## Kandula Srinivasa Reddy Memorial College of Engineering (Autonomous)

Kadapa-516003. AP

(Approved by AICTE, Affiliated to JNTUA, Ananthapuramu, Accredited by NAAC)

(An ISO 9001-2008 Certified Institution)

## Department of Civil Engineering



Certification Course

on

## Requirements and estimation of framed building structures

#### Course Instructor:

Prof. V. Giridhar,

Professor, Civil Engg. Dept., KSRMCE

**Course Coordinators:** 

Sri R. Karthikeyan and G. Venkata Raghu,

Assistant Professor, Civil Engg. Dept., KSRMCE

Date: 18/09/20 to 05/10/20



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Lr./KSRMCE/CE/2020-21/

Date: 14-09-2020

#### From

Sri R Karthikeyan and G Venkata Raghu, Asst. Professor, Course Coordinator, Dept. of Civil Engineering, KSRMCE, Kadapa.

To

The Principal, KSRMCE, Kadapa.

Sub: Permission to Conduct Certificate Course - Reg.

Respected Sir,

The Department of Civil Engineering is planning to offer a certification course on "Requirements and estimation of framed building structures" for B. Tech. students of Civil Engineering. The course will start on 18th Sep. 2020 and the course will run for a total number of 30 hours. In this regard, I am requesting you to accept the proposal to conduct certificate course.

Thanking you

Yours faithfully

(Sri R Karthikeyan and G Venkata Raghu)

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Cr./KSRMCE/CE/2020-21/

Date: 15/09/2020

#### Circular

The Department of Civil Engineering is offering a certification course on Requirements and estimation of framed building structures. The course will start on 18-09-2020 and the course will run for a total number of 30 hours. In this regard, interested students of Civil Engineering are required to register for the Certification Course. The registration link is given below.

 $\underline{https://docs.google.com/forms/f/g/1FSdsfAJmZKShHAAdsQRbdfgSjI36serpjASGEshtdn6GsR2GfNdT9w}$ /viewform

For any information regarding the workshop contact,

The Course Coordinators Sri R. Karthikeyan and Sri. G. Venkata Raghu, Assistant Professor, Dept. of Civil Engg.-KSRMCE.

> V. S. S. Muly Principal

The Director, KSRMCE

The HoD-Civil, KSRMCE

**IQAC-KSRMCE** 

Cc to:

PRINCIPAL K.S.R.M. COLLEGE OF ENGINEERING KADAPA - 516 003. (A.P.)



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### Department of Civil Engineering

Registration list of Certification course

Requirements and estimation of framed building structures

Sl. No.	Student Roll No.	Student Name	Sec.	Mail ID
1	179Y1A0106	Nikhil Kumar Reddy Bhavanasi	A	179Y1A0106@ksrmce.ac.in
2	179Y1A0111	Madhu Sudhan Reddy Bontha	A	179Y1A0111@ksrmce.ac.in
3	179Y1A0113	Venkatesh Naik Bukke	A	179Y1A0113@ksrmce.ac.in
4	179Y1A0115	Pallavi Chatta	A	179Y1A0115@ksrmce.ac.in
5	179Y1A0117	Mallikarjun Chintakayala	A	179Y1A0117@ksrmce.ac.in
6	179Y1A0118	Venkateswara Chowdavaram	A	179Y1A0118@ksrmce.ac.in
7	179Y1A0119	Zaheer Dade	A	179Y1A0119@ksrmce.ac.in
8	179Y1A0122	Jayachandra Derangula	A	179Y1A0122@ksrmce.ac.in
9	179Y1A0123	Siddaiah Dollu	A	179Y1A0123@ksrmce.ac.in
10	179Y1A0124	Suresh Gowd Ediga	A	179Y1A0124@ksrmce.ac.in
11	179Y1A0126	Ashok Kumar Galeti	A	179Y1A0126@ksrmce.ac.in
12	179Y1A0129	Pullaiah Gokula	A	179Y1A0129@ksrmce.ac.in
13	179Y1A0130	Ramamanohar Reddy Gollapalle	A	179Y1A0130@ksrmce.ac.in
14	179Y1A0131	Sreekanth Gurakanivari	A	179Y1A0131@ksrmce.ac.in
15	179Y1A0133	Dharani Jonnavaram	A	179Y1A0133@ksrmce.ac.in
16	179Y1A0134	Manasa Juturu	A	179Y1A0134@ksrmce.ac.in
17	179Y1A0136	Himaja Kancharla	A	179Y1A0136@ksrmce.ac.in
18	179Y1A0139	Vivekananda Reddy Kota	A	179Y1A0139@ksrmce.ac.in
19	179Y1A0146	Madhu Kiran Reddy Bannuru	A	179Y1A0146@ksrmce.ac.in
20	179Y1A0149	Shafi Memon	A	179Y1A0149@ksrmce.ac.in

21	179Y1A0155	Manjunatha Muttalahgari	A	179Y1A0155@ksrmce.ac.in
22	179Y1A0157	Prathima Nagooru	A	179Y1A0157@ksrmce.ac.in
23	179Y1A0158	Vijaya Kumari Nalla	A	179Y1A0158@ksrmce.ac.in
24	179Y1A0164	Sai Bharath Paduchuri	A	179Y1A0164@ksrmce.ac.in
25	179Y1A0174	Bhanu Prakash Peddaalankolla	В	179Y1A0174@ksrmce.ac.in
26	179Y1A0178	Vinodh Kumar Reddy Pokala	В	179Y1A0178@ksrmce.ac.in
27	179Y1A0182	Susma Saraballa	В	179Y1A0182@ksrmce.ac.in
28	179Y1A0183	Gaffar Sayyad	В	179Y1A0183@ksrmce.ac.in
29	179Y1A0184	Abdul Rehaman Shaik	В	179Y1A0184@ksrmce.ac.in
30	179Y1A0197	Surya Thammisetty	В	179Y1A0197@ksrmce.ac.in
31	179Y1A0198	Rajesh Thotakanama	В	179Y1A0198@ksrmce.ac.in
32	179Y1A01A1	Maheswari Undela	В	179Y1A01A1@ksrmce.ac.in
33	179Y1A01A2	Siva Kumar Upparapalli	В	179Y1A01A2@ksrmce.ac.in
34	179Y1A01A5	Keerthana Vodiveeti	В	179Y1A01A5@ksrmce.ac.in
35	179Y1A01A6	Rekha Devi Yarasani	В	179Y1A01A6@ksrmce.ac.in
36	179Y1A01A7	Lokesh Yarragolla	В	179Y1A01A7@ksrmce.ac.in
37	179Y1A01A8	Venkata Lakshmi Yarraguntla	В	179Y1A01A8@ksrmce.ac.in
38	179Y1A01B1	Shanthi Yerukala	В	179Y1A01B1@ksrmce.ac.in
39	189Y5A0102	Siva Gangadhar Alavalapadu	В	189Y5A0102@ksrmce.ac.in
40	189Y5A0104	Dharani Kamalakara Rao Appalarajugari	В	189Y5A0104@ksrmce.ac.in
41	189Y5A0107	Suresh Banka	В	189Y5A0107@ksrmce.ac.in
42	189Y5A0109	Srinatha Reddy Bhumireddy	В	189Y5A0109@ksrmce.ac.in
43	189Y5A0110	Purushothamreddy Bijivemula	В	189Y5A0110@ksrmce.ac.in
44	189Y5A0111	Swarupa Rani Biranna	В	189Y5A0111@ksrmce.ac.in
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47	189Y5A0123	Charan Kumar Gandi	С	189Y5A0123@ksrmce.ac.in
48	189Y5A0126	Shireesha Guramkonda	С	189Y5A0126@ksrmce.ac.in
49	189Y5A0127	Nikitha Jaladi	С	189Y5A0127@ksrmce.ac.in

50	189Y5A0128	Venkata Subbaiah Janapati	С	189Y5A0128@ksrmce.ac.in
51	189Y5A0132	Yaswanth Reddy Kambham	С	189Y5A0132@ksrmce.ac.in
52	189Y5A0134	Sree Hari Reddy Katthi	С	189Y5A0134@ksrmce.ac.in
53	189Y5A0135	Nagesh Kolliboina	С	189Y5A0135@ksrmce.ac.in
54	189Y5A0136	Sudharshan Reddy Kora	С	189Y5A0136@ksrmce.ac.in
55	189Y5A0138	Prasanth Kumar Kotturu	С	189Y5A0138@ksrmce.ac.in
56	189Y5A0140	Suresh Kuruva	С	189Y5A0140@ksrmce.ac.in
57	189Y5A0146	Venkata Ramana Reddy Nimmakayala	С	189Y5A0146@ksrmce.ac.in
58	189Y5A0152	Raja Peddakotla	С	189Y5A0152@ksrmce.ac.in
59	189Y5A0153	Lakshmi Narendra Peddamodium	С	189Y5A0153@ksrmce.ac.in
60	189Y5A0159	Abilash Reddy Sajjala	С	189Y5A0159@ksrmce.ac.in
61	189Y5A0160	Venkata Sai Kumar Sangaraju	С	189Y5A0160@ksrmce.ac.in
62	189Y5A0162	Naveen Kumar Sepuri	С	189Y5A0162@ksrmce.ac.in
63	189Y5A0170	Chandra Kanth Thatamsetty	С	189Y5A0170@ksrmce.ac.in
64	189Y5A0171	Divya Thonduru	С	189Y5A0171@ksrmce.ac.in

Coordinator

HoD-Civil Engg.
Head
Department of Civil Engineering K.S.R.M. College of Engineering (Autonomous) KADAPA 516 003. (A.P.)

Syllabus of Certification Course

Course Name: Requirements and estimation of framed building structures

**Duration: 30 Hours** 

Module I:

Specification of different items of works for framed structures: Earth work for foundations, mortars, foundation concrete, Reinforced concrete, Brick work, Stone masonry, Mosaic Flooring, Terrazo

Flooring, RCC roof and AC roof and GI sheets, plastering, Painting, pointing and wood works.

Module II:

Vastu and its importance, planning of building according to vastu shastra. Different item of works-

units of item of works, Types of Estimates-Methods of estimates.

Module III:

Rate Analysis (Using Excel): Earthwork Excavation - Mortars of various proportions (cement and

lime) - Concrete with various proportions (lime and Cement) - Brick Masonry - Stone Masonry -

Pointing - Painting - Plastering - aluminum partitions - Wooden partitions - cement concrete

flooring with 1:2:4 mix

Module IV

Quantities Estimation of Buildings and Bar Bending Schedule (Using Excel) - Estimation of concrete

in beams, columns, footings, Estimation of Bar Bending Schedule: Beams - Slabs - Staircases - Sun

shade - Lintels - Portico

**Text Books:** 

1. B. N. Dutta, Estimating and Costing in Civil Engineering: Theory and Practice Including

Specifications and Valuation, UBS Publishers' Distributors Ltd, 25th edition,

2. Hodgson Fred T, Estimating Frame and Brick Houses, BiblioLife.

Department of Civil Engineering K.S.R.M. College of Engineering

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### Department of Civil Engineering

Certification course on "Requirements and estimation of framed building structures"

Date	Timing	Course Instructor	Topic to be covered
18/09/20	4 PM to 6 PM	Prof. V. Giridhar	Specification of different items of works for
			framed structures
19/09/20	4 PM to 6 PM	Prof. V. Giridhar	Specification of different items of works for
			framed structures
21/09/20	4 PM to 6 PM	Prof. V. Giridhar	Vastu and its importance
22/09/20	4 PM to 6 PM	Prof. V. Giridhar	planning of building according to vastu shastra
23/09/20	4 PM to 6 PM	Prof. V. Giridhar	Types of Estimates
24/09/20	4 PM to 6 PM	Prof. V. Giridhar	Methods of estimates
25/09/20	4 PM to 6 PM	Prof. V. Giridhar	Rate Analysis
26/09/20	4 PM to 6 PM	Prof. V. Giridhar	Rate Analysis
28/09/20	4 PM to 6 PM	Prof. V. Giridhar	Rate Analysis
29/09/20	4 PM to 6 PM	Prof. V. Giridhar	Quantities Estimation beams (Using Excel)
30/09/20	4 PM to 6 PM	Prof. V. Giridhar	Quantities Estimation Columns (Using Excel)
01/10/20	4 PM to 6 PM	Prof. V. Giridhar	Quantities Estimation Footings (Using Excel)
02/10/20	4 PM to 6 PM	Prof. V. Giridhar	Bar Bending Schedule (Using Excel)
03/10/20	4 PM to 6 PM	Prof. V. Giridhar	Bar Bending Schedule (Using Excel)
05/10/20	4 PM to 6 PM	Prof. V. Giridhar	Bar Bending Schedule (Using Excel)

Instructor

Coordinator: Fourth

V. S. S. Muly Principal

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#### Report

 $\mathbf{of}$ 

## Certification Course on Requirements and estimation of framed building structures

From 18-09-2020 to 05-10-2020

Target Group

Students

:

**Details of Participants** 

64 Students

Co-coordinator(s)

Sri R. Karthikeyan and Sri G. Venkata Raghu

**Organizing Department** 

Civil Engineering

Venue

Online (google meet)

Link: https://meet.google.com/lookup/oh4y7aewy

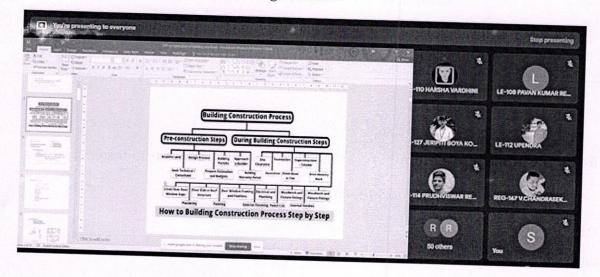
#### Description:

The Department of Civil Engineering offered the certification course on "Requirements and estimation of framed building structures" from 18-09-2020 to 05-10-2020 and the course was organized for a total number of 30 hours. The course was instructed by Prof. V. Giridhar (Professor, Dept. Civil Engg.) and coordinated by Sri R. Karthikeyan and Sri G. Venkata Raghu (Assistant Professor, Dept. of Civil Engg.).

Estimating is extremely important in the world of construction as the project scope or goals need to be transparent despite project complexity, project size, new design, or timelines. Accomplishing set goals and project visions is essential to make projects a reality. As the regular curriculum of KSRMCE covers mostly about the estimation of load bearing structures, the present certification course concentrated on Estimation of Framed Structures and requirements of Framed Building Structures. The course also deals about the usage of MS office (Excel) to automate the estimation problems and make the readymade spreadsheets for particular type of works.

#### Photo:

The picture taken during the course is given below:



(Course Instructor)

(HoD, Civil Engg.) Head

Department of Civil Engineering K.S.R.M. College of Engineering (Autonomous) KADAPA 516 003. (A.P.)

V. S.S. Muly

Principal

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### DEPARTMENT OF CIVIL ENGINEERING

Certification course

on

"Requirements and Estimation of Framed Building Structures"

## **Resource Person:**

Prof. V. Giridhar

Department of Civil Engineering

Date

18-09-2020

05-10-2020

Coordinators: Sri R. Karthikeyan and Sri G. Venkata Raghu, Asst. Professor

## Department of Civil Engineering

Attendance sheet of Certification course on Requirements and estimation of framed building structures

SI. No	Student Roll No.	Student Name	18/ 09	19/ 09	21/ 09	22/ 09	23/ 09	24/ 09	25/ 09	26/ 09	28/ 09	29/ 09	30/	1/1 0	2/1	3/1 0	5/1
1	179Y1A0106	Nikhil Kumar Reddy Bhavanasi	~	<b>~</b>	<b>√</b>	~	>	A	<b>\</b>	>	<b>\</b>	V	<b>V</b>	V	V	V	
2	179Y1A0111	Madhu Sudhan Reddy Bontha	V	V	<b>\</b>	<b>V</b>	<b>~</b>	\ \	V	>	<b>V</b>	<b>/</b>	<b>/</b>	A	V	V	i
3	179Y1A0113	Venkatesh Naik Bukke	V	<u></u>	A	$\checkmark$	V	V	✓	<b>Y</b>	V	<b>V</b>	V	V	~	~	V
4	179Y1A0115	Pallavi Chatta	V	~	V	V	V	~	<b>V</b>	~	V	V	V	V	~	V	V
5	179Y1A0117	Mallikarjun Chintakayala	V	~	V	V	V	~	5	~	V	<u> </u>	A	✓	<b>✓</b>	V	~
6	179Y1A0118	Venkateswara Chowdavaram	5	1	5	15	~	V	A		V	<b>/</b>	V	V	V	V	-
7	179Y1A0119	Zaheer Dade	V	V	~	~	V	~	/	V	A	/	~	~	1	~	
8	179Y1A0122	Jayachandra Derangula	~	V	~	~	V	~	V	~		1	V	A	/	V	v
9	179Y1A0123	Siddaiah Dollu	V	A	~	1	V	V	V	V	~	~	~	V	V	V	
10	179Y1A0124	Suresh Gowd Ediga	V		~	V	V	A	V		V	/	V	V	V	V	V
11	179Y1A0126	Ashok Kumar Galeti	~	~	A	/	V	/	V	~	V	5	V	/	V	V	~
12	179Y1A0129	Pullaiah Gokula			1	V	~	V	V	A		V	A	V	V	V	V

13	179Y1A0130	Ramamanohar Reddy Gollapalle			A	V	V	V	V	V	V	A	V	V	V	V	1
14	179Y1A0131	Sreekanth Gurakanivari	2	0	5	0	5	-	Δ	V	V		~			1	1
15	179Y1A0133	Dharani Jonnavaram	5	5	~	0	5	V	V	V	V	V	A		~	V	V
16	179Y1A0134	Manasa Juturu	1	V	V	V	5	A	V	1	V	1	1	V	V	V	/
17	179Y1A0136	Himaja Kancharla		5		A	V	5	V	V	V	V	V	V	V	V	1
18	179Y1A0139	Vivekananda Reddy Kota	J		/	/	✓	V	/	V	V	V	V	A	<b>/</b>	V	V
19	179Y1A0146	Madhu Kiran Reddy Bannuru	V	V	<b>\</b>	$\checkmark$	$\checkmark$	>	A	V	(	~	V	~	~	V	
20	179Y1A0149	Shafi Memon	/	/		/	V	V	$\sqrt{}$	V	V	V	V	A	1	V	
21	179Y1A0155	Manjunatha Muttalahgari		V		A				1	1					V	1
22	179Y1A0157	Prathima Nagooru	/	A	5	1		1		/	V	/	V		V	V	V
23	179Y1A0158	Vijaya Kumari Nalla	/	V			\ \ \			A		~		A		-v	
24	179Y1A0164	Sai Bharath Paduchuri	/		A	/		/	<b>S</b>	5	\ \	1	V	V		A	
25	179Y1A0174	Bhanu Prakash Peddaalankolla	/			5	5	V	V	V	W	<b>/</b>	V	V	V	A	V
26	179Y1A0178	Vinodh Kumar Reddy Pokala	/	<b>/</b>	V	<b>\</b>	V	- /	4	<b>/</b>	· /	V		-V	V	A	V
27	179Y1A0182	Susma Saraballa	/	V	V	V	V	V	A	V	V	V	V	V	V	V	1

28	179Y1A0183	Gaffar Sayyad			1		A				-	A		~		V	
29	179Y1A0184	Abdul Rehaman Shaik	/	/		1	/	//	- /	A	/		~	-		-	-
30	179Y1A0197	Surya Thammisetty	~			//	1		A	~	V	<b>S</b>	V	V	~	V	V
31	179Y1A0198	Rajesh Thotakanama	1	<b>/</b>	/	V	✓	V	V	A	V	V	· V		V		V
32	179Y1A01A 1	Maheswari Undela	V	V	V	V	<b>V</b>	A	~	1	V	~	<b>\</b>	V	>	V	
33	179Y1A01A 2	Siva Kumar Upparapalli	<b>V</b>	<b>V</b>	<b>/</b>	<b>/</b>	<b>\</b>	/	/					A	~	>	V
34	179Y1A01A 5	Keerthana Vodiveeti	1	<b>\</b>	A	/	/	S	/		A	<b>\</b>	1		V		
35	179Y1A01A 6	Rekha Devi Yarasani	~	V	/	>	<b>\</b>	/	V	<b>\</b>	<b>/</b>	5	A	\	1	V	V
36	179Y1A01A 7	Lokesh Yarragolla	/			>	/	A	V	5			5	V	/	\\ \	
37	179Y1A01A 8	Venkata Lakshmi Yarraguntla	/		~	5	√	->	V	V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		<b>\</b>	<	/	~	
38	179Y1A01B 1	Shanthi Yerukala	<b>\</b>	~	A	V	V	V	V		V	~	>	~	~	V	V
39	189Y5A0102	Siva Gangadhar Alavalapadu	~	/	V	V		A	✓	V	~	~	>	~	~	-/	~
40	189Y5A0104	Dharani Kamalakara Rao Appalarajugari	V	V	~		V	V	V	V	/	A	~	V	V	A	V
41	189Y5A0107	Suresh Banka	/	V	/	V	A	V	V	V	V	/	A		V	V	~

42	189Y5A0109	Srinatha Reddy Bhumireddy	$\checkmark$	V	/	/	A	5	V	V	~	<b>/</b>	V	<b>\</b>	V	~	~
43	189Y5A0110	Purushothamreddy Bijivemula	1	V	V	V	/	V	V	V	V	5	A	N	~	V	~
44	189Y5A0111	Swarupa Rani Biranna	V	<b>\</b>	V	~	V	V	~	~	~	V			~	A	V
45	189Y5A0113	Kiran Kumar Bolleddu	V	<b>\</b>	V	5	A	~	V	V	~	~	V	/	~	~	
46	189Y5A0120	Swetha Damsetty		/	/		~	/	V		~		A	\/	~	V	
47	189Y5A0123	Charan Kumar Gandi	>			>		~		A	/	· /	~	V	A	V	~
48	189Y5A0126	Shireesha Guramkonda	/	/	/	A	/	<b>✓</b>		<b>/</b>	V	<b>/</b>	A	~		V	V
49	189Y5A0127	Nikitha Jaladi	1	/			1	1	1			/		A		1/	/
50	189Y5A0128	Venkata Subbaiah Janapati		V		A				V		V			A	C	
51	189Y5A0132	Yaswanth Reddy Kambham	\/	V	/					A	1	/	1	0	~	V	
52	189Y5A0134	Sree Hari Reddy Katthi	~	V				A	/		/		~	A	V	V	-
53	189Y5A0135	Nagesh Kolliboina			A	- 0		/						<u></u>	V	-	
54	189Y5A0136	Sudharshan Reddy Kora				V	·V	-~	-	A	/	V	A	V	-0	V	-
55	189Y5A0138	Prasanth Kumar Kotturu	/			A				^		V	V	V	V	·V	V

-/	100375 10110	C 1 17	T .														
56	189Y5A0140	Suresh Kuruva	A	-5	5		V	V	V			A	V	V		V	-
		Venkata Ramana															
		Reddy	/	- /	. /	. /	11		/	1/	1/	1/	1	1	- 1	1	. ,
57	189Y5A0146	Nimmakayala	V					A									
58	189Y5A0152	Raja Peddakotla		-	, /		./				-	Λ		. /	. /	- ,	_
		Lakshmi Narendra	V				V				0	A		V	V		
	400775 40450	[ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [			/	_		/	/	- /	/	-	/	- ^	1		
59	189Y5A0153	Peddamodium	V	V		A		V	V	V	V	V	V	A	V	V	
		Abilash Reddy										_ /	/	,			
60	189Y5A0159	Sajjala	/	/	1			A			V					~	
		Venkata Sai													,		
61	189Y5A0160	Kumar Sangaraju	V			A	V			A				V	V		
		Naveen Kumar										,					
62	189Y5A0162	Sepuri	/	~	5	5		V	V				V	V			`~
		Chandra Kanth	14					E AND			de vy V					Michie	
63	189Y5A0170	Thatamsetty		5				A					^ _		A		-
64	189Y5A0171	Divya Thonduru	5	5	5	/	1				-	A	_	1		-	

Coordinator

HoD-Civil Engg.

Umny

Head Department of Civil Engineering
K.S.R.M. College of Engineering
(Autonomous)
KADAPA 516 003. (A.P.)

### Certificate Course on Requirements and Estimation of a Framed Building structure

miles parent

Prof V.Giridhar
M.Tech, Ph.D
Professor,
Dept of Civil Engineering,

Vision

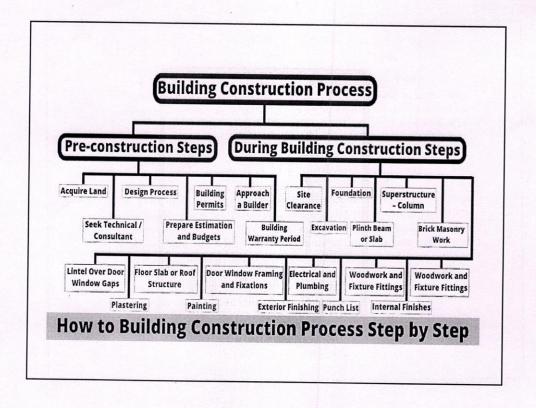
The Department will be the recognized leader for excellence in Civil Engineering education that serve as vital source of leaders who are prepared to meet Nation's current and future requirements for safe, efficient and sustainable infrastructure.

Mission

The mission of the department is to promote the disciplines of planning, design, construction, operation, maintenance and research in support of sustainable development. By providing a multidisciplinary focus for education, professional communication, and collaboration, the Department will enhance the professional knowledge and skills of its students so that they will improve the quality of life. The Department will bring together teachers, planners, industry representatives, citizen groups, developers, public officials and others dedicated to improving quality of life and fostering appropriate development programs at the local, regional, state and national levels.

## Contents

- 1. Introduction to the Estimation
  - a) Definition
  - b) Requirements of Estimation
  - c) Need of the Estimation
  - d) Types of Estimation
- 2. Items involved in building Estimation
  - a) Items and their Units
  - b) Quantity calculation as per the drawing of items in EXCEL Sheet
  - c) Importance of Specification and Rate of the item
- 3. Methods of Estimation
- 4. Single Room, double room and Multy room Framed structure
- 5. Requirements of building plan Approval



Types of construction

Division of work

- 1.Load Bearing of Wall Method
- 1. Pre Construction

2. Framed Structures

2. Actual Construction

- 3. Post Construction

#### 1. Preconstruction stage

a) Prepare Plans Based on requirements of a Client

Layout plan

Architectural Plans (According to VAATHU) ( Square or Rectangle)

Foundation Details Plan

Structural Details (Columns, Plinth beam, Foundation, Roof Beam, slab)

Water supply and Sanitary Layout Plan Safe Bearing Capacity of Soil

- b) Estimation of Structure, Materials and Manpower
- c) Design of structure
- d) Approval of Drawings from client and Approving authorities( Municipality, Corporation)

#### 2. Actual Construction

Site clearance

Preparation of job layout

Marking as per the drawing

Excavation

Erection of Columns

Stone masonry in outer periphery

Back Filling

Plinth beam

Super structure

Roof Beam

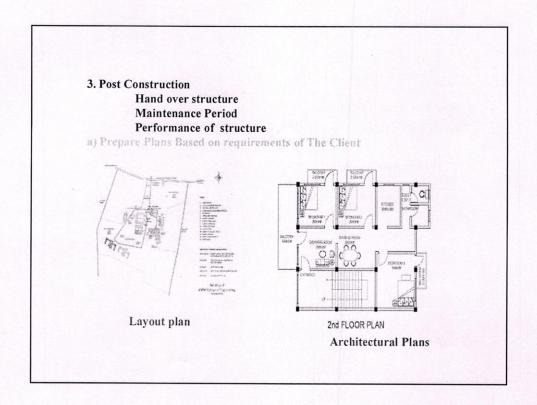
Roof Slab

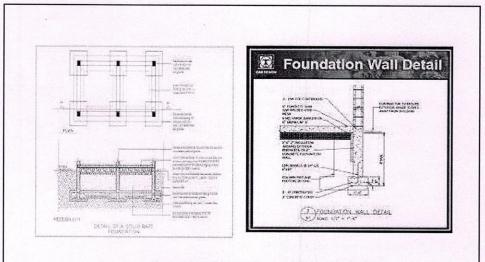
Flooring

Plastering(Inside and Out side)

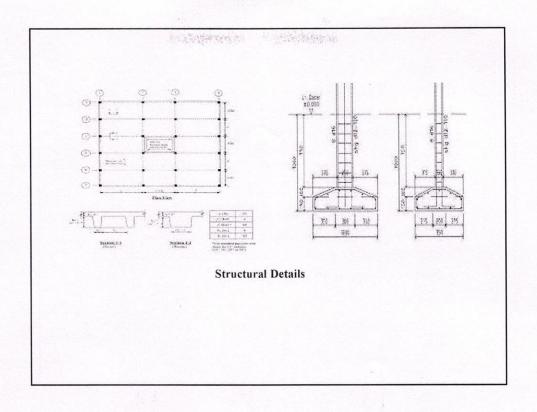
Painting(Inside and Outside)

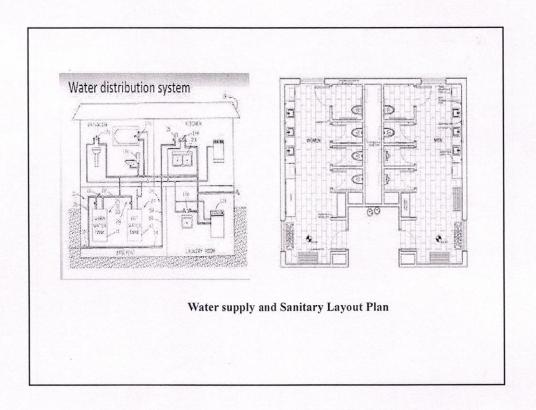
Finishing





Foundation Details Plan and Cross section





#### 1. Introduction

#### 1. a) INTRODUCTION

#### DEFINITION OF ESTIMATING AND COSTING

- Estimating is the technique of calculating or Computing the various quantities and the expected Expenditure to be incurred on a particular work or project.
- In case the funds available are less than the estimated cost the work is done in part or by reducing it or

#### The following requirement are necessary for preparing an estimate.

- · a) Drawings like plan, elevation and sections of important points.
- b) Detailed specifications about workmanship & properties of materials etc.
- · c) Standard schedule of rates of the current year.

#### b)DATA REQUIRED TO PREPARE AN ESTIMATE

- 1. Drawings i.e. plans, elevations, sections etc.
- 2. Specifications.
- 3. Rates.

#### **1DRAWINGS**

If the drawings are not clear and without complete dimensions the preparation of estimation become very difficult. So, It is very essential before preparing an estimate.

#### **2 SPECIFICATIONS**

a) General Specifications:

This gives the nature, quality, class and work and materials in general terms to be used in various parts of wok. It helps no form a general idea of building.

#### b) Detailed Specifications:

These gives the detailed description of the various items of work laying down the Quantities and qualities of materials, their proportions, the method of preparation workmanship and execution of work.

#### 3. RATES:

For preparing the estimate the unit rates of each item of work are required.

- 1. For arriving at the unit rates of each item.
- 2. The rates of various materials to be used in the construction.
- 3. The cost of transport materials.
- 4. The wages of labor, skilled or unskilled of masons, carpenters, Mazdoor, etc.,

#### C) NEED FOR ESTIMATION AND COSTING

- Estimate give an idea of the cost of the work and hence its feasibility can be determined i..e whether the project could be taken up with in the funds available or not.
- 2. Estimate gives an idea of time required for the completion of the work.
- 3. Estimate is required to invite the tenders and Quotations and to arrange contract.
- 4. Estimate is also required to control the expenditure during the execution of work.
- 5. Estimate decides whether the proposed plan matches the funds available or not.

### PROCEDURE OF ESTIMATING OR METHOD OF ESTIMATING.

Estimating involves the following operations

- 1. Preparing detailed Estimate.
- 2. Calculating the rate of each unit of work
- 3. Preparing abstract of estimate

### D) Types of Estimates

- 1. Detailed Estimate
- 2. Approximate Estimate
- 3.Revised Estimate
- 4. Supplemental Estimate
- 5. Working Estimate
- 6.Annual Maintenance Estimate

#### 8.1. Detailed Estimate

#### **Detailed Measurement Form**

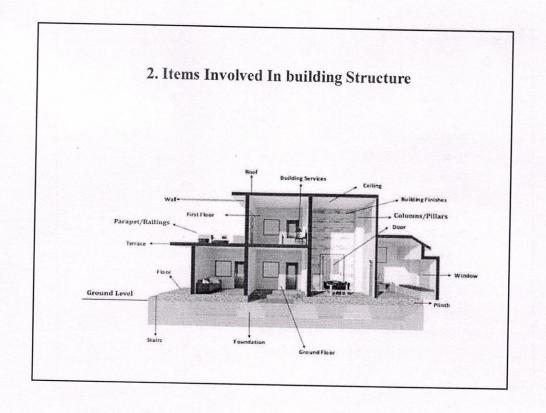
S,No	Description of Item	Length (L)	Breadth (B)	Height (D)	Quantity (LXBXD)
1	Earth Work	15	10	0.5	750 Cum
	Excavation				

#### Abstract Measurement sheet

S.N o	Descrption of Item	Qunatity	Rate	Unit	Amount
1	Earth Work	750	80	Cum	750x80
	Excavation				

	8.3. Revised	a Doimate						
S.no	Description of Item	Sanctioned Quantity	Revised Quantity	Difference of Quntity	Rate	Unit	Amount	Rema ks
1	Brick Masonry	50 Cum	75 Cum	25	2800	Cum	25x2800	Reas
	3.4. Supplemen							
S.NO	Description Ite	m Description o Revised item	f Sanctioned Qty	Revised Qty	Sauctioned amount	Revised Amount	Differnce	Re mar
1	Iron Grill	Aluminu m	150 Sqm	150 Sqm	75000	10000	25000	ks

。《西斯·斯·西斯·西斯



### Item of works in Building Structure

Site clearance

Preparation of job layout

Marking as per the drawing

Excavation

Erection of Columns

Stone masonry in outer periphery

Back Filling

Plinth beam

Super structure

Roof Beam

Roof Slab

Flooring

Plastering(Inside and Out side)

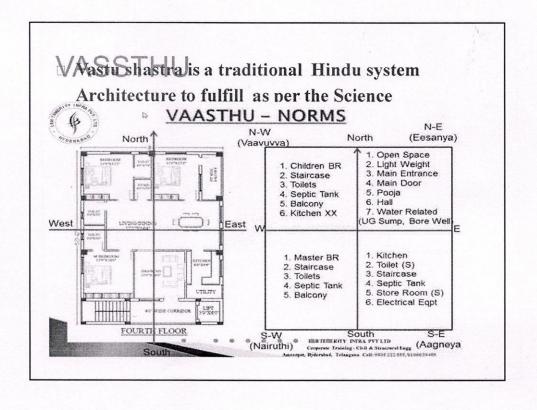
Painting(Inside and Outside)

Finishing

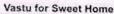
S.No	Description of Item	Units of Quantity	Rate calculation /unit	
1	Earth work Excavation	Cum	10 Cum	
2	Back Filling	Cum	10 Cum	
3	PCC	Cum	Cum	
4 .	Stone Masonry	Cum Cum		
5	Pointing	Sqm	10 Sqm	
6	Concrete for all Structural elements	Cum	Cum	
7	Brick Masonry (230mm)	Cum	Cum	
8	Brick Masonry(115mm)	Sqm	Sqm	
9	Plastering (Inside and Out side)	Sqm	10 Sqm	
10	Painting ( Inside and Out side)	Sqm	10 Sqm	
11	DPC	Rmt	Rmt	
12	Impervious coat	Smt	Smt	
13	Structural Glazing	Sqm	Sqm	
14	Aluminum Partition/UPVC Partition	Sqm	Sqm	
15	Flooring( Vitrified, ceramic, granite )	Sqm	Sqm	
16	Fall ceiling	Sqm	Sqm	

S.No	Description of Item	Quantity	Quantity (A)	Any specific Deduction (B)	Net Quantity (A-B)
1	Earth work Excavation	Cum	LxBxD	Nil	
2	Back Filling(Morram)	Sqm	LxBxD	Footing, Pedestal, Column Below PL	
3	PCC	Cum	LxBxD	Nil	
4	Stone Masonry	Cum	LxBxD	Nil	
5	Pointing	Sqm	LxD	Nil	
6	Concrete for all Structural elements	Sqm	LxBxD	Nil( Ixcluding the Qty of steel)	
7	Brick Masonry (230mm)	Sqm	LxBxD	Qty of Door, Window and Ventilators	
8	Brick Masonry(115mm)	Rmt	LxD	Qty of Door, Window and Ventilators	
9	Plastering (Inside and Out side)	Smt	LxD	50% Qty of Door, Window and Ventilators or Based on the specification	
10	Painting ( Inside and Out side)	Sqm	LxD	50% Qty of Door, Window and Ventilators or Based on the specification	
11	DPC	Rqm	Length	Nil	
12	Impervious coat	Sqm .	LxB	Nil	
13	Structural Glazing	Sqm	LxD	Nil	

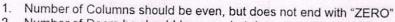
Control State



## VAASTHU - NORMS







Number of Doors be should be even, but does not end with "ZERO"

Number of Windows should be even, but does not end with "ZERO"

LSB TEMERITY INFRA PVT LTD

\*\*Corporate Training - Civil & Structural Engg

Ameerpet, Hyderabad, Telaugana, Cell: 9905 222 555, \$1066 39493

### Materials used in the Construction

Cement is used as a binding material in mortar, concret, etc.

#### TYPES:

✓ OPC

✓ PPC,etc

#### **GRADES:**

✓ 33 Grade

43 Grade

√ 53 Grade





### Aggregates





### Bricks

#### Grades of Bricks:

- \* 1st class Bricks
- 2<sup>nd</sup> class Bricks
- 3<sup>rd</sup> class Bricks



### Reinforcement bars

#### Grades of reinforcement:

- ✓ FE 250
- ✓ FE 415
- ✓ FE 500
- ✓ FE 550



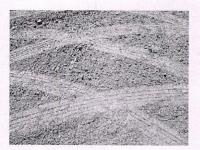
#### Wood





#### 2. Actual Construction

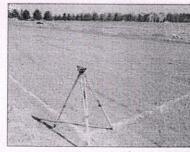




Site clearance or Jungle clearence

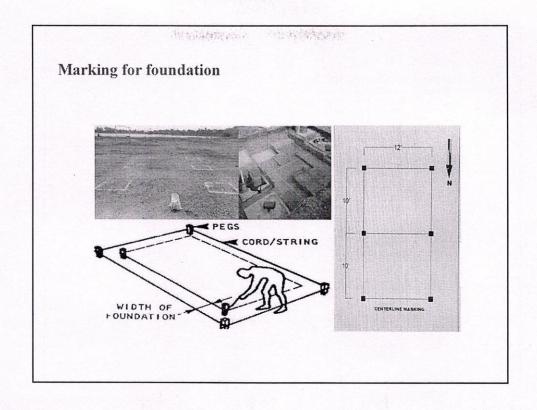
## Leveling and grading

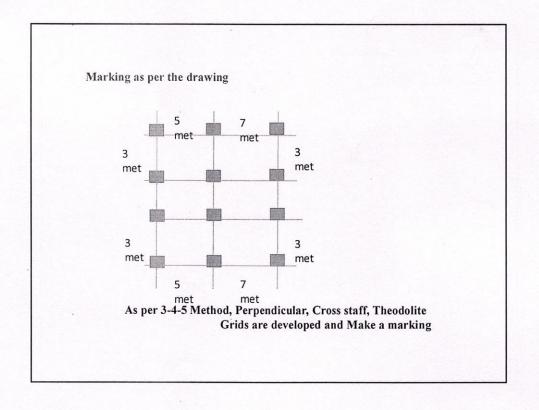
(rg, 4 ma )).





Plu 2 Field bound wine Field enwander and saidding after interal landing





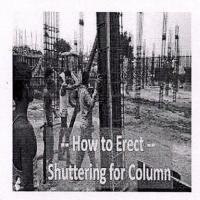
### **Excavation for Foundation**

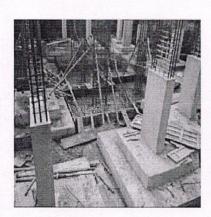


## **PCC** for Footings



### **Concreting Footings**









Stone masonry in outer periphery

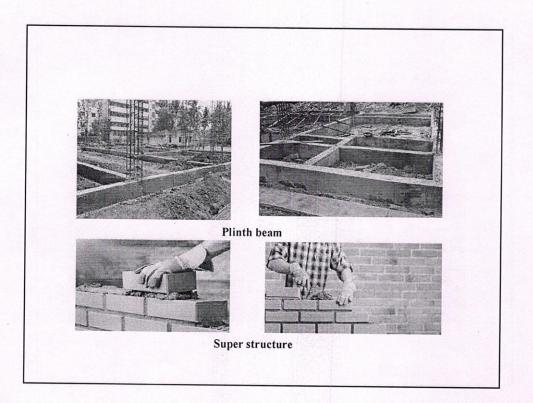
destruction of the section of

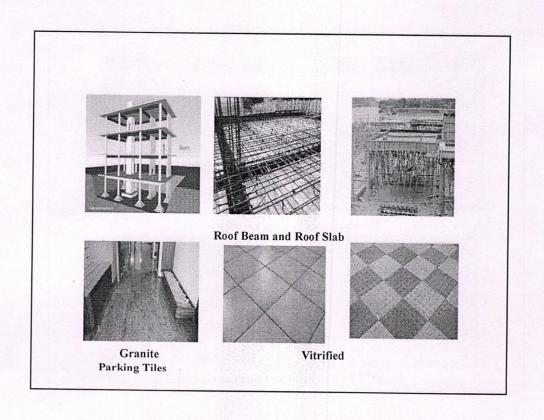
ASMALLIS AND

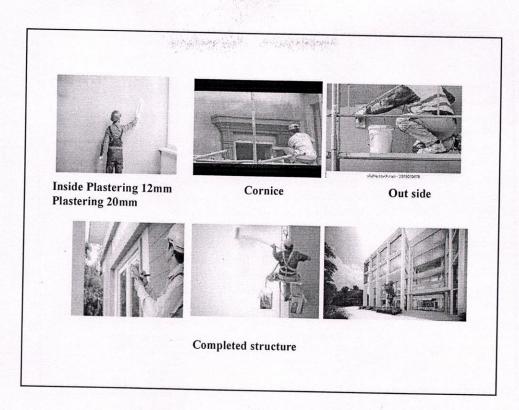




Back Filling with excavated earth and carted earth





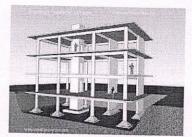


## Load Bearing Wall Structure and Framed Structure

Significance of
Load Bearing Wall Structure
Framed Structure



Load Bearing Wall Structure



Framed Structure

### Methods of Estimating the quantities

The quantities like earth work, foundation concrete, brickwork in plinth and Super structure etc., can be workout by any of following two methods:

- a) Long wall short wall method
- b) Centre line method.
- a) Long wall-short wall method:

In this method, the wall along the length of room is considered to be long wall while the wall perpendicular to long wall is said to be short wall. To get the length of long wall or short wall, calculate first the centre line lengths of individual walls. Then the length of long wall, (out to out) may be calculated after adding half breadth at each end to its centre line length.

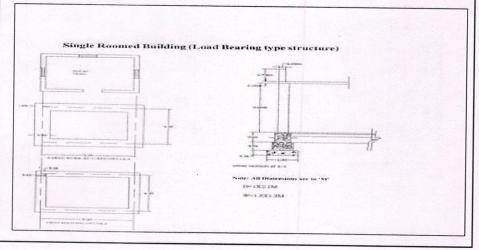
#### b) Centre line method.

This method is suitable for walls of similar cross sections. Here the total centre line length is multiplied by breadth and depth of respective item to get the total quantity at a time. When cross walls or partitions or verandah walls join with main wall, the centre line

length gets reduced by half of breadth for each junction. such junction or joints are studied carefully while calculating total centre line length. The estimates prepared by this method are most accurate and quick.

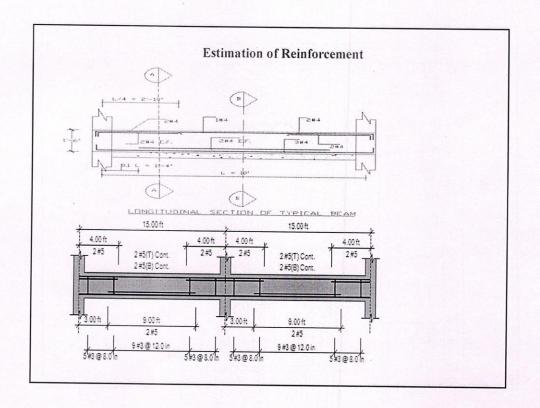
## Estimate quantities of Single room Structure ( Load Bearing Wall Structure)

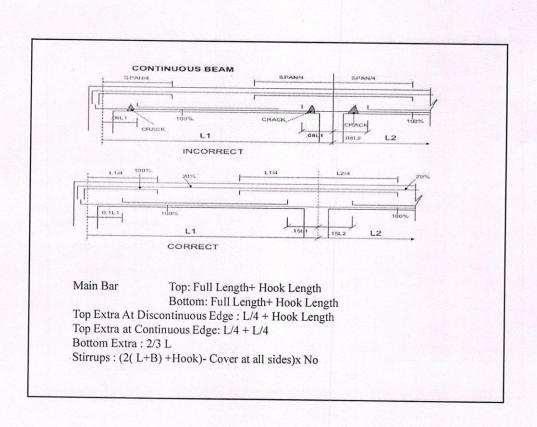
From the given figure below calculate the detailed and abstract estimate for the single roomed building (Load bearing type structure) by a) long wall & short wall method (b) Centre Line Method

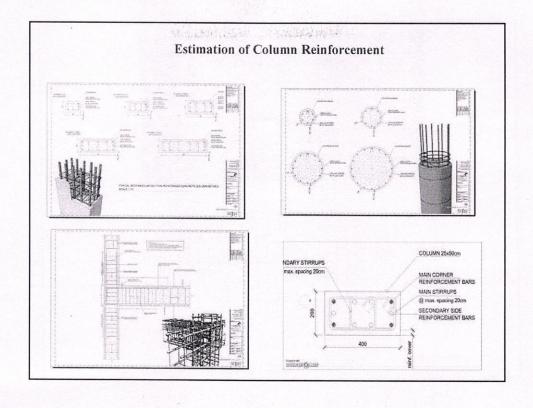


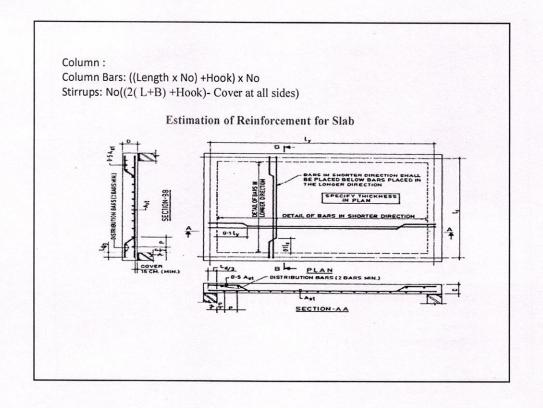
S.No. Particulars of Items	No	l.	В	H	Q	Explanation	
1 Earth Work excavat	on ·						
a) Long walls	2	6.2	0.9	1.4	15.264	L=5.3+.45+.45=6.2 D=0.3+0.5+0.6=1.4	
b) Shortwalls	2	3.4	0.9		8.568 24.192		
2 C.C.(1:4:8) bed for foundation							
a) Long walls	2	6.2	0.9	0.3	3.348		
b) Shortwalls	2	3.4	0.9		1.836	m <sup>3</sup>	
3. R.R.Masonry in CM (1:6) for a)Fooings				Loca			
i)Long walls	2	5.9	0.6	0.5	3.54	L=5.3+0.3+0.3=5.9	
ii) Short walls	2	3.7	0.6	0.5	2.22 5.76	L=43-03-03=3.7 m <sup>3</sup>	
b) Basement							
i) Longwalls	2	5.75	0.45	0.6	3.105	1.=5.3+0225+0225=5.75	
ii) Short walls	2	3.85	0.45			L=43-0225-0225=5.85 m <sup>3</sup>	
Total R.R. Masonry I	or fo						
4. Brick masonary with C	М	= 5.°	6+5.	184 =	10.94 m		
(1:6) for super structure a) Long Woll					1000		TO LES
a) Long Wall b) Short walls	2 2			3.00		L=5.3+0.15+0.15=5.6	
oj Shortwats	2	4.0	0.30	3.00		L=43-015-015=40	

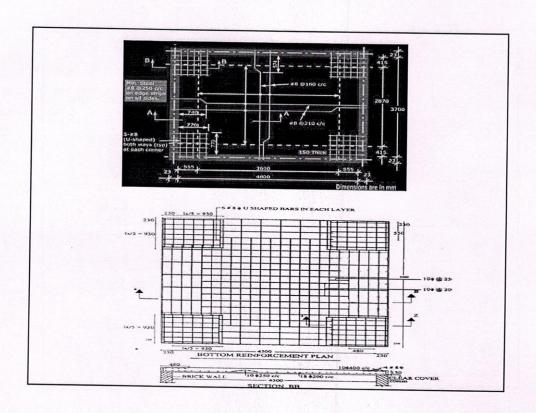
.No	Particulars of Items	No	L	В	Н	Q	Explanation
1,	Earth Work excavati for foundation 53	on 1	19.2	0.9	1.4	24,192	m³ L=2(5.3+4.3)=19.2
2.	C.C.(1:4:8) bed for foundation	1	19.2	0.9	0.3	5.184	m³
3,	R.R.Masonry in CM (1:6) for						
	a) Footings	1	19.2	0.6	0.5	5.76	
	b)Basement	1	19.2	0.45		5.184 10.944	
4.	Brick masany with						
	CM(1:6) for super struct	re 1	19.2	0.3	0.3	17.28	m <sup>3</sup>

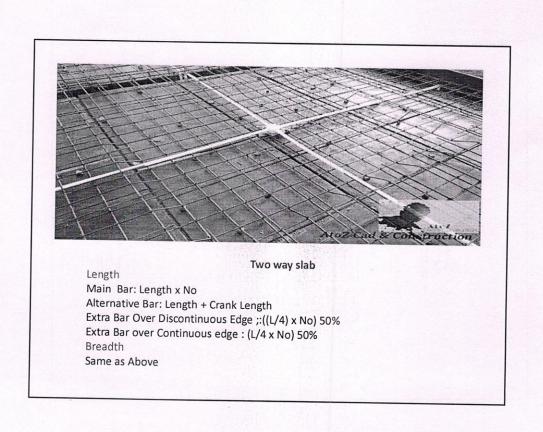


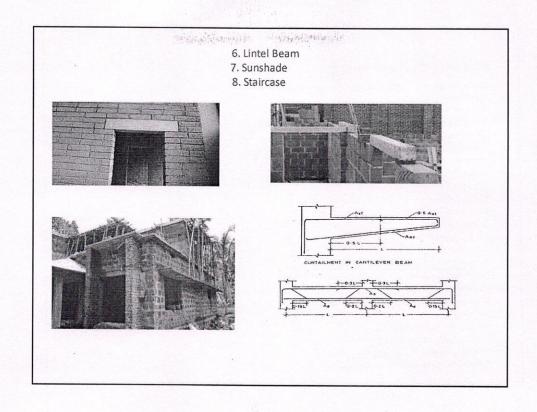




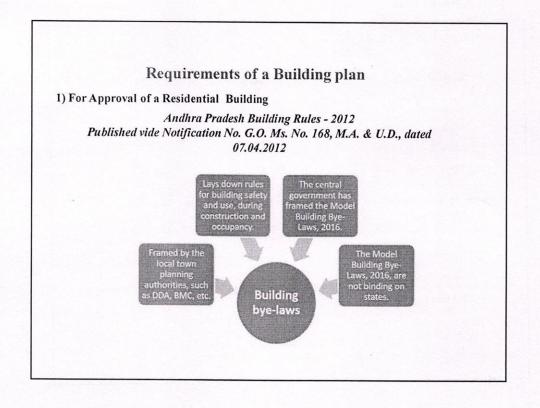








Constitution with Barrier of



#### **Building Byelaws covers**

Under the building bye-laws in India, directions are laid down with respect to the following aspects of construction:

Area and usage

**Building height** 

**Building coverage** 

Floor space index

Density

Setbacks and projections

Parking facilities

Fire provisions with respect to staircase and exits

Basement facilities

Green spaces

Open spaces

Amenities in the project

Provision for elevators

Sewerage facilities

Provision for water

Provision for power supply

Provision for waste management

Rainwater harvesting

Barrier-free environment

Safety provisions

Effects of communication technology

Height of building	Setbacks (front, side and rear) in mtrs
Above 3.5 to 9.0 Above 9.5 m and up to 12 m	3.0 4.5
Above 12 m up to 15 m	5.0
Above 15 m up to 18 m	6.0
Above 18 m up to 21 m	7.0

These are changes for group housing, commercial buildings, Apartments, Multiplex

A strip of at least 1m greenery / lawn

#### Restrictions

Railway Property: 30 mets

High Tension Transmission lines: Min Safety distance is 3.0 met,

1.5 met for low tension transmission wires

Airport: 1 km from the boundary of airports

#### I LAYOUT/ BUILDING PERMIT FEE & CHARGES

- a. Residential use 1 sq.mt of site area Rs 15
- b. b. Non Residential uses 1 sq.mt of site area Rs 20

#### 2. APPROVAL OF LAYOUTS:

Layout approval fee or Scrutiny fee per Hectare or part of 25000

#### 3. APPROVAL OF SITE

- a. Site approval Rs 20/ Sqm
- b. Betterment charges Residential Rs 125/ Sqm Non residential Rs 150/ Sqm

**"我们在我们的人**"

#### 4. BUILDING PERMIT FEE

A Residential Buildings

 Up to 200 Sqm
 Rs15/Sqm

 200---500 Sqm
 Rs 30/Sqm

 Above 500 Sqm
 Rs 75/Sqm

B. Non Residential Buildings: Commercial / Institutional/ Industrial/ Cinema

Halls/ Function Halls etc.,

 Up to 200 Sqm
 Rs35/Sqm

 200---500 Sqm
 Rs 70/Sqm

 Above 500 Sqm
 Rs 120/Sqm

### Functional Requirements of a building Structure

#### Functional Requirements of Building Walls

Strength.

Stability.

Durability.

Weather resistance.

Fire resistance.

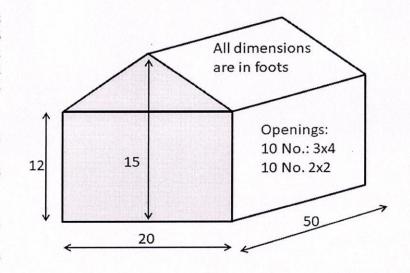
Heat insulation.

Sound insulation.

Privacy and security.

## Cement brick work estimation

	Feet m	meter		
Wall thickness	0.656	0.1999488		
front wall	240	22.2967296		
	30	2.7870912		
Number of front walls		2		
Side walls	600	55.741824		
Number of Side walls	2			
Openings	12	1.11483648		
Number of openings	10			
Openings	4	0.37161216		
Number of openings	10			
Toatal Wall area		146.7868032		
Volume of Brick Work		29.34984516		
Standard cement brick size	0.016			
Effective cement brick size	0.014079			
Number of bricks required	1834.365322			
Wet volume of mortar	3.523815784			
Wastage percentage	10			
Total Wet Volume	3.876197362			
Bulkage for Dry volume of mortar	25			
Dry Volume of Mortar	4.845246703			



Praportion of Mortar 6 cft Cement (m3) 0.6921781 35.3147 Sand (m3) 4.776028893 168.6640275 Density (Kg/m3) Amount (Kg) No.of Bags (50Kg) Density of Cement 996.7364646 1440 19.935 River Sand 1650 7880.447673 157.61 bricks

Total material cost 36732.83669

cost

7973.891717

6746.561102

22012.38387

# Two Roomed Building

Item No.	Particulars of Items	No	Length (m)	Broadth (m)	Hight or	
1	Earth Work	110.	(111)	Breadth (m)	Depth (m)	Quantit
	Long wall	2	11.7	1.1		
	Short wall	3	5.2	1.1	1	25.74
		3.	3.2	1.1	1	17.16
2	undation (Lime concre	ete)			Total	42.9
	Long wall	2	11.7	1.1	0.2	
	Short wall	3	5.2	1.1	0.3	7.722
			0.2	1.1	0.3	5.148
DEL S					Total	12.87
3	Brick Work					
	Level 1					
	Long wall	2	11.4	0.8	0.2	2 (10
	Short wall	3	5.5	0.8	0.2	3.648
			0.0	0.8	Total	2.64
					Total	6.288
	Level 2					
	Long wall	2	11.3	0.7	0.1	1.500
	Short wall	3.	5.6	0.7	0.1	1.582
			3.0	0.7	0.1	1.176
					Total	2.758
	Level 3					
	Long wall	2	11.2	0.6	0.1	1044
	Short wall	3	5.7	0.6	0.1	1.344
				0.0	Total	1.026
	Level 4				Total	2.37
	Long wall	2	11.1	0.5	0.1	1.11
	Short wall	3	5.8	0.5	0.1	1.11
				0.5	Total	0.87
4	Plinth beam				Total	1.98
		2	11	0.4	0.8	7.04
		3	5.9	0.4	0.8	7.04
			E e e e	0.1	Total	5.664
5	DPC				Total	12.704
	Long wall	2	11	0.4	_	8.8
		3	5.9	0.4		7.08
	Reduction	2	1.2	0.4		15.88 0.96
				0.1	Total	
5 կ	per structue(brickwork)				Total	14.92
		2	10.9	0.4	4.2	36 624
		3	6	0.4	4.2	36.624

				Total	66.864
Reduction			and the second		
Doors	2	1.2	2.1	0.3	1.512
Windows	4	1	1.5	0.3	1.8
Shelves	2	1000	1.5	0.2	0.6
Sherres				Total	3.912

Mosaic/Terrazo flooring

Rate analysis for 100 Sq.m Mosa	ic/Terrazo flooring		T
Thickness of Cemen concrete lay	er (mm)		2
Thickness of Mosaic layer (6)	(		2
Toal Area of work (Sq.m)	100		
Cement concter proportion (M15	) 1		
Mosaic layer proportion	1		
	1	1	
	1		
Total Quanty of cement concrete			
Total Quanty of Mosaic mortar (C	Cum)		
Total quantity (Cum)		0	
Material	Quantity/No.	Unit Rate	Cost
Cement	26		4758
Coarse aggregate	1.88	103	2293.0
Fine aggregate	0.94	1220	479.4
Marble chips	1.762	90	158.58
	Total	70	7689.58
Labour			7007.50
Mistri (head mation)	0	840	(
Mation(skilled)	30	770	23100
Mazdoor	30	644	19320
Bhisti	10	700	7000
Polisher	70	735	51450
Polishing stone	2	2000	4000
Oxalic acid powder	1	1000	1000
Sundries	1	500	500
	Total	500	106370
	Grass amount		114060
Water Cherges @1.5%			1710.89
Contractor Profit @ 10%			11406
	Grand total		127176

## Multi Roomed Building

	Item No.	Particulars of Items	No.	Length (m)	Breadth (m)	Hight or Depth (m)	Quantity		
Left side	1	Earth work				- sp. ()	Quantity	Left side bu	:1.d:
		Long wall	2	11.5	0.9	1	20.7	Long wall	10.6
		Short wall	3	4.4	0.9	1	11.88	short wall	5.3
Right side		Earth work							
		Long wall	2	10.35	0.9	1	10.62	Right side b	_
		Short wall	2	3.9	0.9	1	18.63 7.02	Long wall short wall	9.45 4.8
Vanual 1 V	U. 11. 0	-						Short wan	4.0
verndan v		Earth work							
		Long wall	1	10.3	0.6	0.5	3.09	Long wall	9.7
		Short wall	1	1.65	0.6	0.5	0.495	short wall	2.25
Verndah V	Vall (I	Earth work							
		Long wall	1	10.3	0.6	0.5	3.09	Long wall	9.7
		Short wall	1	2.15	0.6	0.5	0.645	short wall	2.75
-	21	Foundation (L	C)			Total	65.55		
Left side		Earth work	()						
		Long wall	2	11.5	0.9	0.2	(01	Left side buil	_
		Short wall	3	4.4	0.9	0.3	6.21 3.564	Long wall short wall	10.6
Right side	-					0.0	3.304	SHORT WAII	5.3
Right side		Earth work						Right side bu	ilding
		Long wall Short wall	2	10.35	0.9	0.3	5.589	Long wall	9.45
-	- 2	short wall	2	3.9	0.9	0.3	2.106	short wall	4.8
Verndah W	all (I E	Earth work		38 11 1					
	L	ong wall	1	10.3	0.6	0.2	1.236	I ama11	0.5
	S	Short wall	1	1.65	0.6	0.2	0.198	Long wall short wall	9.7 2.25
Verndah Wa	all (F	arth work							2.25
		ong wall	1	10.3	0.6	0.2	1006		
		hort wall	1	2.15	0.6	0.2	1.236 0.258	Long wall	9.7
						otal	20.397	short wall	2.75

	Plastering				
	Area (m2)	255	5		
	depth (m)	0.01	3		
	Volume of Cement Mortal (M3)	33.21	5		
Wastage (%)		10			
Total Wet Volume		36.536	5		
C					
Conversion % for mortar		3!			
	Total Dry Volume	49.324275	5		
Praportion of Mortar			1 4	1	
Cement (m3)		9.864855		9.864855	
Sand (m3)		45.378333	3		
		River sand	6 mm chips		
Prapotions in sand		2.5	1.5		
			In cft	35.3147	
Sand material 1	River sand	28.36145813	1001.576385		
Samd Material 2	6 mm chips	17.01687488	600.9458311		193
		Density (Kg/m3)		Amount (Kg)	No.of Bags (50Kg)
Density of	Cement	1440		14205.3912	284.108
	River Sand	1650		46796.40591	935.93
	6 mm chips	1680		28588.34979	571.77

# Single Room Building

Item No.	Particulars of Items	No.	Length (m)	Breadth (m)	Hight or Depth (m)	Quantity
1	Earth Work					
	Long wall	2	6.2	0.9	0.9	10.044
	Short wall	2	3.4	0.9		5.508
					Total	15.552
2	PCC					
	Long wall	2	6.2	0.9	0.3	3.348
	Short wall	2	3.4	0.9	0.3	1.836
					Total	5.184
3	Foundation Brick work					
	Level-1					
	Long wall	2	5.9	0.6	0.3	2.124
	Short wall	2	3.7	0.6	0.3	1.332
					Total	3.456
	Level-1					
	Long wall	2	5.8	0.5	0.3	1.74
	Short wall	2	3.8	0.5	0.3	1.14
					Total	2.88
	Plinth level Brick work					
	Long wall	2	5.7	0.4	0.6	2.736
	Short wall	2	3.9	0.4	0.6	1.872
					Total	4.608
5	Superstructure					
	Long wall	2	5.6	0.3	3.5	11.76
	Short wall	2	4	0.3	3.5	8.4
					Total	20.16



(AUTONOMOUS) KADAPA, ANDHRA PRADESH, INDIA-516003

## DEPARTMENT OF CIVIL ENGINEERING

## CERTIFICATE OF COURSE COMPLETION

This certificate is presented to

Shafi Memon (Reg. No. 179Y1A0149), Student of KSRM College of Engineering (Autonomous) for successful completion of certification course on "Requirements and estimation of framed building structures" offered by Department of civil Engineering, KSRMCE-Kadapa.

Course Duration: 30 Hours; From 18/09/20 to 05/10/20

Course Instructor:

Prof. V. Giridhar,

Professor, CE, KSRMCE-Kadapa

Coordinator

Head of the Department

V. S 3 muly

Principal



(AUTONOMOUS) KADAPA, ANDHRA PRADESH, INDIA-516003

# DEPARTMENT OF CIVIL ENGINEERING

# CERTIFICATE OF COURSE COMPLETION

This certificate is presented to

Sai Bharath P. (Reg. No. 179Y1A0164), Student of KSRM College of Engineering (Autonomous) for successful completion of certification course on "Requirements # and estimation of framed building structures" offered by Department of civil Engineering, KSRMCE-Kadapa.

Course Duration: 30 Hours; From 18/09/20 to 05/10/20

Course Instructor:

Prof. V. Giridhar,

Professor, CE, KSRMCE-Kadapa

Coordinator

Head of the Department

V.S.S. Muly Principal



(AUTONOMOUS) KADAPA, ANDHRA PRADESH, INDIA-516003

### DEPARTMENT OF CIVIL ENGINEERING

### CERTIFICATE OF COURSE COMPLETION

This certificate is presented to

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Prof. V. Giridhar,

Professor, CE, KSRMCE-Kadapa

Route Gill Aghuf

Coordinator

Head of the Department

Department Principal

V. S. S. Musly



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KADAPA, ANDHRA PRADESH, INDIA-516003

## DEPARTMENT OF CIVIL ENGINEERING

## CERTIFICATE OF COURSE COMPLETION

This certificate is presented to

Susma S. (Reg. No. 179Y1A0182), Student of KSRM College of Engineering (Autonomous) for successful completion of certification course on "Requirements" and estimation of framed building structures" offered by Department of civil Engineering, KSRMCE-Kadapa.

Course Duration: 30 Hours; From 18/09/20 to 05/10/20

Course Instructor: Prof. V. Giridhar,

Professor, CE, KSRMCE-Kadapa

Gv. Rghyl Coordinator

Head of the Department

MMM

V S. S. Muly Principal

## Department of Civil Engineering

Feedback of students on Certification Course on "Requirements and estimation of framed building structures"

				Are the lecture			
			Is the course	hours sufficient	Rate the	Is this course	Rate the
S1.			content met your	to cover the	course	useful for your	entire
No.	Name of The Student	Reg. No.	expectations?	topics?	instructor	Carrier?	course
1	Nikhil Kumar Reddy Bhavanasi	179Y1A0106	Yes	Yes	Excellent	Yes	5
2	Madhu Sudhan Reddy Bontha	179Y1A0111	Yes	Yes	Excellent	Yes	5
3	Venkatesh Naik Bukke	179Y1A0113	Yes	Yes	Excellent	Yes	5
4	Pallavi Chatta	179Y1A0115	Yes	Yes	Excellent	Yes	5
5	Mallikarjun Chintakayala	179Y1A0117	Yes	Yes	Excellent	Yes	5
6	Venkateswara Chowdavaram	179Y1A0118	Yes	Yes	Excellent	Yes	5
7	Zaheer Dade	179Y1A0119	Yes	Yes	Excellent	Yes	5
8	Jayachandra Derangula	179Y1A0122	Yes	Yes	Excellent	Yes	5
9	Siddaiah Dollu	179Y1A0123	Yes	Yes	Excellent	Yes	5
10	Suresh Gowd Ediga	179Y1A0124	Yes	Yes	Excellent	Yes	5
11	Ashok Kumar Galeti	179Y1A0126	Yes	Yes	Excellent	Yes	5
12	Pullaiah Gokula	179Y1A0129	Yes	No	Excellent	Yes	4
13	Ramamanohar Reddy Gollapalle	179Y1A0130	Yes	Yes	Excellent	Yes	5
14	Sreekanth Gurakanivari	179Y1A0131	Yes	Yes	Excellent	Yes	5
15	Dharani Jonnavaram	179Y1A0133	Yes	Yes	Excellent	Yes	5
16	Manasa Juturu	179Y1A0134	Yes	Yes	Excellent	Yes	5
17	Himaja Kancharla	179Y1A0136	Yes	Yes	Excellent	Yes	5

18		179Y1A0139	Yes	Yes	Excellent	Yes	5
19	Madhu Kiran Reddy Bannuru	179Y1A0146	Yes	Yes	Excellent	May be	5
20	Shafi Memon	179Y1A0149	Yes	Yes	Excellent	Yes	5
21	Manjunatha Muttalahgari	179Y1A0155	Yes	Yes	Excellent	Yes	
22	Prathima Nagooru	179Y1A0157	Yes	Yes	Excellent		4
23	Vijaya Kumari Nalla	179Y1A0158	Yes	Yes	Good	Yes	5
24	Sai Bharath Paduchuri	179Y1A0164	Yes	Yes	Good	Yes	5
25	Bhanu Prakash Peddaalankolla	179Y1A0174	Yes			Yes	5
26	Vinodh Kumar Reddy Pokala	179Y1A0178		Yes	Excellent	Yes	5
27	Susma Saraballa		Yes	Yes	Excellent	Yes	5
28		179Y1A0182	Yes	Yes	Excellent	Yes	5
	Gaffar Sayyad	179Y1A0183	Yes	Yes	Excellent	Yes	5
29	Abdul Rehaman Shaik	179Y1A0184	Yes	Yes	Excellent	Yes	5
30	Surya Thammisetty	179Y1A0197	Yes	Yes	Good	May be	4
31	Rajesh Thotakanama	179Y1A0198	Yes	Yes	Excellent	Yes	3
32	Maheswari Undela	179Y1A01A1	Yes	Yes	Excellent	Yes	5
33	Siva Kumar Upparapalli	179Y1A01A2	Yes	Yes	Excellent	May be	5
34	Keerthana Vodiveeti	179Y1A01A5	Yes	Yes	Excellent	Yes	
35	Rekha Devi Yarasani	179Y1A01A6	Yes	Yes			5
36	Lokesh Yarragolla	179Y1A01A7	Yes		Excellent	Yes	4
101	Venkata Lakshmi Yarraguntla			Yes	Excellent	Yes	5
	Shanthi Yerukala	179Y1A01A8	Yes	Yes	Excellent	Yes	5
36	Shalithi Yerukala	179Y1A01B1	Yes	Yes	Excellent	Yes	5

39	Siva Gangadhar Alavalapadu	189Y5A0102	Yes	Yes	Excellent	Yes	5
40	Dharani Kamalakara Rao Appalarajugari	189Y5A0104	Yes	Yes	Excellent	May be	5
	11 , 0						
41	Suresh Banka	189Y5A0107	Yes	Yes	Good	Yes	5
42	Srinatha Reddy Bhumireddy	189Y5A0109	Yes	Yes	Excellent	Yes	5
43	Purushothamreddy Bijivemula	189Y5A0110	Yes	Yes	Excellent	Yes	5
44	Swarupa Rani Biranna	189Y5A0111	Yes	Yes	Excellent	Yes	5
45	Kiran Kumar Bolleddu	189Y5A0113	Yes	Yes	Excellent	Yes	5
46	Swetha Damsetty	189Y5A0120	Yes	Yes	Excellent	Yes	- 5
47	Charan Kumar Gandi	189Y5A0123	Yes	Yes	Excellent	Yes	5
48	Shireesha Guramkonda	189Y5A0126	Yes	Yes	Excellent	Yes	5
49	Nikitha Jaladi	189Y5A0127	Yes	Yes	Excellent	Yes	5
50	Venkata Subbaiah Janapati	189Y5A0128	Yes	Yes	Excellent	Yes	5
51	Yaswanth Reddy Kambham	189Y5A0132	Yes	Yes	Excellent	Yes	5
52	Sree Hari Reddy Katthi	189Y5A0134	Yes	Yes	Excellent	Yes	5
53	Nagesh Kolliboina	189Y5A0135	Yes	Yes	Excellent	Yes	5
54	Sudharshan Reddy Kora	189Y5A0136	Yes	Yes	Excellent	Yes	5
55	Prasanth Kumar Kotturu	189Y5A0138	Yes	Yes	Excellent	Yes	5
56	Suresh Kuruva	189Y5A0140	Yes	Yes	Excellent	Yes	5
57	Venkata Ramana Reddy Nimmakayala	189Y5A0146	Yes	Yes	Excellent	Yes	5
58	Raja Peddakotla	189Y5A0152	Yes	No	Excellent	Yes	4

59	Lakshmi Narendra Peddamodium	189Y5A0153	Yes	Yes	Excellent	Yes	1 -
60	Abilash Reddy Sajjala	1007/5 4 04 5 0			Zacenent	168	5
		189Y5A0159	Yes	Yes	Excellent	Yes	5
61	Venkata Sai Kumar Sangaraju	189Y5A0160	Yes	77	A CONTRACTOR OF THE PARTY OF TH		,
		10713/10100	ies	Yes	Excellent	Yes	5
62	Naveen Kumar Sepuri	189Y5A0162	Yes	Yes	T 11		M. P. Sili
(2			1 03	1 es	Excellent	Yes	5
63	Chandra Kanth Thatamsetty	189Y5A0170	Yes	Yes	D 11		
-	D' III i			1 es	Excellent	Yes	5
64	Divya Thonduru	189Y5A0171	Yes	Yes	T11		
				168	Excellent	Yes	5

G. W. Kally Coordinators

HoD-Civil Engg.

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