

**COLLABORATIVE  
ACTIVITIES**

**DEPARTMENT OF  
ARCHITECTURE**

**3.7.1 Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year**

<b>Title of the collaborative activity</b>	<b>Name of the collaborating agency with contact details</b>	<b>Name of the participant</b>	<b>Year of collaboration</b>	<b>Nature of the activity</b>
Collaborative Studio workshop- Crafts in Today's context	Sathyabama Institute of Science & technology	42+24(PMIST+Sathyabama)	2023	Crafts in Today's context
Unveiling sustainable Architecture design and planning	Dr. G.Yogapriya, Chettinad School of Architecture , Chettinad Academy of Research and Education,Kelambakkam	Ar.S.Suganthi Ar.R.Kalaivani	Dec-23	Book Chapter - chapter 11 Green Building Material
Unveiling sustainable Architecture design and planning	Dr. G.Yogapriya, Chettinad School of Architecture , Chettinad Academy of Research and Education,Kelambakkam	Dr.C.V.Subramanian Ar.J.Mullai	Dec-23	"Bio mimicry-integrating nature into architectural construction for sustainable and human centered design - chapter 6

## Evidence

<b>NameoftheProgram:</b>	Collaborative Studio Workshop
<b>Date/Time:</b>	16.8.2023- 20.8.2023
<b>Venue:</b>	Architecture studio
<b>No.ofParticipants:</b>	42+24(PMIST+ Sathyabama)
<b>Description of theProgram:</b>	<p>A collaborative studio workshop was organized for the II-year Students of PMIST and II- and III-year students of SatayabamaInstitute of Science and Technology from 16.8.2023 – 20.8.2023.</p> <p>42 students of II-yearArchitecture and 24 students of II- and III-yearof Interior Design participated in the workshop.</p> <p><b>Day -1</b></p> <p>The programme was inaugurated by Ar. V.S Kavitha, Dean in charge, FAP. An Introductory session was given by the coordinators of programme Ar. Dr. C.V Subramanian, Ar. S. Deepalakshmi&amp;Ar. V. Guruji. They demonstrated about the theme of the workshop “Crafts in Todays context”</p> <p>The design project was introduced by the coordinator Ar. K.Jasmine Vidhya, Asso. Prof / Arch in the afternoon session.</p> <p><b>Day-2</b></p> <p>The students were taken for a site visit to the following Craft making workshops.</p> <ol style="list-style-type: none"> <li>1. Thanjavur art plate</li> <li>2. Thanjavur Doll</li> <li>3. Thanjavur Painting</li> <li>4. Veena making</li> </ol> <p>They also visited Thanjavur Palace and Saraswathi mahal.</p> <p><b>Day-3</b></p> <p>The students were divided into groups and they collected the data’s and done with literature study. They worked on the project “Designers Niche”. The students’ progress was reviewed in the afternoon session’.</p> <p><b>Day-4</b></p> <p>The students continued to work on their design concepts and produced designs for the craft designer they have choosed. The students were guided by Ar.R.Kalaivani.</p> <p><b>Day-5</b></p> <p>The students work were review by Ar. N Ramesh Babu and Ar. K .Chithra</p> <p>Feedbacks were collected from the students and the workshop ended with a valedictory session</p>



***Inauguration and introduction to workshop***



***Students Visit to Thanjavur art plate making Workshop***



***Students working on the designs***



***Students working on the designs***



***Review of the students work by Ar.RameshBabu***



***Feedback and valedictory session***

## EVENT POSTER



**SATHYABAMA**  
INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)



**PERIYAR  
MANIAMMAI**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
(Deemed to be University)  
Established Under Sec. 3 of UGC Act, 1956 - NAAC Accredited  
think • innovate • transform



# Collaborative Studio Workshop

ARCHITECTURE AND INTERIOR DESIGN WORKSHOP

## CSW#02

### Crafts in Today's Context

16.08.2023 to 20.08.2023

COORDINATORS

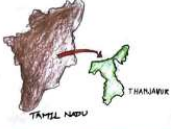
			
<b>Dr.C.V.Subramanian</b> Professor Periyar Maniammai Institute of Science & Technology, Thanjavur	<b>Ar.K.Jasmine Vidhya</b> Asso.Professor	<b>Ar.S.Deepalakshmi</b> Asso.Professor Sathyabama Institute of Science and Technology, Chennai	<b>Ar.V.Guruji</b> Asso.Professor

**Participants: Second and Third year students of both the Institutions.**

Architecture and Interior Design Workshop is organised by School of Building and Environment, Sathyabama Institute of Science & Technology, Chennai in collaboration with Faculty of Architecture and Planning, Periyar Maniammai Institute of Science & Technology, Thanjavur. Venue: PMIST Campus.

# Students' design sheets

## CRAFTS IN TODAY'S CONCEPT



**THANJAVUR** IS A CITY IN THE SOUTH INDIA STATE OF TAMILNADU. ITS MANY TEMPLES INCLUDE THE 11<sup>TH</sup> CENTURY BRHMIJESWARAR TEMPLE, A VAST CHOLA DYNASTY-ERA COMPLEX WITH A FRESCOED INTERIOR. THANJAVUR MARATHA PALACE IS HOME TO LIBRARY, PALM LEAF MANUSCRIPTS, ART GALLERY ETC... THANJAVUR IS MAINLY FOCUSED ON ITS ARTS AND CRAFTS.

### HISTORY

VEENA WAS FIRST FOUND BY P. SAMRAMURTHY AT THE TIME OF 1000 BCE. THE GARASWATHI VEENA WITH 24 FIXED FRETTS WERE EVOLVED IN TAMILNADU.

**MATERIALS USED:**  
 - ROSE WOOD  
 - JACK FRUIT TREE  
 - STRINGS (BRASS, STEEL)

**USES OF JACKFRUIT TREE**  
 THE JACKFRUIT TREE IS USED DUE TO ITS SUITABLE WOOD PROPERTIES SUCH AS DENSITY, SOUND QUALITY, AND GITS FOR ALL ENVIRONMENTS. JACKFRUIT TREE HAS MILK STRENGTH SO IT SUITS EVERYWHERE.  
 THESE JACK FRUIT TREES ARE BOUGHT FROM

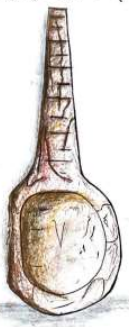
**VEENA PARTS:**

- KUDAM:** IS A HOLLOW PART OF THE INSTRUMENT THAT AMPLIFIES THE SOUND PRODUCED BY THE STRINGS.
- METTU:** METTU IS A CONNECTOR. IT HAS 24 METTU IN IT.
- DIHANI:** IS A NECK OR STEM OF VEENA. IT HOLDS THE FRET IN THE PART. IN EARLIER STAGE KUDAVAI IS MADE OF PAPER, TAMBRIND, JEEVA, LIMEWOOD, ETC.
- VALLI:** REFERS TO MYRTICAL CREASURE WITH BODY OF A LION. AS IS USED AS AN DECORATIVE ELEMENT.
- BIROVA:** THIS TRUSSER FOR TUNING AND END PART OF VEENA.
- BIROVA:** THIS TRUSSER FOR TUNING AND END PART OF VEENA.

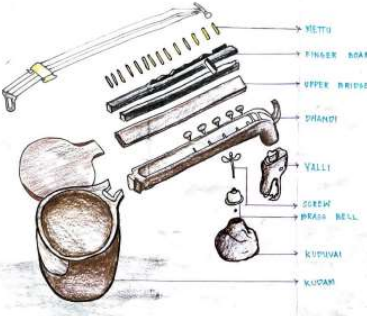
SHEET NO: **01**

Group Members:   
 S. SRI PRITHVI  
 K. VEENA  
 K. VEENKA PRAGN  
 L. CHANDINI  
 M. BHAKTHAVATHI  
 S. SRIJITHA  
 T. SREERAGHAR  
 K. SRINITHA

## VEENA IN INTERIOR



- THIS IS ONE OF THE OLDEST FORM OF VEENA.
- IT IS MADE OF A SINGLE TREE BARK WITHOUT ANY JOINTS.
- THIS IS CALLED AS EKANTHA.



**VEENA IN INTERIOR**  
 INCORPORATING VEENA IN INTERIORS AS DECORATIVE PURPOSE ETC...  
 THE PAINTINGS IN VEENA CAN BE USED FOR THE BORDERS IN FALSE CEILING.  
 THE KUDAVAI CAN BE USED AS HANGING LIGHT FIXTURE.

THE FACES OF VEENA CAN BE FRAMED AS PHOTO FRAMES.

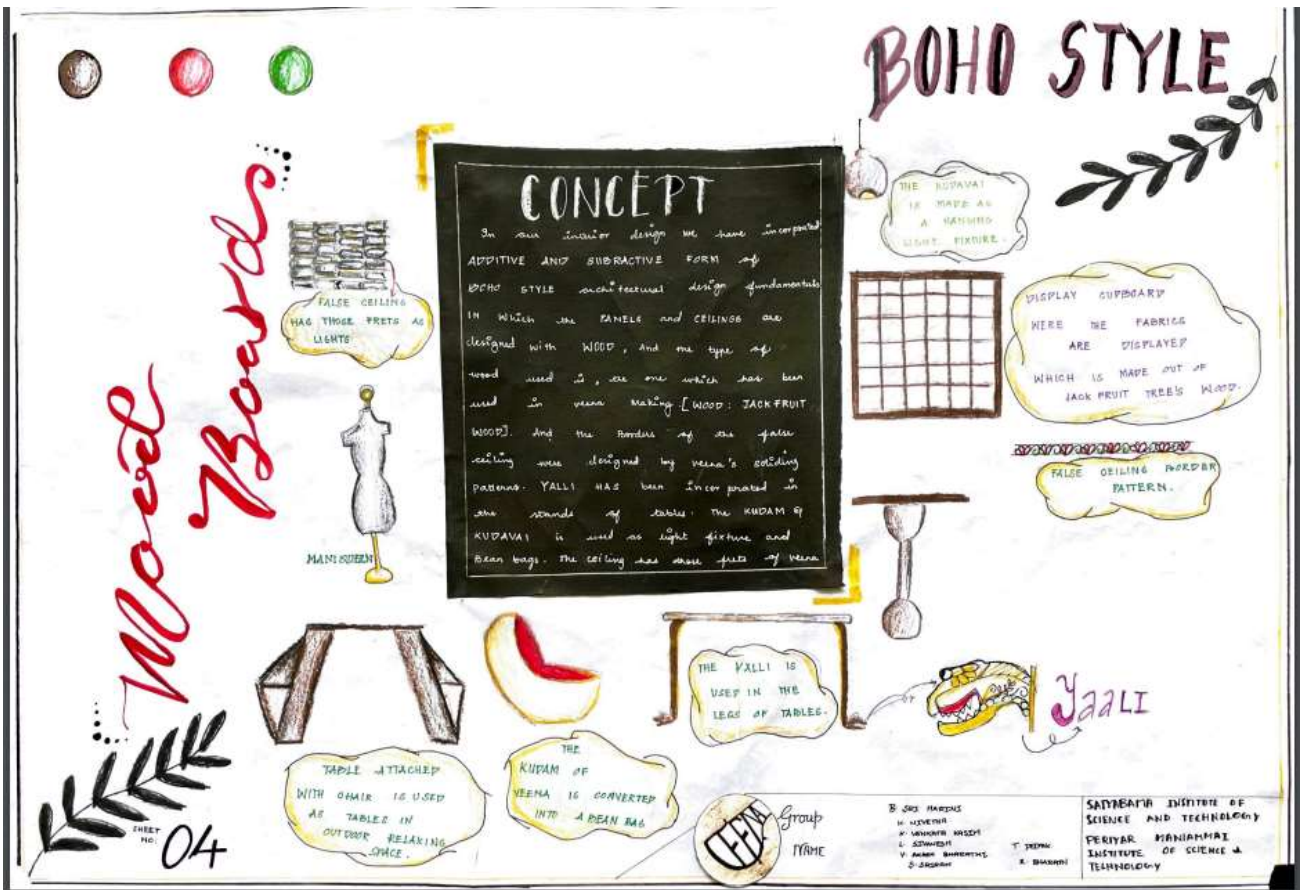
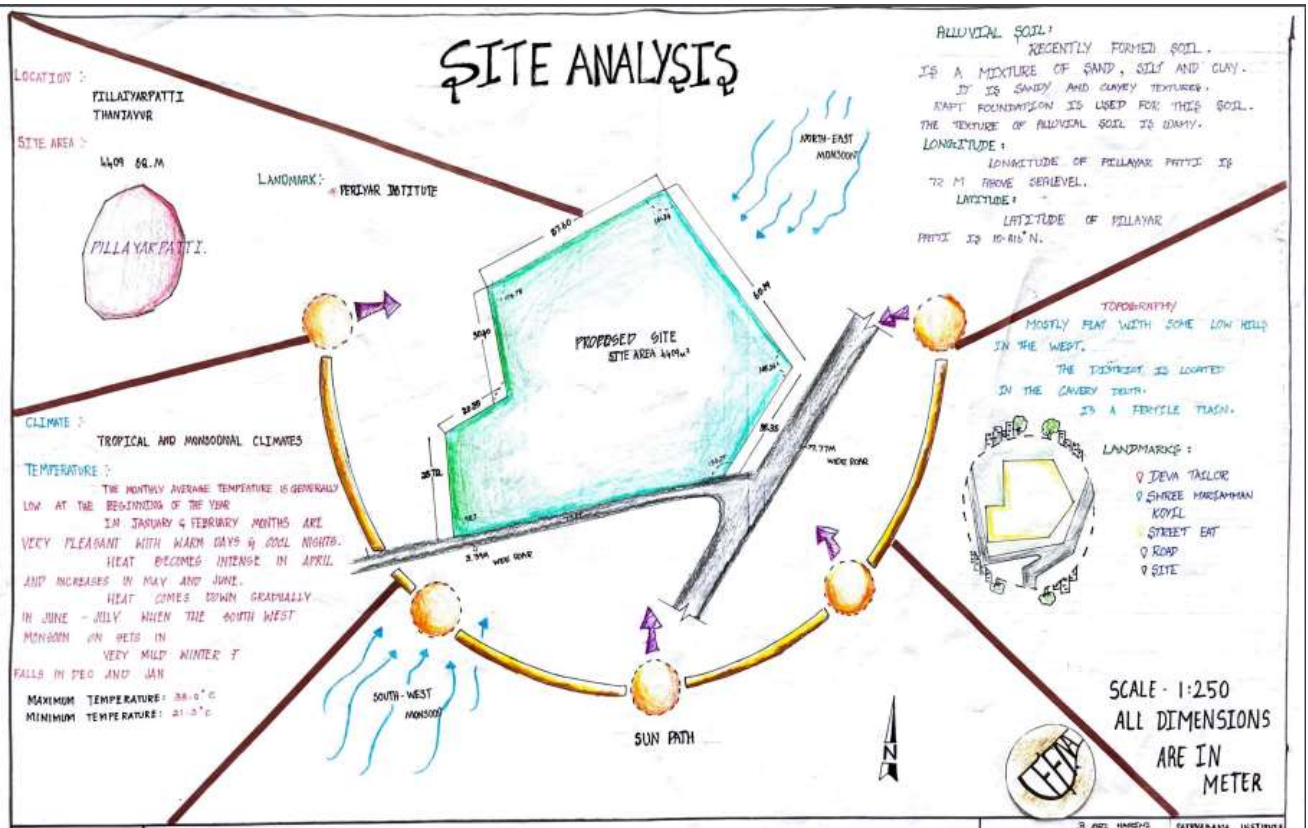
THE EXTENSIVE USE OF WOOD THROUGHOUT THE INTERIORS.  
 THE SHAPES OF BROWN, MAROON, GOLD IS USED.

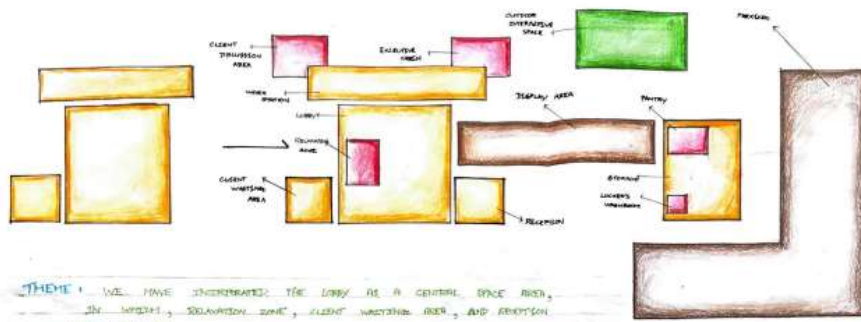
STRINGS ARE CRUCIAL IN VEENA, BECAUSE THEY ARE RESPONSIBLE FOR PRODUCING SOUND. DIFFERENT STRINGS ARE TUNED TO SPECIFIC PITCHES. THE SIZES OF STRINGS ARE [IN BRASS] 22, 24 [IN STEEL] 30, 32

SHEET NO: **02**

SATYANARAYAN INSTITUTE OF SCIENCE & TECHNOLOGY Group  
 MEMBER: MANJUNATH  
 MEMBER: SURESH AND SURESH  
 MEMBER: SURESH

SAS HAREESH  
 K. VEENA  
 K. VEENKA PRAGN  
 L. CHANDINI  
 M. BHAKTHAVATHI  
 S. SRIJITHA  
 T. SREERAGHAR  
 K. SRINITHA





### AREA STATEMENT

- > LOBBY - 8' x 18'
- > EXECUTIVE CABIN - 7' x 8'
- > CLIENT WAITING AREA - 6' x 6'
- > RECEPTION - 22' x 12'
- > WORK STATION - 17' x 14'
- > CLIENT DISCUSSION AREA - 18' x 20'
- > EXECUTIVE CASHIER - 10' x 10'
- > DISPLAY AREA - 12' x 20'
- > PANTRY - 6' x 8'
- > STORAGE - 8' x 8'
- > LOCKER - 15' x 10'

**THEME:** WE HAVE INTEGRATED THE LOBBY AS A CENTRAL SPACE AREA, IN WHICH, RELAXATION ZONE, CLIENT WAITING AREA, AND RECEPTION WORKS TOGETHER.

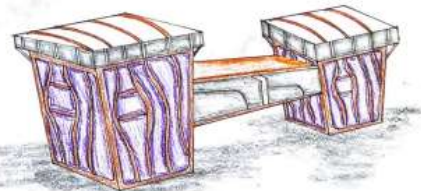
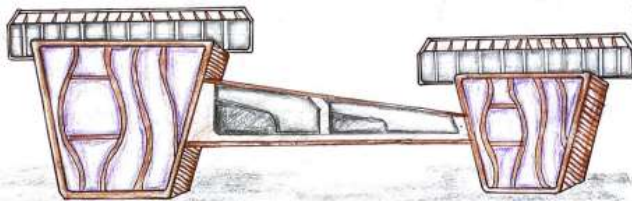
THE WHOLE TRANSECTION IS THE REPRESENTATION OF THE STRUCTURAL DESIGN IDEA 'VEENA'.

THE FIRST PART OF THE BUILDING IS THE REPRESENTATION OF (SOUND), THE SECOND PART OF THE BUILDING REPRESENTS THE DESIGN REPRESENTATION OF (SOUND). THE CENTRAL PART IS THE REPRESENTATION OF (CHANGE).

THE MATERIALS USED ARE GLASS, WOODEN TRANSDOM, AND STEEL BEAM IN PACKAGE LEVEL.

## FORM EVOLUTION

### ISOMETRIC VIEW



SHEET No: **05**

FRONT ELEVATION



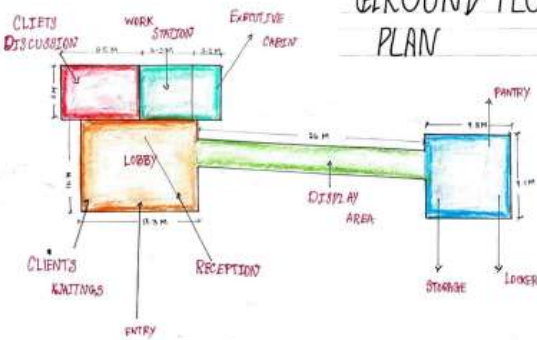
SATYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY  
PERIYAR MANIAMPAL  
INSTITUTE OF SCIENCE AND TECHNOLOGY

GROUP NAME

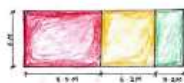
B: SRI HARINI, S: SRI RAM  
A: NIVETHA, T: DEEPAK  
K: VENKATA RAGINI, R: SARATHI  
L: JHA NEESH  
V: AKASH & HARANI

# PLAN

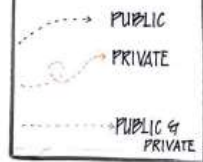
## GROUND FLOOR PLAN



## FIRST FLOOR PLAN



### USERS



# ZONING

SHEET No: **06**

DESIGNER'S OFFICE OF FASHION DESIGNER

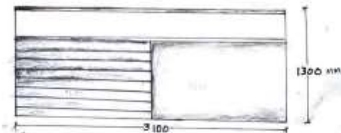
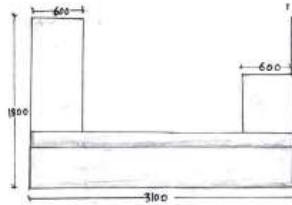
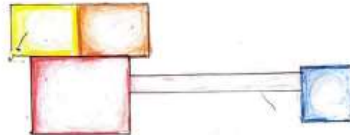
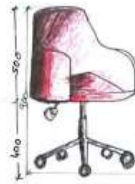
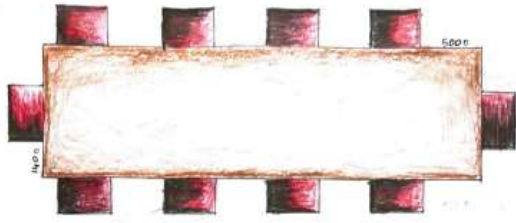
SATYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY  
PERIYAR MANIAMPAL  
GROUP NAME

B: SRI HARINI, S: SRI RAM  
A: NIVETHA, T: DEEPAK  
K: VENKATA RAGINI, R: SARATHI  
L: JHA NEESH  
V: AKASH & HARANI





Furniture  
Design



SHEET No.

07

SATYADAMA INSTITUTE OF  
SCIENCE AND TECHNOLOGY  
PERIYAR MANIYANDAVI INSTITUTE  
OF SCIENCE AND TECHNOLOGY

DESIGNER'S OFFICE OF FASHION DESIGNER

## Attendance

COLLABORATIVE STUDIO WORKSHOP CRAFTS IN TODAY'S CONTEXT 16/08/2023 - 20/08/2023						
S.NO	STUDENT NAME	DAY 01	DAY 02	DAY 03	DAY 04	DAY 05
		16/08/2023	17/08/2023	18/08/2023	19/08/2023	20/08/2023
1	ALLWIN ROBERT M	P	P	P	A	P
2	BONIGI LAKSHITHA	P	P	P	P	P
3	DHANALAKSHMI R	P	P	P	P	P
4	DON FLEMING ABRAHAM L J	P	P	P	P	P
5	GOVIND K	P	P	P	P	P
6	KEERTHANA S	P	P	P	P	P
7	KSHIRAJA V	P	P	P	P	P
8	LAKSHMI B	P	P	P	P	P
9	LEANDRA MERLIN GOMES L	P	P	P	P	P
10	NIVETHA K	P	P	P	P	P
11	PRAVEEN V	P	P	P	P	P
12	SAMYUKTHA P.R	P	P	P	P	P
13	SANTHOSH R	P	P	P	P	P
14	SRI HARINI B	P	P	P	P	P
15	SWETHAA SIVAKUMAR	P	P	P	P	P
16	VIGNESHWARAN M	P	P	P	P	P
17	BATRA KANNAALAN R.A	P	P	P	P	P
18	FARAH MOHAMED PEER MOHAMED	P	P	P	P	P
19	JEEVISHRI S	P	P	P	P	P

CRAFTS IN TODAY'S CONTEXT 16/08/2023 - 20/08/2023						
S.NO	STUDENT NAME	DAY 01	DAY 02	DAY 03	DAY 04	DAY 05
		16/08/2023	17/08/2023	18/08/2023	19/08/2023	20/08/2023
20	KAVYA B	P	P	P	P	P
21	KURICHETI VENKATA KASIM	P	P	A	P	P
22	LAAVANYA R	P	P	P	P	P
23	SWETHA R	P	P	P	P	P
24	VARSHINI R	P	P	P	P	P

*Pm/11/8/23*      *Pm/11/8/23*      *Pm/18/8/23*      *Pm/19/8/23*      *Pm/20/8/23*

COLLABORATIVE STUDIO WORKSHOP CRAFTS IN TODAY'S CONTEXT 16/08/2023 - 20/08/2023							
Year/Semester: II / III			Section: A				
S.NO	REGISTER NO.	STUDENT NAME	DAY 01	DAY 02	DAY 03	DAY 04	DAY 05
			16/08/2023	17/08/2023	18/08/2023	19/08/2023	20/08/2023
1	122012001922	ABDUL KALAAM A B					
2	122012001923	ABDUL RAHMAN S					
3	122012001924	AHAMED RAZA A					
4	122012001925	AKASH BHARATHI V					
5	122012001926	ARUNMOZHI VARMAN K					
6	122012001927	BHARATH R					
7	122011001928	BRATHATHESVARI R					
8	122012001929	DEEPAKKUMAR T					
9	122011001930	DENY DIANA P					
10	122012001931	DHARANITHARAN S B M					
11	122012001933	DHARUN KUMAR P					
12	122012001934	INDHIRAN V					
13	122012001935	JOE PRINCE L					
14	122012001936	KABILAN B A S					
15	122012001937	MANIVANNAN S					
16	122011001939	MEENADAKSHINI S					
17	122012001940	MICHEAL RABIN A					
18	122011001941	MISBHA A					
19	122012001942	MOHAMMED ASLAM A					
20	122011001943	NASHA FIRDIOUS S					
21	122011001944	NIVETHA A					

COLLABORATIVE STUDIO WORKSHOP CRAFTS IN TODAY'S CONTEXT 16/08/2023 - 20/08/2023							
Year/Semester: II / III			Section: A				
S.NO	REGISTER NO.	STUDENT NAME	DAY 01	DAY 02	DAY 03	DAY 04	DAY 05
			16/08/2023	17/08/2023	18/08/2023	19/08/2023	20/08/2023
22	122011001945	NIVETHA P					
23	122012001946	PRAVEEN S					
24	122012001947	RAKESH A					
25	122012001948	ROHIT SAMUEL B					
26	122011001949	SAHANA S					
27	122011001950	SAKTIESWARI S					
28	122011001951	SHERIN NACHIYA B					
29	122012001952	SIVANESH L					
30	122012001953	SRIRAM S					
31	122011001954	SUBHIKSHA S					
32	122012001955	SUDHARSAN R					
33	122011001956	SWASTHIKA D					
34	122012001957	THAWFEEQ A					
35	122012001958	THILEEPAN A G					
36	122012001959	TIM MANFRED K					
37	122012001960	VISHWA R					
38	122012001961	VIVEHANANDHAHN M					
39	122011001962	ZAITHOON SHAHANI J S					
40	122011001963	THIRUVEMPAVAI J					
41	122012001965	DHAMODARAN B					
42	122012001966	SRIDHAR E					

C. S. Srinivasan

Feed Back

## Collaborative Studio Workshop Feedback

The collaborative workshop is very interesting. I loved the ~~the~~ case study. It was really interesting to watch the procedures of traditional Thanjavur painting, doll making & earthen plate. I learned new experiences ~~from~~ because of this workshop.

Farah Mohamed  
III<sup>rd</sup> Year  
B.DES.

In these 5 days we learnt many things about time management, teamwork and traditions and culture of Tanjore.

I will carry these lessons in the future with me. and am grateful for the chance to work with new students

## CHAPTER 11

### GREEN BUILDING MATERIALS (GBM)

Suganthi Subramanian, Assistant Professor, Department of Architecture, Periyar Maniammai Institute of Science & Technology (Deemed to be University), Vallam, Thanjavur.

Kalaivani Rajendran, Assistant Professor, Department of Architecture, Periyar Maniammai Institute of Science & Technology (Deemed to be University), Vallam, Thanjavur.

#### ABSTRACT:

The rapid urbanization that is taking place across the country results in the construction industry being forced to contend with an increasing number of significant environmental challenges. There has been an increase in the demand for buildings, which has led to an increase in the consumption of energy, resources, and raw materials. This has resulted in an increase in the emission of CO<sub>2</sub>, which is harmful to both people and the environment. It is necessary for us to learn how to use products that are friendlier to the environment if we are going to be able to reverse the wide range of negative effects that are currently being seen on the planet. Both inside and outside, it contributes to the contaminants that are found in the indoor air. Green building materials (GBMs) with non-toxic, natural, and organic chemicals have the potential to lessen their overall effects on both the health of humans and the environment. This is because GBMs have the capability of contributing to sustainable development (SD). This article primarily introduces the concept of GBMs (Green Building Materials), as well as the benefits of using these materials, and a few different varieties that are being utilized by Indian architects. The goal of doing so is to provide readers with a more in-depth understanding of this category of materials. This also addresses the problems that have been caused by using GBM in the construction of buildings.

#### 1. INTRODUCTION

Buildings must be environmentally friendly because they use a lot of natural resources. In India's construction sector, green and sustainable structures are currently necessary. Sustainable design has become more and more well-liked among architects and

## CHAPTER-6

### **BIOMIMICRY- INTEGRATING NATURE INTO ARCHITECTURAL CONSTRUCTION FOR SUSTAINABLE AND HUMAN-CENTERED DESIGN**

Dr.C.V.Subramanian, Professor, Department of Architecture, Periyar  
Maniammai Institute of Science & Technology, Thanjavur, India

J.Mullai, Associate Professor, Department of Architecture, Periyar  
Maniammai Institute of Science & Technology, Thanjavur, India

A.Prethicksha, Practising Architect, Chennai

#### **ABSTRACT**

Due to urbanization, people are moving from rural to urban areas. Urban areas are occupied by a concrete jungle that creates an urban heat island in the center of the city. So, we must integrate nature into the field of Architecture. The meaning of Biomimicry is an imitation of nature, getting a form from nature, implementing the function of nature and integrates nature into buildings. Ancient days onwards, human beings have been living in nature; living with nature. Nowadays, people are living in the global boiling stage. So, we must understand the form and function of nature, and to integrate nature into the architecture. Natural forms are used for buildings and functions are used to achieve stability, ventilation, lighting, material selection, and utilization of spaces. Integration of nature into buildings created comfortable living, reduced temperature, less air pollution, less noise pollution, increased air quality in addition to aesthetical and visual benefits, economic and increased human wellbeing. So, biomimicry design is a sustainable and human centered design. This chapter deals with integrating biomimicry design into the field of architecture.