

SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work report entitled with "DETERMINATION OF OPTIMUM BINDER CONTENT FOR DENSE GRADED BITUMINOUS MACADAM GRADE-2" is a bonafied work carried out by team associates ANJANA JAGADEESH (ISG15CV003), KARTHIK KUTTAPPA B J (ISG15CV022), SHREEJITH R (ISG15CV050), CHANDAN K (ISG16CV403) 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Mr. AKSHAY J Asst. Professor Dr. R L RAMESH
Professor and HOD

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

Examiner 1: A. d. Kalkucchi 6

Examiner 2: Sunil & C. St.

Principa

Principal

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



DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

CERTIFICATE

It is Certified that the project work report entitled with "DETERMINATION OF MARSHALL PROPERTIES OF HOT MIX ASPHALT MIXED WITH RECYCLED COARSE AGGREGATE" is a bonafied work carried out by team associates ASLAM IDRISH (ISG15CV004), KONSAM LOYANGAMBA SINGH (ISG15CV024). MAKBOOL (1SG15CV026), SACHIN KUMAR A K (1SG15CV059). 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 2018-2019. All corrections suggestion indicated for Internal Assessment have been incorporated in the report. The project work report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree in Civil Engineering.

GUIDE:

Assistant Professor

of . L. Ramerican 6

Professor and H.O.D

HOD, Dept. of Civil Engg.

Dr.K.L SHIVABASAPPA

Principal

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S.C.E, Bangalore-560 057Sapthagiri College of Engineers

Chikkasandra, Hesaragharta Ruad

Bangalore-550357

EXTERNAL EXAMINERS

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



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with *PERFORMANCE EVALUATION OF CEMENT CONCRETE SOLID BLOCK BY PARTIAL REPLACEMENT OF FINE AGGREGATES BY SAW DUST AND CHARCOAL" is a bonafied work carried out by team associates SHARATH V(1SG15CV046), SHETTY LAVARAJ RAMA(1SG15CV048), V U AISHWARYA(1SG15CV055), PALLAVI S D (ISG16CV408) 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Asst. Professor

. L. Kameeregh

Professor and HOD

HOD, Dept. of Civil Eng

S.C.E, Bangalore-560 05

Dr. K L SHIVABASAPPA

Principal

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SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with "ANALYSIS AND DESIGN OF INDOOR STADIUM WITH RAINWATER HARVESTING" is a bonafied work carried out by team associates ANIL KUMAR REDDY K (1SG15CV002), BHARATH K(1SG15CV007), SARIN BABU R H (1SG15CV045), SHIVAPRASAD H M (1SG15CV049), 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Asst. Professor

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HOD, Dept. and WPEngy

S.C.E, Bangalore-560 05

Principal Principal

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SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

"EXPERIMENTAL the project work entitled with Certified that INVESTIGATION ON CONCRETE WITH RECYCLED AGGRIGATES AS PARTIAL REPLACEMENT FOR COARSE AGGRIGATE" is a bonafied work carried GANGARAJU T out by team associates HARSHITHA V (1SG14CV015), M.S.BASAVAPRASAD (1SG16CV402), VINAYA (1SG15CV014), PATAKARE (1SG16CV413) 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Asst. Professor

HODD DROW, ROLLING MESHENGO.

S.C.Prassgaloud 1590 057

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road

Bangalore-560 057

Principal

Examiner 1: 9. 1. Rayuccely 636/19.

Chikkasandra, Hesaraghatta Road Bangalore-560 057



SAPTHAGIRI COLLEGE OF ENGINEERING DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

This is to certify that the Project work entitled with "STUDIES ON STRENGTH OF VIBRO COMPACTED GEOPOLYMER CONCRETE AND BLOCKS" carried out by team associates Ms.HAMSA.T.N (ISGISCV018), Ms.JAYALAKSHMI.B L (ISGISCV020), Mr.LINGARAJU Y.K(ISGI6CV404) were bonafide students of SAPTHAGIRI COLLEGE OF ENGINEERING BANGALORE in partial fulfilment for the award of degree "BACHELOROF ENGINEERING" in CIVIL ENGINEERING of VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belagavi during the academic year 2018-19. All corrections/suggestions indicated have been incorporated in the report. The Project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree in Civil Engineering.

Mr.Col.Vinod.M.Sasalatti
Executive Engineer
BMRCL

External Examiners

Dr.R.L. Ramesh

Dr.K.L.Shivabasappa

Professor and HOD

Principal

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Principal

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DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU- 560057

CERTIFICATE

It is Certified that the project work report entitled with "A STUDY ON PROPERTIES OF PERVIOUS CONCRETE PAVEMENT FOR ITS USE IN LESS IMPORTANCE ROADS" is a bonafide work carried out by team associates HARSHITH R (ISG15CV014), MOHANRAJ A (ISG15CV033), ABHISHEK D N (ISG16CV400), RAKSHITH A (ISG16CV409), 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 2018-2019. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project report phase 2 has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree in Civil Engineering.

Mrs. PALLAVI G A

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

Dr.R.L.RAMESH

Professor and HOD

Department of civil engineering

Dr. K.L SHIVABASAPPA

Principal

S.C.E. Bengaluru.

Name of the examiners Signature with date S.C.E. Bangalore-560 Chikkasandra, Hesaraghalta Road

Bangalore-560 057

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road, Bangalore, 560,057

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14/8/19



DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU- 560057

CERTIFICATE

It is Certified that the Project Work entitled with "EXPERIMENTAL STUDY ON PARTIAL REPLACEMENT OF CEMENT WITH GGBS AND ZEOLITE TO PRODUCE AN ECOFRIENDLY CONCRETE" is a bonafide work carried out by team associates B E PAVAN KUMAR (1SG15CV005), SUSHMITHA A (1SG15CV053), RAMESH KOTIHAL (1SG16CV410), SUSHMITHA D N (1SG16CV412), 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 2018-2019. All corrections / suggestion indicated for Internal Assessment have been corporated 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 in Civil Engineering.

GUIDE:

Mr. PRAMOD K R
Assistant Professor

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Dr. K.L SHIVABASAPPA

Principal Principal

Sapthagiri College of Engineering

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DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OENGINEERING BENGALURU - 560057

CERTIFICATE

It is Certified that the project workreport entitled with "ANALYSIS AND DESIGN OF G+3 RESIDENTIAL BUILDING USING STAAD PRO" is a bonafied work carried out by team associates KANOJ S V (1SG15CV021), PREM FERNANDES(1SG15CV038), MEGHANA A H (1SG65CV406), YAMINI J(1SG16CV414), 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 2018-2019. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project work report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree in Civil Engineering.

GUIDE:

Assistant Professor

Dr. R.L. RAMESH

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Professor and H.O.D

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Dr.K.L SHIVABASAPPA

Principal

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EXTERNAL EXAMINERS

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SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with "EVALUATION OF PROPERTIES OF BITUMINOUS MIXES WITH PARTIAL REPLACEMENT OF AGGREGATES WITH STEEL SLAG" is a bonafied work carried out by team associates BENAKA KUMAR S (1SG15CV006), NAMRATHA A.V(1SG15CV035), POORVA M.B (1SG15CV036), MAMATA R (1SG16CV405), 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Mr. AKSHAV J Asst. Professor Dr. R L RAMESH Professor and HOD

R.L. Lameers 4.6

Dr. K L SHIVABASAPPA

Principal

HOD, Dept. of Civil Engg. Sapthagiri College of Engineering S.C.E, Bangalore-560 057. Chikkasand Pangalore-560 057.

Examiner 1

Examiner 2: S.U. N. 1. 8K

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with "APPLICATION OF BACTERIA AS

SELF HEALING AGENT IN CONCRETE" is a bonafied work carried out by team associates GOWTHAM M (1SG15CV017), MANOJ M (1SG15CV029), PRAKASH S K (1SG15CV037), SACHIN REDDY (1SG15CV042), 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Mrs. GEETHATS

Asst. Professor

K. L. Ramerech

Professor and HOD

HOD, Dept. of Civil Engg. S.C.E, Bangalore-560 057 Dr. K.L. SHIVAB

Principal

Principal

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Sapthagiri College of Engineering Chikkasandra, Hesaragh



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



It is Certified that the project work entitled with "EXPERMENTAL INVESTIGATION ON SELF CURING CONCRETE" is a bonafied work carried out by team associates RAKSHITH GOWDA V (ISG15CV040), SUSHMA L (ISG15CV052), AMRUTHA A G (ISG16CV401), RAVIKUMAR K S (ISG16CV411) 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Mrs. SUMA N G Asst. Professor Dr. R.L. RANHES HOOD

Dr. K L SHIVABASAPPA

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road

Ba/galore-560 057

Examiner 1:

Examiner 2: Special ... & . C.

Principat

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road



DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

CERTIFICATE

It is Certified that the project work report entitled with "BIO-AEROSOLS CONTAMINATION IN AND AROUND SAPTHAGIRI CAMPUS" is a bonafide work carried out by team associates GAZI MOHAMMED MANSOOR (ISG15CV015), KISHOR VN (ISG15CV062), SHAFIYA SULTANA N (ISG15CV065), 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 2018-2019. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project work report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree in Civil Engineering.

GUIDE:

Mr. DHRUVARAJ M S Assistant Professor Dr. R.L. RAMESH Professor and H.O.D Dr. K.L SHIVABAŠAPPA

Principal

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

EXTERNAL EXAMINERS

1. R. L. Ramuesta 614/6/19

2. Son. 7 & K

3/16/19

Principal

Sapthagiri College of Engineering



DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

CERTIFICATE

It is Certified that the project work report entitled with "EXPERIMENTAL STUDY ON USE RECYCLED PLASTIC AS PARTIAL REPLACEMENT OF COARSE AGGREGATE AND FINE AGGREGATE WITH M-SAND" is a bonafied work carried out by team associates CHETHAN S PATIL (18G15CV010), RAMYA K V (18G15CV041), SHYLESH S D (18G15CV051), VIGNESH RAO S (18G15CV056), 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 2018-2019. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project work report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree in Civil Engineering.

GUIDE:

Dr. R.L.RAMESH

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новорберало Н.О.В Engg. S.C.E, Bangalore-560 057

EXTERNAL EXAMINERS

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Swil & K Sof

Dr.K.L.SHIVABASAPPA

Principal Principal

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Chikkasandra, Hesaraghatta Road Bangalore- 560 057

Principal

Sapthagiri College of Engineering Chikkasandra, Hesaraghatta Road,



DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

CERTIFICATE

It is Certified that the project work report entitled with "EFFECT ON BACTERIAL CONCRETE USING SILICA FUME AND RICE HUSK ASH AS PARTIAL REPLACEMENT OF CEMENT" is a bonafied work carried out by G SAI PRASANNA KUMAR(1SG15CV012),HARSHAN(1SG15CV019),MOHAMMEDRAFEEQ (1SG15CV031), MOHAMMED RIAZ J(1SG15CV032), 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 2018-2019. All corrections suggestion indicated for Internal Assessment have been incorporated in the report. The project work report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree in Civil Engineering.

Mr. RAJIV T Asst. Professor

Dr. R.L. RAMESH Professor and H.O.D

Dr.K.L SHIVABA

Principal Principal

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DEPARTMENT OF CIVIL ENGINEERING



SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

CERTIFICATE

It is Certified that the project work report entitled with " STUDY OF WATER CHARACTERISATION OF CHIKKBANAVARA LAKE" is a bonafied work carried out by team associates BHAVANI B G (1SG14CV005), CHETHAN REDDY B (1SG15CV061), RANJITH KUMAR S (1SG15CV063), SANDEEP B S (1SG15CV064), 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 2018-2019. All corrections / suggestion indicated for Internal Assessment have been incorporated in the report. The project work report has been approved as it satisfies the academic requirements in respect of academic project prescribed for the Bachelor of Engineering Degree in Civil Engineering.

GUIDE: 6

Mrs. KRUPA T L Assistant Professor

Dr. R.L. RAMESH Professor and H.O.D

R.L. Kameraly

Dr.K.L SHIVABASAPPA Principal

HOD, Dept. of Civil Engg.

EXTERNAL EXAMINERS

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SAPTHAGIRI COLLEGE OF ENGINEERING BENGALURU - 560057

DEPARTMENT OF CIVIL ENGINEERING



CERTIFICATE

It is Certified that the project work entitled with "STUDY ON VIBRO-COMPACTED GEOPOLYMER CONCRETE" is a bonafied work carried out by me SWATHI K (1SG15CV054), 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 2018-2019. 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 in Civil Engineering.

GUIDE:

Tr. R L RAMESH

Professor and HOD

Dr. K L SHIVABASAPPA

Principal

Principal

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