

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi & Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057

		AY :- 2021-22		PROJECT LIST	
SI	Batch No	Name of the Students	USN	Title of the Project	
1			1SG18CV027		
2	4		1SG18CV040	Utilisation of black cotton soil in the manufacture of bricks	
3	1	RENUPRASAD T	1SG18CV045	Officialities of Grades Corresponding to the Corres	
4		PRAJWAL S GOWDA	1SG18CV067		
5	2	CHANDANA KUMARI.S	1SG19CV400	M sand cement mortar with partial replacement of nano aluminium oxide	
6		SANJEEV KISHOR.P	1SG19CV406		
7			1SG19CV407		
8			1SG19CV408		
9		DIVYA K	1SG18CV016		
10			1SG18CV059	Analysis and design of multistorey buildings using cost	
11	3		1SG18CV061	effective material	
12		LINGRAJ	1SG17CV027		
13		CHANDANA.M	1SG18CV011	Determination of optimum binder content of bituminous	
14		POOJA.S	1SG18CV035		
15	4	PRAGATHI.R	1SG18CV037	concrete	
		SINDHU.C	1SG18CV051		
16		GURUCHARANA REDDY			
17		DILIP K. S	1SG18CV015	SOLID WASTE MANAGEMENT	
18	5	HANUMANTHARAJA S C			
19			1SG18CV022		
20		NAVEEN GOWDA K R	1SG18CV032		
21		YASHAS. M		Improving compressive strength of the concrete by crushe	
22	6	DARSHAN.N	1SG18CV013	aggregates	
23		ABHISKEK MOHAN	1SG18CV003	aggregates	
24		VIVEK HEGDE	1SG18CV063		
25		TEJASWINI S D	1SG18CV058	Studies on properties of bricks with cyclonic filter resisting	
26	7	PRIYADARSHINI P	1SG18CV039	polluted air.	
27		GEETHA N	1SG18CV019		
28		TILAK H S	1SG18CV060	ANALYSIS AND DESIGN OF MULTILEVEL CAR	
29	8	SACHIN K C	1SG18CV065		
30		DHANUSH K L	1SG19CV402	PARKING	
31		HARISH S R	1SG19CV403		
32		ANKITH KC	1SG18CV008		
33	9	BHARATH P	1SG18CV009	Analysis and design of a multilevel residential building usi ETabs	
34		MADHUSUDAN BS	1SG18CV029		
35		ADHYA NK	1SG18CV005		
36		BRINDA P	1SG18CV010		
37	40	POSHITHA AV	1SG18CV036	Study of Strength Characteristics of Cladding Material usi	
38	10	MEGHANA TS	1SG18CV031	quarry dust and bio medical plastic waste	
39		PARINITHA J	1SG18CV034		
40		SHWETHA. R	1SG18CV050		
41		HARSHITHA. R.	1SG18CV023	SMART VILLAGE	
42	11	SOWMYA. K. V.	1SG18CV053	SWART VILLAGE	
43		KAVYA SHREE S	1SG18CV025	一种是一种的人的人们是一个人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人们的人	
43		RASOOL A	1SG16CV063	partial replacement of GGBS and FLYASH in cement	
45		MANJUNATH GOWDA H			
45	12	SHREEJITH S	1SG18CV408		
		SUMANTH GOWDA S	1SG16CV052		
47		ANKITH KUMAR B	1SG18CV401		
48	-	TEJAS GOWDA	1SG17CV049	Application of solid waste management around Pavagad	
49	13		1SG17CV047	Taluk	
50		NAIRA N SURAJ J	1SG17CV047	1/2	
51	THE RESERVE OF THE PARTY OF THE				

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

53	14	YASHWANTH T P	1SG18CV066	RETROFITTING OF COLUMNS BY THE METHOD OF CONCRETE JACKETING	
54		DHRUVA KUMAR D L	1SG18CV014		
55		ABHISHEK R	1SG18CV004		
56	15	VINAY R	1SG18CV062		
57		SANJAY SHARMA	1SG18CV047	TRANSLUCENT CONCRETE	
58		KHALID MAQSOOD	1SG18CV026		
59		ISHAQUE AHMED	1SG18CV024		
60	16	RAHUL H. J	1SG18CV042		
61		ABHISHEK M. V	1SG18CV002	Analysis and design of a warehouse using etabs	
62		ABHISHEK G. A	1SG18CV001		
63		PRAJWAL S	1SG18CV038		
64	17	TEJAS N	1SG18CV056		
65		RAVIKUMAR	1SG18CV043	EXPERIMENTAL STUDY ON DENSE BITUMINOUS	
66		TEJAS S RAM	1SG18CV057	MACADAM USING CRUMB RUBBER	
67		SUNIL YADAV	1SG18CV054		
68		ANANYA S	1SG18CV007	EXPERIMENTAL INVESTIGATION ON DURABILITY	
69	10	GANAVIN	1SG18CV017	OF CONCRETE BY REPLACING NATURAL SAND BY MANUFACTURING SAND	
70	18	SINDHU H S	1SG18CV052		
71		REKHA M	1SG18CV044		
72		SUSHMA M	1SG18CV055	SELF COMPACTING CONCRETE	
73	1	POOJA S	1SG19CV405		
74	19	CHETHAN GOWDA D	1SG19CV401	GEET COM ACTING CONCINED	
75		PUSHPALATHA H.	1SG18CV041		

Printer

Principal
Sapthagirl College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

Depi^{HOD CV}ivil Engg. S.C.E, Bangalore-560 057.

8



A PROJECT REPORT ON

"UTILIZATION OF BLACK COTTON SOIL IN THE MANUFACTURE OF BRICKS"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In
CIVIL ENGINEERING
Submitted By:

KIRAN H D PRUTHVI RAJ S RENUKAPRASAD T PRAJWAL S GOWDA

USN: 1SG18CV027 USN: 1SG18CV040 USN: 1SG18CV045

USN: 1SG18CV067

Under the Guidance Of: Dr RAJESHWARTR

Professor and Head
Department of Civil Engineering



Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Rose
Bengaluru - 560 057

DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi & Approved by AICTE, New Delhi)
(Accredited by NAAC with 'A' Grade) & ISO 9001-2015 and 1400:2015 Certified Institute)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

(Affiliated to VTU, Belagavi & Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with "UTILIZATION OF BLACK COTTON SOIL IN THE MANUFACTURE OF BRICKS"is a bonafied work carried out by team associates KIRAN H D (1SG18CV027), PRUTHVI RAJ S (1SG18CV040), RENUKA PRASAD T(1SG18CV045), PRAJWAL S GOWDA (ISG18CV067), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022 All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report hasbeen approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Dr. RAJESWARI R **PROFESSOR**

Department of Civil Engineering S.C.E, Bengaluru

Dr. RAJESHWARLR H.O.D

Department of Civil Engineering S.C.E. Bengaluru

Dr. H RAMAKRISHNA

PRINCIPAL S.C.E, Bengaluru

Name of Examiner

Sapthagiri College of

Signature of the Examiner with date

1) S282/22 2) July 28/03/202



A

PROJECT PHASE 2 REPORT ON

"EFFECTS OF PARTIAL REPLACEMENT OF CEMENT WITH NANO ALUMINA OXIDE ON MECHANICAL PROPERTIES OF M-SAND CEMENT MORTAR"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In

CIVIL ENGINEERING

Submitted By:

CHANDANA KUMARIS

SANJEEV KISHOR P

SINDHUNATH D T

SRINIVASATL

USN: 1SG19CV400

USN: 1SG19CV406

USN: 1SG19CV407

USN: 1SG19CV408

Under The Guidance Of:

Prof. BHANYACH

Asst. Professor

SAPTHAGIRI

DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLUM

14/5, Chikkasandra, Hesaraghatta Main Road, BENGALURU

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Male Read
Bengaluru - 560 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU -560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work phase I entitled with TETLETS OF PARTIAL REPLACEMENT. OF CEMENT WITH NANO ALUMINIUM OXIDE ON MECHANICAL PROPERTIES OF MISAND CEMENT MORTAR" is a bonafied work carried out by team associates CHANDANA KUMARI S (ISG19CV400), SANIEEV KISHOR P (ISG19CV406), SINDHUNATH D T (ISG19CV407), SRINIVASA T.L. (18G190 V408), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Asst. professor Department of Civil Engineering S.C.E., Bengaluru

HOD

Department of Cred Engineering S.C.E. Bengahiru

Dr. H RAMAKRISHNA

PRINCIPAL

S.C.E. Bengalum Principal
Saothagiri College of Engineering Chikkasandra, Hesaraghatta Rond,

Bangalore-560 057

Name of the examiner

1. Dr. Rajeshirain R 2. Alekay J

Principal

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road

Bengaluru - 560 057

20/01/n

Signature with date



PROJECT REPORT

ON

"ANALYSIS AND DESIGN OF MULTISTOREY BUILDING WITH COST EFF CTIVE MATERIALS"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In CIVIL ENGINEERING

Submitted By:

LINGRAJ DIVYA K THUNGA B K VAISHNAVI S YADAV

USN: 18G17CV027 USN: 18G18CV016 USN: 18G18CV059 USN: 18G18CV061

Under The Guidance Of:

Mr. PRAMODKR

Asst. Professor



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi)
(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

2021-22

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Royd Bengaluru - 560 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is certified that the project work entitled with "ANALYSIS AND DESIGN OF MULTISTOREY BUILDING WITH CONCURRED THE STATERIAL" is a bonafied work carried out by team associates UNGRAD (18G17CV027), DEVYA K (18G18CV016), THUNGA B K (ISG18CV059), VAISHNAVI S VADAV (ISG18CV061), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Mr. PRAMOD K R GUIDE Assistant. professor

Department of Civil Engineering S.C.E, Bengaluru

Name of the examiner

Dr. RAJESHIVARI

H.O.D Department of Civil Engineering S.C.E, Bengaluru

Dr. II RAMAKRISHNA

PRINCIPAL S.C.E, Bengaluru

Signature with date

Principal Sapthagirl College of Engineer Bengaluru - 560 057

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI-590018, KARNATAKA.



A PROJECT REPORT

On

"DETERMINATION OF OPTIMUM BINDER CONTENT OF BITUMINOUS CONCRETE GRADE-1"

Submitted in Partial Fulfillment for the Award of the Degree of

BACHELOF OF ENGINEERING

IN

CIVIL ENGINEERING

Submitted By:

CHANDANA M POOJA S PRAGATHI R SINDHU C

USN: 1SG18CV011 USN: 1SG18CV035 USN: 1SG18CV037 USN: 1SG18CV051

Under the Guidance of Mr. AKSHAY J Asst. Professor Dept. of Civil Engineering



SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VIU. Belogavi. Approved by AICTE, New Delhi)
18O 9001:2015 & ISO 14001:2015 Certified Institute Accredited By NAAC with "A Grade 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

Principal
Sapthagiri College of Enginearing
14/5, Chikkasandra, Hesaraghatta Male

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VIII, Belagavi, Approved by AICTE, New Delhi) 18O 9001:2015 & ISO 14001:2015 Certified Institute Accredited By NAAC with "A" Grade 14/5, Chikkasandra, Hesaraghatta Main Road BENGALURU-560057



Department of Civil Engineering

Certificate

Certified that the Project Work entitled "DETERMINATION OF OPTIMEM BINDER CONTENT OF BITUMINOUS CONCRETE carried out by CHANDANA M (18G18CV011). POOJAS (ISGI8CV035), PRAGATHER (ISGI8CV031), SINDHUC (ISGI8CV051), bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The project report has been approved as it satisfies the academic requirements in respect of Project prescribed for the said degree.

ignature of the Guide

Prof. Akshay J. Department of Civil Engineering

Signature of the HOD

Dr. Rajeshwari R Head of the Department Dept. of Civil Engineering Signature of the Principal

Dr. U Ramkrishna

Principal

Sapthagiri College of Engineering

Name of the Examiner

Principal Sapthagiri College of Engineering.

14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

L 25/07/22

Signature of the Examiner with date

1. Dr. Rayeshwari R 2. Akrhay

BERNOOM DE WAS BEEN BEEN BEEN BERNOOM BEEN BETTE BETTE BEEN BEEN BETTE

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI, KARNATAKA-590 018



A Project Report On

"SOLID WASTE MANAGEMENT: A CASE STUDY OF GAURIBIDANURU"

Submitted in partial fulfillment of the requirement for the award of

Bach does no sea cring

Submitted by:

DILIP K S	1SG18CV015
HANUMANTHARAJA S C	1SG18CV022
NAVEEN GOWDA K R	1SG18CV032
GURUCHARANA REDDY P S	1SG18CV021

Under the guidance of

Dr. RAJESHWARI R Associate Professor & HOD



Department of Civil Engineering

SAPTHAGIRI COLLEGE OF ENGINEERING

Affiliated to VTU, Belagavi& Approved by AICTE, New Delin.
(ISO 9001,2015 & ISO 15001:2015 Certified Institute)
According to NAAC with "A" Grade

#14/5, Chikkasander, H. Sanghatta Main Road, Rengaloro - 56

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Page Bengaluru - 560 087

Affiliated to VTU Belagavi, Approved by AICTE, NEW DELHI Accredited by NAAC with 'A' grade (ISO 9001-2015 & ISO14001-2015 Certified Institute) 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057. Department of Civil Engineering



Certified that the Project work entitled "SOLID WASTE MANAGEMENT: A CASE STUDY OF GAURIBIDANURU" carried out by bonafide students of 8th semester. DILIP KS (1SG18CV015), HANUMANTHARAJA S C (1SG18CV022). NAVEEN GOWDA K R (1SG18CV032), GURUCHARANA REDDY P S(1SG18CV021), Department of Civil Engineering carried out at college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor Of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22 It is certified that all corrections/suggestions indicated for Final Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Signature of the Guide Dr. Rajeshwari R Associate Prof. and Head

\$ 16/07/22

Signature of the HOD Dr Rajeshwari R

Signature of the Principal Saptha principal Engineering S. C. Associate Prof. and Head Chikkasand Princips araghatta Road, Bangalore-560 057

1. Ar Kychwari R 2. Akatay J

Sapthagi Arlacinal Cipal
Sapthagichi Goslanda of Engineerin
14/5, Chikkasandraeheanin



PROJECT PHASE 2 REPORT

ON

"IMPROVING THE COMPRESSIVE STRENGTH OF CONCRETE BY USING CRUSHED AGGREGATE - GRANITE POWDER AS FILLER MATERIAL."

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING CIVIL ENGINEERING

Submitted By:

ABHISKEK MOHAN

DARSHAN.N

VIVEK HEGDE

YASHAS. M

USN: 1SG18CV003

USN: 1SG18CV013

USN: 1SG18CV063

USN: 1SG18CV064

UNDER THE GUIDANCE OF Prof. KAVYA.H. P.

Asst.Professor



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkasandra, Hesaraghatta Main Road, BENGALURU 560057.

2021-22

Sapthagiri College of Engineerin 14/5, Chikkasandra, Hessen Shinta Main Roa Chigaluru - 560 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the projectwork phase 2 entitled Improving the compressive strength of concrete by using crushed aggregate - Granite powder as Filler material." Is a bonafide work carried out by team associates ABHISKEK MOHAN (1SG18CV003), DARSHAN.N (1SG18CV013), VIVEK HEGDE (1SG18CV063), YASHAS.M (1SG18CV064), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of the academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Signature of the Guide

25/07/22

Kanyafff

Signature of the HOD

Signature of the Principal

Prof. Kavya .H. P

Dr. Rajeshwari.R

Dr. H. Ramakrishna

Assistant Professor

HOD

Principal

EXTERNAL EXAMINATION

Name of the Examiner

Signature with Date:

Sapthagiri College of Engineer 14/5, Chikkasandra, Hesaraghatta Main R. Bengaluru - 560 057

28/7/noz

VISVESVARAYA TECHNOLOGICAL UNIVERSITY JNANA SANGAMA, BELAGAVI-590018, KARNATAKA



A PROJECT REPORTON

"STUDY ON BREATHE BRICKS"

Submitted by partial fulfilment of the requirement of the degree of Bachelor of Engineering in

CIVIL ENGINEERING

SUBMITTED BY

Ms. GEETHA N (1SG18CV019)

Ms. PRIYADARSHINI P(1SG18CV039)

Ms. TEJESWINI S D (1SG18CV058)

Under the Guidance of

Prof. AKSHAY J

Asst, Professor



Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Heseraghatta Meln Road
Bengaluru - 567

DEPARTMENT OF CIVIL ENGINEERING
SAPTHAGIRI COLLEGE OF ENGINEERING

(Accredited by NAAC with "A" grade)
(An ISO 9001:2015 & ISO 14001:2015 Certified Institution) (Affiliated to VTU, Belagavi and approved by AICTE, New Delhi) 14/5, Chikkasandra, Hesarghatta Main Road, Bengaluru-560057

SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru- 560057 (Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka)

DEPARTMENT OF CIVIL ENGINEERING



It is Certified that the project work entitled with "STUDY ON BREATHE BRICKS" is a bonafide work carried out by team associates Ms. Geetha N (1SG18CV019), Ms. Priyadarshini P (1SG18CV039), Ms. Tejeswini S D (1SG18CV058) in partial fulfilment of the requirements as prescribed by Visvesvaraya Technological University, Belagavi, for the award of Bachelor Degree in Civil Engineering during the academic year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Signature of the Guide Prof. AKSHAY J Assistant Professor

Signature of the Principal Dr. H Ramakrishna Principal

SCE, Bengaluru.

Signature of the HOD Dr. R. RAJESHWARI Department of Civil Engineering

Name of the Examiner

Signature of the Examiner with date

1. Dan Rayushwasi K

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Med Bengaluru - 50%

VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI, KARNATAKA-590 018



A Project Report
On
"ANALYSIS AND DESIGN OF MULTILEVEL CAR
PARKING"

Submitted in partial fulfillment of the requirement for the award of

Backetor of engineering
In
Civil Engineering

Submitted by:

TILAK H S 1SG18CV060 SACHIN K C 1SG18CV065 DHANUSH K L 1SG19CV402 HARISH S R 1SG19CV403

Under the guidance of Prof. Shobha Y N
Assistant Professor



Department of Civil Engineering

SAPTHAGIRI COLLEGE OF ENGINEERING

Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi.
(ISO 9001:2015 &ISO 14801:2015 Certified Institute)

Accredited By NAAC with "A" Grade
#14/5, Chikkasandra, Hesaraghatta Blain Road, Bengaluru-560 0

2021-2022

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

SAPIDACIRICOLLARIZADA INCINETRING

Affiliated to VTU Belagavi. Approved by AICTE. NEW DELHI
Accredited by NAAC with 'A' grade
(ISO 9001-2015 & ISO14001-2015 Certified Institute)

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.

Department of Civil Engineering



CERTIFICATE

Certified that the Project work entitled "ANALYSIS AND DESIGN OF MULTILEVEL CAR PARKING" carried out by bonafide students of 8th semester. Tilak H S (18G18CV060), Sachin K C (18G18CV065), Dhanush K L (18G19CV402). Harish S R (18G19CV403), Department of Civil Engineering carried out at college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor Of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Final Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Shothay. N | 22

Signature of the Guide Prof. Shobha Y N Assistant Professor Signature of the HOD
Dr Rajeshwari R
Associate Prof and Head

Signature of the Principal
Dr. H. Ramakrishna

anthagin College Engineer

EXTERNAL EXAMINATION:

Name of the Examiner

Dr Rajohuasi Z

2. Athlay. 0

B

7 28/07/22 20/28/022

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Roas Bengaiyru - 560 057



A PROJECT REPORT ON

"ANALYSIS AND DESIGN OF MULTISTOREY RESIDENTIAL BUILDING USING ETABS"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In
CIVIL ENGINEERING
Submitted By:

ADHYA N K ANKITH K C BHARATH P MADHUSUDAN B S USN: 1SG18CV005 USN: 1SG18CV008 USN: 1SG18CV009 USN: 1SG18CV029

Under the Guidance Of:

Prof. PALLAVI G A

Asst. Professor



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi)
(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

2021-22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work phase 1 entitled with "ANALYSIS AND DESIGN OF MULTISTOREY RESIDENTIAL BUILDING USING ETABS" is a bonafied work carried out by team associates ADHYA N K (1SG18CV095), ANKITH K C (1SG18CV008), BHARATH P (1SG18CV009), MADHUSUDAN B S (1SG18CV029), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report hasbeen approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Asst. professor

Department of Civil Engineering S.C.E, Bengaluru

Dr. RAJESHWARI R

H.O.D

Department of Civil Engineering S.C.E. Bengaluru

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Folks Bengaluru - 50

Dr. Rajerhweri R



A PROJECT REPORTON

"STRENGTH CHARACTERISTICS OF CLADDING MATERIAL USING CEMENT AS BASE MATERIAL AND PLASTIC FROM BIOMEDICAL WAASTE AS ADDITIVE"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In CIVIL ENGINEERING Submitted By:

BRINDAP MEGHANATS PARINITHA J POSHITHAAV

USN: 1SG18CV010 USN: 1SG18CV031 USN: 1SG18CV034 USN: 1SG18CV036

Under the Guidance Of: rof. NAGARJUN GOWDABS Asst. Professor



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGTRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

2021-22

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Re Bengaluru - 860 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU-560057

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work phase I entitled with "STRENGTH CHARACTERISTICS OF CLADDING MATERIAL USING CEMENT AS BASE MATERIAL AND PLASTIC FROM BIOMEDICAL WASTE AS ADDITIVE" is a bonified work carried out by team associates BRINDA P (1SG18CV010), MEGHANA T.S. (1SG18CV031), PARINITHA J. (1SG18CV034), POSHITHA A.V. G18CV036), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report hasbeen approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Prof. NAGARJUN GOWDA BS

Asst. professor Department of Civil Engineering S.C.E, Bengaluru

Principal

Sapthagiri College of Engineering Department of Civil Engineering 14/5, Chikkasandra, Hesaraghatta Main Rose Bengaluru - 560 057

Dr. RAJESHWARIR

HOD

S.C.E, Bengaluru



A PROJECT WORK REPORT ON SMART VILLAGE

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING In CIVIL ENGINEERING

Submitted By

HARSHITHA R KAVYA SHREE S SHWETHA R SOWMYA K V USN:1SG18CV023 USN:1SG18CV025 USN:1SG18CV050 USN:1SG18CV053

UNDER THE GUIDANCE OF

Dr. RAJESHWARI R

HEAD OF DEPARTMENT

DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkasandra, Hesaraghatta Main Road, BENGALURU560057.

2021-22

Sapthagiri College of Engineerind 14/5, Chikkasendra, Hesaraghatta Main R-Bengaluru - 5000



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU -560057

(Affiliated to VTU, Belagavi & approved by AICTE, New Delhi)
(Accredited by NAAC with 'A' Grade &ISO 9001:2015 and 1400: certified institute #14/5, Chikkasandra, Hesaraghatta main road, banglore-560057)

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is to certify that the Project work entitled with "SMART VILLAGE: A CASE STUDY OF GUNGURUMALE VILLAGE" is a bonafide work carried out by team associates HARSHITHA R(1SG18CV023), KAVYA SHREE S(1SG18CV025), SHWETHA R(1SG18CV050), SOWMYA KV(1SG18CV053), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering degree 7th and 8th semesters.

£ 25/07/2

Signature of the Guide Dr. RAJESHWARI R HOD

Department of Civil Engineering SCE, Bengaluru

Name of the examiner

B 25/07/22

Signature of the HOD Dr. RAJESHWARI R HOD.

Department of Civil Engineering SCF, Bengaluru

Signature of the Principal Dr. H Ramakrishna

Principal
Sapthagiri College of Engineering
Principal

Signature of the examiner with dates Rose

Sapthagiri College of Engineering.....

2..... Bengaluru - 560 057 2.....



PROJECT REPORT ON

"PARTIAL REPLACEMENT OF GGBS AND FLY ASH IN CEMENT"

Submitted in partial fulfilment for the award of the degree of

BACHELOR OF ENGINEERING

In

CIVIL ENGINEERING

Submitted By

RASOOL A
MANJUNATH GOWDA H
SHREEJITH S

USN: 1SG16CV063

USN: 1SG18CV408

USN: 1SG17CV044

UNDER THE GUIDANCE OF
Mr. PRAMOD K R
ASSISTANT PROFESSOR
DEPARTMENT OF CIVIL



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affillated to VFU, Belagavi & approved by AICTE, New delhi)

(Accredited by NAAC with 'A'Grade & ISO 9001:2015 & 1400:2015 Certified Institute)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore-560057.

2021-22

Sapthagiri College of Engineering 14/5, Chikkasandra, Hasaraghatta Main Road Bengaluru - 560 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi)

(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work phase I entitled with "PARTIAL REPLACEMENT OF GGBS & FLY ASH IN CEMENT" is a bonafide work carried out by team associates RASOOL A (ISG16CV063), MANJUNATH GOWDA H (ISG18CV408), SHREEJITH S (ISG17CV044) in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections/suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Prof. PRANODKR

Asst. professor

Department of Civil Engineering S.C.E, Bengaluru

Department of Civil Engineering S.C.E., Bengaluru

Principal S.C.E, Bengaluru

Name of the examiner

Kayahwar

Signature of the examiner with date.

apthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main I Bengaluru - 560 057



PROJECT WORK REPORT 2

APPLICATION ON SOLID WASTE MANAGEMENT IN KANIVENAHALLI, PAVAGADA TALUK, TUMKUR DISTRICT.

Submitted in partial fulfilment for the award of the degree of BACHELOR OF ENGINEERING

In CIVIL ENGINEERING

Submitted By

J. SURAJ NAIRA .N TEJAS G.V ANKITH KUMAR .B

USN: 1SG17CV021 USN: 1SG17CV047 USN: 1SG17CV049 USN: 1SG18CV401

UNDER THE GUIDANCE OF DR. RAJESHWARIR

HEAD OF THE DEPARTMENT

SAPTHAGIRE

DEPARTMENT OF CIVIL ENGINEERING

14/5, Chikkasandra, Hesaraghatta
Main Road, Bengaluru 560057

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU 560057 DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI

CERTIFICATE

Certified that the project work phase II entitled with "APPICATION OF SOLID WASTE MANAGEMENT IN KANIVENAHALLI, PAVAGADA TALUK, TUMKURU DIST, and KARNATAKA, INDIA" carried out by, J SURAJ(1SG17CV021), NAIRA N(18G17CV047), TEJAS GV(18G17CV049), ANKITH KUMAR B(18G18CV401), a bonafide student of civil engineering in partial fulfilment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.

Signature of the Guide

Signature of the HOD

Signature of Principal

Dr Rajeshwari R

Dr Rajeshwari R

Dr. H Ramakrishna

Signature of the examiner

External Examiners

1. Dr. Rojuhwai 2

2. BHAVYA CH

1 2 30/07/2

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Roa-Bengaluru - 560 057

2 Bhauya 30/7/202



A PROJECT REPORT ON

"RETROFITTING OF COLUMN BY RC JACKETING"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In
CIVIL ENGINEERING
Submitted By:

DHRUVA KUMAR. D L AKSHATH GOWDA. N K ABHISHEK. R YASHWANTH. T P USN:1SG18CV014 USN:1SG18CV006 USN:1SG18CV004 USN:1SG18CV066

Under the Guidance of PRAMOD K R Asst. Professor



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi& Approved by AICTÉ, New Delhi)
(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057

2021-22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi)

(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057

DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI

CERTIFICATE

It is Certified that the project work phase I entitled with "RETROFITTING OF COLUMN BY RC JACKETING" is a bonafide work carried out by team associates DHRUVA KUMAR DL (ISG18CV014). AKSHATH GOWDANK (ISG18CV006), ABHISHEK R (ISG18CV004), YASHWANTH T P (ISG18CV066), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Prof. PICTIOD K R

Asst. professor
Department of Civil Engineering
S.C.E, Bengaluru

Dr. RAJESHWARIR

Department of Civil Engineering S.C.E. Bengaluru Dr. H RAMAKRISHNA

Principal

S.C.E. Bengaluru

Name of the examiner

. Pallani G. A.

Principal

Signature of the examiner with date.

1. Po aw G.A. 29 722

Sapthagiri College of Engine 14/5, Chikkasandra, Hesaraghatta



A

PROJECT REPORT ON "TRANSLUCENT CONCRETE"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING In CIVIL ENGINEERING

Submitted By

ISHAQUE AHMED K M KHALID MAQSOOD MIR SANJAY SHARMA S VINAY R

USN: 1SG18CV024 USN: 1SG18CV026 USN: 1SG18CV047 USN: 1SG18CV062

UNDER THE GUIDANCE OF
Ms. KAVYA H P

Asst. Professor



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute)

14/5, Chikkasandra, Hesaraghatta Main road

2021-22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Mata Response



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with "TRANSLUCENT CONCRETE" is a bonafide work carried out by team associates KHALID MAQSOOD MIR (ISG18CV026), ISHAQUE AHMED K M (ISG18CV024), VINAY R (ISG18CV062), SANJAY SHARMA S (ISG18CV047) in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2020-2021. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and8th semesters.

Asst. professor

Department of Civil Engineering S.C.E, Bengaluru.

Dr. RAJESHWARI

H.O.D

Department of Civil Engineering S.C.E, Bengaluru.

Name of the Examiner

1. Pallani G.A

Signature of the Examiner with

R 29/07/22

2 Dr. Rajeshwasi R Sapthagiri College of Engineering 14/5, Chikkasandra, Hesarach



PROJECT REPORT

ON

ANALYSIS AND DESIGN OF MULTISTOREY BUILDING USING ETABS"

Submitted in partial fulfilment for the award of the degree of BACHELOR OF ENGINEERING

In CIVIL ENGINEERING

Submitted By

ABHISHEK, G A ABHISHEK, M Y PRAJWAL, S RAHUL, H J

USN: 1SG18CV001 USN: 1SG18CV002 USN: 1SG18CV038 USN: 1SG18CV042

UNDER THE GUIDANCE OF Prof. PRAMOD K R

Asst. Professor



DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI COLLEGE OF ENGINEERING ?

14/5, Chikkasandra, Hesaraghatta Main Road, BENGALURU 560057.

2021-22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Ma**
Bengeluru - 560 61.



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi)

(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work phase 2 entitled with "ANALYSIS AND DESIGN OF MULTISTOREY BUILDING USING ETABS" is a bonafide work carried out by team associate ABHISHEK G A (ISG18CV001), ABHISHEK M V (ISG18CV002), PRAJWAL S (ISG18CV038), RAHUL H J (ISG18CV042) in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Prof. PRAMOD K R

Asst professor Department of Civil Engineering

S.C.E, Bengaluru

Dr. RAJESHWARI R H.O.D

Department of Civil Engineering ODSCE, Bengaluru

S.C.E. Bangalor

Dr. H RAMAKRISHNA

Principal,

S.C.E, Bengaluru

Name of the examiner

Signature of the examiner with date.

1 Pallani G. A 2 Dr. Rejushwai Z

Sapthagiri College of Principal 14/5, Chikkasandra, Hi

Beno

VISVESVARAYATECHNOLOGICALUNIVERSITY JNANA SANGAM, BELGAVI-590018,KARNATAKA



PROJECT REPORT ON

"AN EXPERIMENTAL INVESTIGATION ON DURABILITY OF CONCRETE PRODUCED BY REPLACING NATURAL SAND WITH MANUFACTURED SAND"

Submitted in Partial Fulfillment of the Requirement of the degree

Bach in all Englishing

CIVIL ENGINEERING

SUBMITTED BY:

ANANYA S	1SG18CV007
GANAVIN	1SG18CV017
REKHA M	1SG18CV044
SINDHU H S	1SG18CV052

Under the Guidance of:

Dr. RAJESHWARI R

HEAD OF THE DEPARTMENT.
DEPT. OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING #14/5, Chikkasandra, Hesaraghatta Main Road, BENGALURU - 560057.

2021-22

3

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Heseraghatta Main Road
Bengaluru - 560 057

SAPTHAGIRICOL GEOFENGINEERING #14/5, Chikkasandra, Hesaragbatta Main Road, BENGALURU- 560057.

DEPARTMENT OF CIVIL ENGINEERING



is to certify that the Project work entitled "AN EXPERIMENTAL INVESTIGATION ON DURABILITY OF CONCRETE PRODUCED REPLACING NATURAL SAND WITH MANUFACTURED SAND" is a bonafide work carried out by ANANYA S (1SG18CV007), GANAVI N (1SG18CV017), REKHA M (1SG18CV007), SINDHU H S (1SG18CV052), in partial fulfilment of the Academic requirement in Eighth Semester "Bachelor of Engineering in Civil Engineering" from Visvesvaraya Technological University, Belagavi, in the academic year 2021-22. All corrections/suggestion indicated for Internal Assessment have been incorporated in this report. The seminar report has been approved as it satisfies the academic requirements for the Bachelor of Engineering Degree in CIVIL Engineering.

De 28/1/12
Signature of the Guide
Dr. RAJESHWARI R

Professor

28/07/22

Signature of the HOD

Signature of the Principal

HODE RAJESHWARIR agg.

Dr. H RAMAKRISHNA

Head of the Department

apthagiri Converpet Engineering Chikks@E'Bangaloragbatta Road Bangalora-560057

Name of the Examiner

Signature of the Examiner with date

1. Pallani G.A.

1. Prania A

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghette Med Bengaluru - 560 A

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



A PROJECT REPORT ON

"EXPERIMENTAL STUDY OF DENSE BITUMINOUS MACADAM USING CRUMB RUBBER"

Submitted in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING In CIVIL ENGINEERING Submitted By:

RAVIKUMAR SUNIL YADAV TEJAS N TEJAS S RAM USN:1SG18CV043 USN: 1SG18CV054 USN: 1SG18CV056 USN:1SG18CV057

Under the Guidance Of: Prof. PALLAVI G A Asst. Professor



DEPARTMENT OF CIVIL ENGINEERING SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi)
(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute)
#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057

2021-22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghetta Main Ro
Bengaluru - 560 057

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with "EXPERIMENTAL STUDY OF DENSE BITUMINOUS MACADAM USING CRUMB RUBBER" is a bonafide work carried out by team associate RAVIKUMAR (ISG18CV043), SUNIL YADAV (ISG18CV054), TEJAS N (ISG18CV056), TEJAS S RAM (ISG18CV057) in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

Asst. professor

Department of Civil Engineering S.C.E. Bengaluru

29/07/22 Dr RAJESHWARI R

Dr. H.RAMAKRISHNA

Department of Civil Engineering
S.C.E. Bengaluru
Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road

Signature of the the anning with date

Rajo modi

Name of the examiner

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main P Bengaluru - 56



(Affiliated to VTU, Belagavi & Approved by AICTE, New Delhi)

SAPTHAGIRI (Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400:2015 Certified Institute)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057

#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore – 560057

	AY-2021-22		INTERNSHIP WORK (18 CVI 84)	
SI	Name of the Students	USN	Title of the Project	
1		1SG18CV016		
2		1SG18CV023		
3	KAVYA SHREE S	1SG18CV025		
4	POOJA S	1SG18CV035		
5	PRAGATHI R	1SG18CV037	Widening ofroad	
6	SHWETHA R	1SG18CV050		
7	NAIRA N	1SG17CV047		
8	TEJAS G V	1SG17CV049		
9	ANKITH KUMAR	1SG18CV401		
10	ANKITH K C	1SG18CV008		
11	BHARATH P	1SG18CV009	Production of Prestress Sleepers	
12	ABHISHEK M V	1SG18CV002	Production of President Glospers	
13	MADHUSUDHAN B S	1SG18CV029		
14	ANANYA S	1SG18CV007		
15	GANAVI N	1SG18CV017	Shobha Rajvilas-Residential and Commertial Building	
16	REKHA M	1SG18CV044	SHODHA INAJVIIAS-INESIGERIIAI ARG COMMINISTRAL BURIARING	
17	SINDHU H S	1SG18CV052		
18	MEGHANA T S	1SG18CV031	Residential and Commertial Building	
19	PARINITHA J	1SG18CV034	Residential and Commental Building	
20	BRINDA P	1SG18CV010		
21	GEETHA N	1SG18CV019		
22	POSHITHA A V	1SG18CV036		
23	PRIYADARSHINI P	1SG18CV039	Multi level car storage parking	
24	TEHESHWINI S D	1SG18CV058		
25	CHANDANA M	1SG18CV011		
26	SINDHU C	1SG18CV051		
27	ABHISHEK R	1SG18CV004		
28	AKSHATH GOWDA N K	1SG18CV006	Construction of Multi storey buliding	
29	DHRUVA KUMAR D L	1SG18CV014		
30	SANJAY SHARMA S	1SG18CV047	Public work department- Road design and traffic census	
31	VINAY R	1SG18CV062	Fubile Work department. Road design and dame series	
32	ABHISHEK G A	1SG18CV001		
33	PRAJWAL S	1SG18CV038	Contilever Planning and 3D modelling	
34	RAVIKUMAR	1SG18CV043	Outline for Flamming and out moderning	
35	TEJAS N	1SG18CV056		
36	RAHUL H J	1SG18CV042		
37	VIVEK VIDYADHAR HEGDE		Residential building -Abhaya Builders	
38	YASHWANTH T P	1SG18CV066		
39	SUSHMA M	1SG18CV055	Banglore Nirmithi kendra	
40	THUNGA B K	1SG18CV059		
41	RASOOL A	1SG16CV063		
42	MANJUNATH GOWDA H	1SG18CV408	Residential Building	
43	SHREEJITH S	1SG17CV044		
44		1SG18CV060	Site Operation at BSN Complex near Laggere	
45		1SG18CV065		
46		1SG18CV005		
47	SANJEEV KISHORE P	1SG19CV406	Residential Building	
48	SINDHUNATH D T	1SG19CV407	19	

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

49	SRINIVASA T L	1SG19CV408			
50	KIRAN H D	1SG18CV027			
51	SUNIL YADAV D S	1SG18CV054			
52	PRAJWAL S GOWDA	1SG18CV067	Residential Building		
53	DILIP K S	1SG18CV015			
54	RENUPRASAD T	1SG18CV045			
55	NAVEEN GOWDA K R	1SG18CV032			
56	PUSHPALATHA H R	1SG18CV041			
57	CHANDANA KUMARI S	1SG19CV400	Residential Building		
58	CHETHAN GOWDA D	1SG19CV401	1 tooluonna. Danamig		
59	POOJA S	1SG19CV405			
60	GURUCHARANA REDDY P S	1SG18CV021	Ready Mix Concrete paint and Site visiting		
61	HANUMANTHARAJA S C	1SG18CV022	Troady min donoroto paint and one troang		
62	DHANUSH K L	1SG19CV402	Site Operation in Residential Building		
63	HARISH S R	1SG19CV403	Cito oporation in regularitian panamy		
64	SURAJ	1SG17CV021	Residential Building		
65	LINGRAJ	1SG17CV027			
66	ABHISHEK MOHAN	1SG18CV003			
67	DARSHAN N	1SG18CV013	Execution of Receiving Sub station		
68	ISHAQUE AHMED K M	1SG18CV024			
69	KHALID MAQSOOD MIR	1SG18CV026			
70	PRUTHVI RAJ S	1SG18CV040			
71	TEJAS S RAM	1SG18CV057	Exposure on Residential Building Construction		
72	VAISHNAVI S YADAV	1SG18CV061			
73	YASHAS M	1SG18CV064	Study on Residential Building		
74	SOWMYA K V	1SG18CV053	Colliers Ltd		

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

Dept. of Civil Engg.
S.C.E, Bangalore-560 057.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU 560057 DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is certified that the Internship work entitled with "WIDENING OF ROADS" is a bonafied work carried out by DIVYA K (ISG18CV016), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections suggestion indicated for Internal Assessment have been incorporated in the report. The internship report has been approved as it satisfies the academic requirements in respect of academic internship prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

de norter

Dr. RAJESHWARI R HOD

Department of Civil Engineering
S.C.F. Bengalury IVII Engo

S.C.E. Bangalore-5 (195)

Dr. H RAMAKRISHNA PRINCIPAL

Sapthagiri College of Engineering

Sapthaoi Bengaluru

hikkasandra, Hasaran 1994 Main R. Rangahiro - 1997

Name of the examiner

1. PRIYANKA A

2. BHAVYA CH

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hessraghatta Main Road
Bengaluru - 560 057

Signature with date

Bhalup 29/1/2

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057 DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIBI

CERTIFICATE

It is Certified that the Internship work entitled with "WIDENING OF ROADS" is a Bonafide work carried out by HARSHITHA R (ISG18CV023), POOJA S (ISG18CV035). PRAGATHER (ISG18CV037), SHWETHAR (ISG18CV050) in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvanaya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed fithe Bachelor of Engineering Degree 7th and 8th semesters.

Dr. RAJESHWARI R

Signature of HOD S.C.E, Bangalore-Sed 05/ Dr. H RAMAKRISHNA

Signature of Principal Principal

Sapthagiri College of Engineming Chikkasandra, Hesaraghatta Road, Bangalore-560 057

Examiner

1. Sentuels. R. 2. Shobha. Y.N

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Male

Bengaluru - 56

Signature with date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING

BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the Internship work entitled with "WIDENING OF ROADS" is a Bonafide work carried out by KAVYA SHREF S (ISG18CV025), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

B 25/07/21

Dr. RAJESHWARI R

HOD

Department of Civil Engineering SCE, BENGALURU

West, Buildalate-skings

HOO, Dent. of Civil Engg.

Examiner

Name of the examiner

1. Senthershi R.

2. ShobhayN

13

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

Dr. H RAMAKRISHNA

PRINCIPAL

SCE, BENGALURU Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road Bangalora- 560 057

Signature with date

CN 78/7/92

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU – 560057 DEPARTMENT OF CIVIL ENGINEERING

SAPTHAGIRI

CERTIFICATE

It is Certified that the Internship work entitled with "WIDENING OF ROADS" is a Bonafide work carried out by NAIRA N (ISG17(V047), TEJAS G V (ISG17CV049), ANKITH KUMAR B (ISG18CV401), in partial fulfillment of therequirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project reporthas been approved as it satisfies the academic requirements in respect of academic project prescribed frihe Bachelor of Engineering Degree 7th and 8th semesters.

26/07/22

Dr. RAJESHWARI R

Signature of HOD

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Mam Road
Bengaluru - 560 057

Examiner
Name of the examiner

1. PRITANKA A

2. BHAVYA CH

Dr. H RAMAKRISHNA

Signature of Principal

Signature with date

Bhalya 20/7/2

(Affiliated to VTI, Belagavice Approved by AIC 11, See 15.) (Accredited by NAAC with 'A' Grade) & ISO 9001 2015 and 1400 2015 (embed Institute) #14/5. Chikkasandra Hesaraghatta Main Road, Bangasore -



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled "Sri Maruthi builders- Railway sleepers production plant" carried out by ABHISHEK MV (18G18CV002), ANKITH KC (1SG18CV008), BHARATH P (1SG18CV009), MADHUSUDAN BS (1SG18CV029) (Ubonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internshipreport has been approved as it satisfies the academic requirements in respect of Internshipwork prescribed for the said Degree.

20/07/22 Dr. Rajeshwari R

Dr. H Ramakrishna

Signature of the HOD

Signature of the Principal

Sapthagin College it Engineering 14/5, Chikkasandra, Fiesum in the Main Road Bengaluru - 510 017

Name of the Examiner

, PRIYANKA A

2 BHAVYA CH

Signature of the Examiner with date

1 - Print 29/7/22 2 Bharrys 29/7/22

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main P

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, "JNANA SANGAMA", BELGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU -560057 DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the Internship work entitled with "SOBHA RAJVILAS" is a Bonafide work carried out by ANANYA S (1SG18CV007), GANAVI N (1SG18CV017), REKHA M (1SG18CV044), SINDHU H S (1SG18CV052), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. All corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

28/07/22 Dr. RAJESHWARI R

Dr. H RAMAKRISHNA Principal

Sapthagiri College of Engineering Chikk Saphattires of Philicipal

Signature of HOD

Name of the Examines

1. Sunty. R.

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

Examiner with date

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the Internship report entitled with "RESIDENTIAL AND COMMERCIAL BUILDING" is a bonafied work carried out by MEGHANA T S (1SG18CV031), PARINITHA J (1SG18CV034) in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The Internship report has been approved as it satisfies the academic requirements in respect of academic Internship prescribedfor the Bachelor of Engineering Degree in Civil engineering

Prof. NAGARJUN GOWDA B S

Asst. professor
Department of Civil Engineering
S.C.E, Bengaluru.

2 25/07/22

Dr. RAJESHWARI.R
Professor and H.O.D
Department of Civil Engineering
S.C.E, Bengaluru

Name of the Examiner	Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru, see all Road	date
1. Temthoshi K.	Bengaluru - 560 057	
2. Shobha Y'N	2 Shx 98/7/82	

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru 560057 (Affiliated to Visvesvaraya Technological University, Belgavi, Karnataka DEPARTMENT OF CIVIL ENGINEERING



This is to certify that BRINDA P(ISG18CV010), GEETHA N(ISG18CV019), POSHITHA AV(ISG18CV036), PRIYADARSHINI P(ISG18CV039), TEJESWINI SD(IISG18CV058), is a bonified student of Sapthagiri College of Engineering has satisfactorily presented a Internship entitled on "MULTI-LEVEL CAR STORAGE PARKING" in partial fulfilment of the requirements as prescribed by Visvesvaraya Technological University, Belagavi, for the award of Bachelor Degree in Civil Engineering during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

De 25/07/22

Signature of the HOD

Dr. RAJESHWARI

Department of Civil Engineering

Signature of the Principal

Dr. H RAMAKRISHNA

Sapthagiri College of Engineering

Sapthagiri College of Engineering 14/5, Onkkasandra, Hastrech ita Main Poud Bengaliru (280,107

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

(Affiliated to VTU, Belagavi, Approved by Ait 11, New Delhi)
18O 9001:2015 & ISO 14001 2015 Certified Institute Accredited By NAAC with "A" Grade
14.5. Chikkasandra Hesaraghana Main Road
Bengaling-56007



Department of Civil Engineering

Certificate

Certified that the Internship Work entitled "CONSTRUCTION OF RESIDENTIAL BUILDING" carried out by CHANDANA M (ISG18CV011), SINDHU C (ISG18CV051) bonafide students of Sapthageri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University Belagavi during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the Department Library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship Report prescribed for the said degree.

Signature of the Guide

Prof. Akshay J Department of Civil Engineering Signature of the Principal

Dr. H Ramkrishna Principal

Sapthagiri College of Engineering

Signature of the HOD

Dr. Rajeshwari R Head of the Department Dept. of Civil Engineering

Name of the Examiner

PRIYANKA . A

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 550 007

2 Chaup 29/1/2

Signature of the Examiner with date

111

2. BHAVYA CH

(Affiliated to VIII, Releases, Suprementally vir to the same to be

(Accredited by NAAC with 'A' ()rade) & ISO 9001:2015 and 1400:2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore 560057



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled FINAL INTERNSHIP REPORT carried out by AKSHATH GOWDA N.K (1SG18CV006), DHRUVA KUMAR D.L ABHISHEK. R (1SG18CV004), bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internshipreport has been approved as it satisfies the academic requirements in respect of Internshipwork prescribed for the said Degree.

Z 26/07/n

Signature of the HOD

Dr. Rajeshwari R

Signature of the Principal
Dr. H Ramakrishna

Name of the Examiner

1. Santhesh 17

2 ShobhayN

Signature of the Examiner with date

08 11

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hasaraghatta Main Ross
Bangaluru - 560 057

(Accredited by NAAC with 'A' Grade) & ISO 9001:2015 and 1400 2015 Certified Institute) #14/5, Chikkasandra, Hesaraghatta Main Road, Bangaiore 550057



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled "PUBLIC WORK DEPARTMENT ROAD DESIGN AND TRAFFIC CENSUS" carried out by VINAY R (1SG18CV062), SANJAY SHARMA S (1SG18CV047) bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

25/17/22

Dr. Rajeshwari R

Signature of the HOD

Dr. H Ramakrishna

Principal

SaptSignature of the Principalering

Name of the Examiner

1. SunthashiR.

Signature of the Examiner with date

2 SLY 98 Jag Principal Sapthagirl College of 14/5, Chikkasandra, Hesaragira Sapthagiru - 560

Engineering Bengaluru - 56

DEPARTMENT OF CIVIL ENGINEERING SAPTHAGIRI COLLEGE OF ENGINEERING

(Accredited by NAAC with A Cirally & ISO 5001 2015 and 1400:2015 Certified Institute)
#14/5, Chikkasandra, Hesaraphotta Man Road, Banyalore 560087

Collaga of connecting

Department of Civil Engineering

CERTIFICATE

OF COMMERCIAL BUILDING carried out by ABHISHEK G A (ISG18CV001), PRAJWAL S (ISG18CV038), RAVIKUMAR (ISG18CV043), TEJAS N (ISG18CV056) bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru inpartial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been in corporate in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

B 26/07/12

Dr. Rajeshwari R

Dr. H Ramakrishna

Signature of the HQD

Signature of the Principal

Name of the Examiner

1. Senthah. R.

Shobha Y. N

Signature of the Examiner with date

2 CDV-28/7/22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main R.,
Bengaluru - 560 057

(Accredited by NAAC with A Citable 1) #14.5. Clinkkas indra. Hes in the State Result Harvalores, well to



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled "Residential building"at Abhaya Builders carried out by RAHUL HJ (1SG18CV042), VIVEK H HEGDE (1SG18CV063), YASHWANTH TP (ISG18CV066) (bonafide) student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internshipreport has been approved as it satisfies the academic requirements in respect of Internshipwork prescribed for the said Degree.

B 26	107	122
	141	

Dr. Rajeshwari R

Dr. H Ramakrishna

Signature of the Principal

Signature of the HOD

Sapthagiri College of Engineering

Name of the Examiner

Signature of the Examiner with date

1 September 28/7/22

1 Santhesh R

2 CLN 98/7/22

2. Shobba YN

SAPTHAGIRI COLLEGE OF ENGINEERING 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled BANGALORE NIRMITHI KENDRA[URBAN] carried out by SISHMA M (ISG18CV055) bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the ear 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been heorporated in the Report deposited in the departmental library. The Internship report has been approved sit satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

Prof.Nagarjun gowda B S

Dr. Rajeshwari R

Signature of the Guide Signature of the HOD

Dr. H Ramakrishna

Sapthagiri College Principal anng Chikkasandra, Hesaraghatra Boad, Bangalore-560 057

Name of the Examiner

1. Sernthosty R

2. Shobba Y-N

Signature of the Examiner with date

1. 22

2. Shot 28/7/22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Mahi Road
Bengaluru - 560 057

14 S, Chikkasandra, Hesarachitta Main Road, Bengaluru, 560057 (Affiliated to Visvesynraya Technological University Belgavi, Karnataka DEPAREMENT OF CIVIL ENGINEERING



This is to certify that THUNGA B K(1SG18CV059), is abonified student of Sapthagiri College of Engineering has satisfactorily presented a Internshipentifled on "CONSTRUCTION OF COMMERICAL BUILDING" in partial fulfilment of the requirements as prescribed by Visvesvaraya Technological University, Belagavi, for the award of Bachelor Degree in Civil Engineering during the academic year 2021-2022. It is certified that all corrections suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

2 29/07/22

Signature of the HOD Dr. RAJESHWARI

Department of Civil Engineering

Zines 2

Signature of the Principal Dr. HRAMAKRISHNA

Sapthagiri College of Engineering

Sanths on Consequent Saline 2013

PRIYANKA. A BHAVYA CH

A Priving 29/7/22 Ehauga 29/7/22

Principal Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Habra

SAPTHAGIRI COLLEGE OF ENGINEERING 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY BELAGAVII]



Department of Civil Engineering

CERTIFICATE

MANJUNATH GOWDA H (ISG18CV408), SHREEJITH S (ISG17CV044), RASOOL A (ISG16CV063) bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internshipreport has been approved as it satisfies the academic requirements in respect of Internshipwork prescribed for the said Degree.

B 26/07/22

Dr. Rajeshwari R

Dr. H Ramakrishna

Signature of the HOD

Signature of the Principal

Name of the Examiner

PRIMANKA. A

2 BHAVYA CH

Signature of the Examiner with date

1 A Print 28/1/22

Branya 28/7/22

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Reset
Bengaluru - 560 057

SAPTHAGIRI CONTRACTOR

Affiliated to VIII. Recognized to VIIII. Recognized to VIII. Recogni



Certificate

Certified that the internship work entitled Six Operators BSS Complex next taggered carried out by TILAK H S (ISGISCV060) and SACHIN K C (ISGISCV065) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Civil Engineering of Visvesvarava Technological University, Belagavi during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship (ISCV185) prescribed for the said degree.

Shothary N 25/7/22

Signature of the Guide Prof. Shobha Y N Assistant Professor 1 Pr 25/07/12

Signature of the HOD Dr. Rajeshwari R Associate Prof. and Head Kama 2

Signature of the Principal Dr. H. Ramakrashna

Sapthagiri Collection | Engineering | 14/5 Chakkasandra Havaranhatta Marin 134 | Rengalum - 500 017

EXTERNAL EXAMINATION

Name of the Examiner

BHAVYA CH

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Rose
Bengaluru - 560 057

Stananure with Date

ya 29/7/22

Affiliated to VIII Helagavi, Approved by AICII, NEW DEL HIAccredited by NAAC with A grade (ISO 9001-2015 & ISO (4001-2015 Certified Institute) 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaloru - 560057.



Certificate

Certified that the internship work entitled Construction of Residential Building carried out by

and

bonafide student of

fulfillment for the award of Bachelor of Engineering degree in a tvit Engineering of Visvesvarava Technological University, Belagavi during the academic year 2021-

2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship (180 \ 185) prescribed for the said degree.

Signature of the Guide Prof. Bhavya C H Assistant Professor

Signature of the HOD Dr. Rajeshwari R Associate Prof. and Head

Signature of the Principal Dr. H. Ramakrishna Principal Pal

Sapthagiri College of Engineering

Chikkasandra, Hesaraghatta Road

Bangalore-560057

PRIVANKA · A

2 BHAVYA CH

Sapthagiri College of Engineering Bhaup 14/5, Chikkasandra, Hesaraghatta Main Rox Bengaluru - 569 057

Affiliated to VTU Belagavi, Approved by AICTE, NEW DELHI Accredited by NAAC with 'A' grade (ISO 9001-2015 & ISO14001-2015 Certified Institute) 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057. Department of Civil Engineering



CERTIFICATE

Certified that the Internship work entitled "CONSTRUCTION OF RESIDENTIAL BUILDING " carried out by bonafide students of 8th semester, DILIP K S (1SG18CV015), KIRAN H D(18G18CV027),NAVEEN GOWDA R(1SG18CV032),RENUKA PRASAD T(1SG18CV045),SUNIL YADAV S(1SG18CV054),PRAJWAL S GOWDA(1SG18CV067).Department of Civil Engineering carried out at college Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor Of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Final Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

26/07/26

Signature of the Guide Dr. Rajeshwari R Associate Prof and Head

Signature of the HOD Dr. Rajeshwari R Associate Prof. and Head

Signature of the Principal Dr. H. Ramakrishna Principal

EXTERNAL EXAMINATION:

2

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Ro Bengaluru - 560 057



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled STUDY ON RESIDENTIAL BUILDING carried out by CHANDANA KUMARI S (ISG19CV400), CHETHAN GOWDA D(ISG19CV401),POOJA S(ISG19CV405),PUSHPALATHA H R(ISG18CV041) bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internshipreport has been approved as it satisfies the academic requirements in respect of Internshipwork prescribed for the said Degree.

Signature of the Guide

NAGARJUN GOWDA BS

ASST PROF Department of Civil Engineering SCE, Benguluru Signature of the Hod

Dr. RAJESHWARI R

HOD

Department of Civil Engineering SCE, Benguluru

Signature of the Principle

Dr. H. RAMAKRISHNA

PRINCIPAL Sapthagiri pulpage of Engineering

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road

Bangalore-560 057

Name of the Examiner

Signature of the Examiner with date

2

Shotstol22

Sapthagirl College of Engineering

14/5, Chikkasandra, Hesaraghatta Main 9 - Bengaluru - 560 057

Affiliated to VTU Belagavi, Approved by AICTE, NEW DELHI
Accredited by NAAC with 'A' grade
(ISO 9001-2015 & ISO14001-2015 Certified Institute)

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru - 560057.
Department of Civil Engineering



Certificate

Certified that the internship work entitled "RMC PLANT AND SITE VISITING" carried out by GURUCHARANA REDDY P.S. FELISCOLD HAND MANIHARALAS (
[ISC 180 V022] bonafide student of Sapphagiri College of Engineering, in partial fulfillment for the award of Bachelot of Engineering degree in Computer Science and Engineering of Visvesvacaya Technological University. Nelagavi during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship Work (18CV185) prescribed for the said degree.

Signature of the Guide
Mrs. Mamatha

Signature of the HOD Dr. Rajeshwari R Professor & HOD

EXTERNAL EXAMINATION:

Name of the Examiners

Signature with Date

Blange 29/7/200

2 BHAVYA CH

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Rep.
Bengaluru - 560 057

Affiliated to VIU Belagavi, Approved by AICIF, NEW DEL HIAccredited by NAAC with A grade (ISO 9001-2015 & ISO14001-2015 Certified Institute)

14/5, Chikkasandra, Hesaraghatta Main Road, Bengahiru 560057

Department of Civil Engineering



Certificate

Certified that the internship work entitled "Construction to Replace Bolinians carried out by DHANESH K L (ISG19C v 402) and HARISH'S R (ISG19C v 401) bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of Bachelor of Engineering degree in Civil happing and province various Lechnological University, Belagavi during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship (18C VISS) prescribed for the said degree.

Sh 50 7 1/22

Signature of the Guide Prof. Shobha Y N Assistant Professor E-25/07/22

Signature of the HOD Dr. Rajeshwari R Associate Prof. and Head Kama 12

Signature of the Principal Dr. H. Ramakrishna

Saptinagiri Pridaigud of Engineering 14/5. Chakasandra Hermanhara Han Goed Bengalum in 1971

EXTERNAL EXAMINATION.

Name of the Examiner

1. PRIYANKA. A

BHANYA CH

B

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hasaraghatta Main Road
Bengaluru - 560 057

Signature with Date

Bhauya 29/7/2022

14/5, Chikkasandra, hesaraghatta main road, bengaluru-560057

[Affiliated to visvesvaraya technological university, belagavi]

SAPTHAGINI

Department of Civil Engineering

Certificate

Certified that the internship work entitled "RESIDENTIAL BUILDING CONSTRUCTION" carried out by SURAJ.J (1SG17CV021) bonafide student of 8th semester, Department of civil engineering, Sapthagiri College of engineering, Bengaluru in partial fulfilment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, belagavi during the year 2021-2022. It is certified that all correction/suggested indicated for internal assessment have been incorporated in the report deposited in the departmental library. The internship report has been approved as it satisfies the academic requirements in respect of internship report prescribed for the said degree.

DR RAJESHWARI R

SIGNATURE OF HOD

DR H RAMAKRISHNA

SIGNATUE OF PRINICPAL

NAME OF THE EXAMINER

1 PRIYANKA. A 2 BHAVYA CH

> Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

SIGNATURE OF THE EXAMINER WITH DATE

2. Bharry 28/1/22

VISVESVARAYA TECHNOLOGICAL UNIVERSITY"JNANASANGAMA",BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING

BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the work entitled "EXECUTION OF RECEIVING SUB STATION (RSS)" is a Bonafide work carried out by DARSHAN.N (1SG18CV013) in partial fulfillment of the Academic requirement in Bachelor of Civil Engineering from Visvesvaraya Technological University, Belagavi, in the academic year 2021-22. The seminar report has been approved as it satisfies the academic requirements in respect to the Seminar work prescribed for the Bachelor of Engineering in Civil Engineering.

Karyatt

J 25/17/22 Signature of the HOD

Signature of the Principal

Signature of the Guide

Dr. Rajeshwari, R

Dr. H. Ramakrishna

Signature with Date

Assistant Professor

Prof. Kayva .H. P.

HOD

Principal

EXTERNAL LXAMINATION

Name of the Examiner

1. PRIYANKA A

2 BHAVYA CH Sapthagirl College of Engineering
14/5, Chikkasandra, Hesaraghatta Mahn Road
Bengaluru - 560 057

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU -560057

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade) & ISO 9001;2015 and 1400;2015 Certified Institute) #14 S, Chikkasandra, Hesaraghatta Mam Road, Bangalore - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the Internship work entitled with "TYPES OF WATER PROOFING" is a bonafied work carried out by team associates PRUTHVI RAJ S(18G18CV040) in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree 7th and 8th semesters.

PROFESSOR

Department of Civil Engineering S.C.E. Bengaluru

HOD Department of Civil Engineering

S.C.E. Bengaluru

Dr. H.RAMAKRISHNA

PRINCIPAL S.C.E., Bengaluru

Name of Examiner

PRIYANKA A

Signature of the Examiner with date

1) PRIYANKA A

Principal

2) BHAVYA CH Sapthagiri College of Engineering Bhatya 29/7/22

Bengalury - 560 087

Bhatya 29/7/22

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled Residential building construction carried out by Ishaque Ahmed K M(1SG18CV024), Bonafede student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru impartial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

Ze 26/07/22

Dr. Rajeshwari R

Signature of the HOD

Ms. Kavya H P

Signature of guide

Name of the Examiner

Principal

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Ros

Bengaluru - 560 057

DEPARTMENT OF CIVIL ENGINEERING SAPTHAGIRI COLLEGE OF ENGINEERING

(Affiliated to VTU, Belagavi& Approved by AICTE, New Delhi) (Accredited by NAAC with 'A' Grade & ISO 9001:2015 and 1400:2015 Certified Institute)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bangalore 560057



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled EXPOSURE ON RESIDENTIAL BUILDING CONSTRUCTION carried out by TEJAS S RAM (1SG18CV057) bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru inpartial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections/suggestions indicated for Internal Assessment have been in corporate in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

6 26/07/2

Dr. Rajeshwari RSignature of the HOD

HOD, Declar Civil on

Name of the Examiner

1. Sandhely R

, Chobha Y.N

Dr. H Ramakrishna

Principal

Sasignature of http: Portraing he swing

Chikkasandra, Hesaraghatta Road Bangalore-560 057

Signature of the Examiner with date

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Ro

Bengaluru - sen

SAPTHAGIRI COLLEGE OF ENGINEERING 14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]



Department of Civil Engineering

CERTIFICATE

Certified that the Internship work entitled "CONSTRUCTION OF RESIDENTIAL BUILDING" carried out by VAISHNAVI S YADAV(ISG18CV061) bonafide student of 8th semester, Department of Civil Engineering, Sapthagiri College of Engineering, Bengaluru in partial fulfillment of the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Belagavi during the year 2021-22. It is certified that all corrections suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

Mr.	Pra	mod	K.R		

Dr. Rajeshwari R

Dr. H Ramakrishna

Signature of the Guide

Signature of the HOD

Signature of the Principal

Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatia 1
Bengaluru - 560 02

Name of the Examiner

Signature of the Examiner with date

2 BHANYA CH

2 Bhayye 29/7/22

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELAGAVI-590018



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is certified that entitled with "INTERNSHIP REPORT" is a bonafide work carried out by SOWMYA K V (1SG18CV053), in partial fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University. Belagavi, during the year 2021-2022. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The Internship report has been approved as it satisfies the academic requirements in respect of academic Internship prescribed for the Bachelor of Engineering Degree in Civil engineering.

Dr. RAJESHWARIR

Signature of HOD HOD, Dept. of Civil English S.C.E, Bangalore 51 (195)

Name of the examiner

1. Santhosh, R.

2.

B sap

Principal
Sapthagirl College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bengaluru - 560 057

Dr. HR MARRISHNA

Signature of Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057

Name of the examiner

1, 8, 38/1/22

2.