARK(100) (50% of A + 50% of B)
12	811216103013	VIGNESH K	IV/CIVIL	30	100	20	80	90
13	811216103014	YOGESHWARAN T	IV/CIVIL	27	90	21	84	87
14	811216103301	ARAVIND A	IV/CIVIL	30	100	21	84	92
15	811216103302	PRASANTH N R	IV/CIVIL	27	90	20	80	85
16	811216103303	RAJ GOKUL A B	IV/CIVIL	30	100	21	84	92
17	811216103304	THIRUMALAI VASAN T	IV/CIVIL	30	100	22	88.	94
18	811216103701	HARIHARAN T	IV/CIVIL	30	100	20	80	90
19	811216103702	MANOJKUMAR.A	IV/CIVIL	27	90	21	84	87
20	811216103703	NAVINKUMAR R	IV/CIVIL	27	90	19	76	83
1	811217103001	AISHWARIYA.P	III/CIVIL	30	100	21	84	92
2	811217103002	AKASH.S	III/CIVIL	30	100	22	88	94
3	811217103003	AROCKIA RENALDO.J	III/CIVIL	30	100	20	80	90
4	811217103004	AVINASH KUMAR.R	III/CIVIL	Ph.D.7	90	21	84	87
5	811217103005	BDC GIES	III/CIVIL akrishman Mil Principal	27	90	19	76	83

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-628 812.



	Reg No	Name		Attenda	nce Details	VAC-M	CQ TEST	OVERALL	
S.No.			Year/ Branch	No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	MARK(100) (50% of A + 50% of B)	
6	811217103006	BALASUBRAMANI.R	III/CIVIL	30	100	20	80	90	
7	811217103007	DEEPAN.S.K	III/CIVIL	27	90	21	84	87	
8	811217103008	GAYATHRI.A	III/CIVIL	30	100	21	84	92	
9	811217103009	KOKILA.P	III/CIVIL	27	90	20	80	85	
10	811217103010	MANIKANDAN.G	III/CIVIL	30	100	21	84	92	
11	811217103011	MOUNIKA.M	III/CIVIL	30	100	22	88	94	
12	811217103012	NAVANEETHAN KRISHNAN.K	III/CIVIL	30	100	20	80	90	
13	811217103013	PALANIYAPPAN.N	III/CIVIL	27	90	21	84	87	
14	811217103014	SALEEM KHAN.S	III/CIVIL	27	90	19	76	83	
15	811217103015	SATHISH KUMAR.S	III/CIVIL	30	100	21	84	92	
16	811217103016	THAMARAI SELVI.K	III/CIVIL	30	100	22	88	94	
17	811217103301	ARUN PRASATH R	.IH/CIVIL	30	100	20	80	90	
18	811217103302	JOEL FERNANDEZ.R	III/CIVIL	27	90	21	84	87	
19	811217103303	SUMITHIRA.R	III/CIVIL	27	90	19	76	83	
20	811217103304	THIRUPATHI RAJA.G	III/CIVIL	27	90	19	76	83	

Dr. G. Balakrishnan, M.E., Ph.D.,

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#### Department of Civil engineering

	Reg No	Name	Year/	Attenda	nce Details	VAC-M	CQ TEST	
S.No.		(%)	Branch	No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	OVERALL MARK(100) (50% of A + 50% of B)
1	811218103001	AKASH J	II/CIVIL	27	90	20	80	85
2	811218103002	M. MAHENDRAN	II/CIVIL	30	100	21	84	92
3	811218103003	S MUSARAF ALI	II/CIVIL	30	100	22	88	94
4	811218103004	PRABU J	II/CIVIL	30	100	20	80	90

nator

AC Coordinator

3/

Dr. G. Balakrishnan, M.E., Ph.D.,

Principal

Indra Ganesan College of Engineering

IG Valley, Madurai Main Read Manikandam, Trichy-620 012.

HoD/ CIVIL



#### Academic Year 2019-2020 - Odd Semester

#### STUDENTS ATTENDANCE LIST Value Added Course- Estimation and current practices in civil engineering

S.No.		Reg No	Name	Name	Year/ Branch		7,20	21.0	7.20	22.0	7.20	23.0	7.20	24.0	7.20	NO OF SESSIONS	SIGN OF THE STUDENT
			0.5%7.5%0.507	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED			
1	811216103001	AUGUSTIN RAJ J	IV/CIVIL	P	P	P	P	P	P	P	P	P	P	10			
2	811216103002	DANISH AHAMED SHAREEF K	IV/CIVIL	а	P	P	P	P	P	P	P	-	-				
3	811216103003	HARIHARAN M	IV/CIVIL	P	P	P	P	P	P	P	P	P	P	10			
4	811216103005	ISHWARYA V	IV/CIVIL	P	P	а	P	P	P	P	P	P	P	9			
5	811216103006	JAMES ALPHONES RAJ A	IV/CIVIL	P	P	P	P	P	P	P	P	P	P	10	ONLINE		
6	811216103007	KALPANA K	IV/CIVIL	P	P	P	P	P	P	P	P	P	P	10			
7	811216103008	KARTHICK K	IV/CIVIL	P	P	P	P	P	P	P	P	P	P				
8	811216103009	MATHIYAZHAGAN E	IV/CIVIL	P	P	P	P	P	P	P	a		P	9			
9	811216103010	PREETHA S	IV/CIVIL	P	P	P	P	P	a	P	P	P	P	10			
10	811216103011	SRINANDHINI V P	IV/CIVIL	P	P	a	P	P	р	P	P		- 7.5	10			
11	811216103012	SYED JAMIRDEEN S	IV/CIVIL	P	P	P Bala	р	P	р	р	P	P P	P	10 10			

Indra Ganesan College of Engineering IG Valley, Madurai Main Reas Manikandam, Trichy-€2u 012.



### Indra Ganesan

COLLEGE OF ENGINEERING Madural Main Road (NH-458), Manikandam, Trichy-12.
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#### Department of Civil engineering

S.No.	Reg No	Name	Year/ Brancl	1,500	07.20	21.0	7.20	22.0	07.20	23.0	7.20	24.0	7.20	NO OF SESSIONS	SIGN OF THE
			CONTROL MARKET CONTROL	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED	STUDENT
12	811216103013	VIGNESH K	IV/CIVIL	P	P	P	Р	P	P	P	P	P	P	10	
13	811216103014	YOGESHWARAN T	IV/CIVIL	P	а	P	P	P	P	P	P	P	P	9	
14	811216103301	ARAVIND A	IV/CIVIL	P	P	P	P	P	P	P	P	P	p	10	
15	811216103302	PRASANTH N R	IV/CIVIL	P	P	P	P	P	a	P	P	P	P	9	
16	811216103303	RAJ GOKUL A B	IV/CIVIL	P	P	P	P	P	P	P	P	P	P	10	
17	811216103304	THIRUMALAI VASAN T	IV/CIVIL	P	P	P	P	P	P	P	P	P	P	10	ONLINE
18	811216103701	HARIHARAN T	IV/CIVIL	P	P	P	Р	P	P	P	P	P	P	10	MODE
19	811216103702	MANOJKUMAR.A	IV/CIVIL	P	а	P	P	P	P	P	P	P	P	9	
20	811216103703	NAVINKUMAR R	IV/CIVIL	P	P	P	P	P	а	P	P	P	P	9	
1	811217103001	AISHWARIYA.P	III/CIVIL	P	P	P	Р	P	P	P	P	P	P	10	
2	811217103002	AKASH.S	III/CIVIL	P	P	P	P	р	P	P	P	P	P	10	
3	811217103003	AROCKIA RENALDO.J	III/CIVIL	P	· P	P	P	P	P	P	P	P	P	10	
4	811217103004	AVINASH KUMAR.R	III/CIVIL	P	P	P	а	P	P	P	P	P	P	9	
5	811217103005	BALAJI.S	III/CBHG. 1		shnah,	M.E.	PhPD.	, P	P	P	P	P	P	9	

Indra Ganesan College of Engineering IG Valley, Madurai Main Road

Manikandam, Trichy-620 012.

S.No.	Reg No		Year/ Branch	20.0	07.20	21.0	7.20	22.0	7.20	23.07	.20	24.0	7.20	NO OF SESSIONS	SIGN OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED	
6	811217103006	BALASUBRAMANI.R	III/CIVIL	P	P	P	Р	P	P	F	P	P	P	10	
7	811217103007	DEEPAN.S.K	III/CIVIL	P	P	P	P	a	P	F	-	P	P	9	
8	811217103008	GAYATHRI.A	III/CIVIL	P	P	P	P	P	P	F	P	P	P	10	
9	811217103009	KOKILA,P	III/CIVIL	P	P	P	P	P	a	F	-	P	P	9	
10	811217103010	MANIKANDAN.G	III/CIVIL	P	P	P	P	P	P	F	-	P	P	10	
11	811217103011	MOUNIKA.M	III/CIVIL	P	P	P	P	P	P	F	P	P	P	10	
12	811217103012	NAVANEETHAN KRISHNAN,K	III/CIVIL	P	P	P	P	P	P	P		P	P	10	
13	811217103013	PALANIYAPPAN.N	III/CIVIL	P	P	P	а	P	P	P	P	P	P	9	ONLINE
14	811217103014	SALEEM KHAN.S	III/CIVIL	P	P	P	P	а	P	P	P	P	P	9	MODE
15	811217103015	SATHISH KUMAR.S	III/CIVIL	P	P	P	P	P	P	P	-	P	P	10	
16	811217103016	THAMARAI SELVI.K	III/CIVIL		- P	P	P	P	P	P	-	P	P	10	
17	811217103301	ARUN PRASATH R	III/CIVIL	DÈ	P	P	p	P	P	P		P	p	10	
18	811217103302	JOEL FERNANDEZ.R	III/CIVIL	P	a	P	P	P	P	P	-	P	P	9	
19	811217103303	SUMITHIRA.R	HACKAR!	la P	ch P	n R	F B	nP	P	P		P	P	9	

Principal

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#### Department of Civil engineering

20	811217103304	THIRUPATHI RAJA.G	III/CIVII	L I	P 1	)	9 1	) ]	a	P	) ]	) ]	p		<u> </u>
S.No.	Reg No	Name	Year/	20.6	7.20	21.0	7.20	22.0	7.20	23.07	-	-	7.20	NO OF SESSIONS	SIGN OF THE
			Branch	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	ATTENDED	STUDENT
1	811218103001	AKASH J	II/CIVIL	P	P	P	P	a	P	P	P	P	P	9	ONLINE
2	811218103002	M. MAHENDRAN	II/CIVIL	P	P	P	P	P	P	P	P	P	P	10	MODE
3	811218103003	S MUSARAF ALI	II/CIVIL	P	P	P	P	P	P	р	р	р	P	10	
4	811218103004	PRABU J	II/CIVIL		P	P	P	P	P	P	P	P	p	10	

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Manikandam, Trichy-620 012.

Cox

VAC Coordinator

HoD/ CIVIL



# Madural Main Road (NH-458), Manikandam, Trichy-12. ndra Ganesan

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## CERTIFICATE OF PARTICIPATION

The following awards are given to

completed the Value Added Course "Safety in Construction" organized by This is to certify that Mr. AUGUSTIN RAJ J of IV Year has successfully

Department of CIVIL Engineering in Association with "Kalam Construction" from

20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

3. ofr M Kalam Construction Managing Director,

Dr. G. Balakrishnan, M.E., Ph.D.

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012 Principa

Princ bal



The following awards are given to

This is to certify that Ms. KALPANA K of IV Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Rozzl
Manikandam, Trichy-620 012

Principal



The following awards are given to

This is to certify that Mr. KARTHICK K of IV has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering



The following awards are given to

This is to certify that Mr. HARIHARAN M of IV Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

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Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.

Principal



The following awards are given to

This is to certify that Mr. ARAVIND A of IV Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012. Principal



The following awards are given to

This is to certify that Mr. MANOJ KUMAR A of IV Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director, Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D., Principal Indra Ganesari College of Engineering

IG Valley, Madural Main Road

Principal



The following awards are given to

This is to certify that Mr. BALAJI S of III Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam Trichy-620 012.

Principal



The following awards are given to

This is to certify that Mr. MANIKANDAN G of III Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012. Principal



The following awards are given to

This is to certify that Ms. MONIKA M of III Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D., Principal Indra Ganesan College of Engineering

IG Valley, Madural Main Road Manikandam, Trichy-620 012. Principal



The following awards are given to

This is to certify that Mr. AKASH S of III Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering

IG Valley, Madural Main Road Manikandam, Trichy-620 01.2. Principa



The following awards are given to

This is to certify that Mr. AVINASH KUMAR R of III Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Principal

Indra Ganesan College of Engineering

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



The following awards are given to

This is to certify that Mr. DEEPAN S K of III Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director, Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012. Principal



The following awards are given to

This is to certify that Mr. MUSARF ALI S of II Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,

Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012. Principal



The following awards are given to

This is to certify that Mr. PRABU JJ of II Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering

IG Valley, Madural Main Road Manikandam, Trichy-620 012. Principal



The following awards are given to

This is to certify that Mr. MAHENDRAN M of II Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,
Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D.,

Indra Ganesan College of Engineering IG Valley, Madurai Main Road Manikandam, Trichy-620 012. Principal



The following awards are given to

This is to certify that Mr. AKASH J of II Year has successfully completed the Value Added Course "Safety in Construction" organized by Department of CIVIL Engineering in Association with "Kalam Construction" from 20.07.2020 to 24.07.2020 (5 days) during the Academic year 2019-2020.

Managing Director,

Kalam Construction

Dr. G. Balakrishnan, M.E., Ph.D., Principal Indra Ganesan College of Engineering

1G Valley, Madurai Main Road Manikandam, Trichy-620 012.