

**Adaption and Development of Designs from Traditional Molela
Craft of Rajasthan for Design Intervention on Women Apparels**

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THESIS

MASTER OF SCIENCE (HOME SCIENCE)

IN

Department of Textiles and Apparel Designing



2019

DEPARTMENT OF TEXTILES AND APPAREL DESIGNING
MAHARANA PRATAP UNIVERSITY OF AGRICULTURE

AND TECHNOLOGY, UDAIPUR (RAJASTHAN)

**Adaption and Development of Designs from Traditional Molela
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dk vuqdwyu vkSj fodkl**

A

THESIS

SUBMITTED TO THE

MAHARANA PRATAP UNIVERSITY OF

AGRICULTURE & TECHNOLOGY, UDAIPUR

IN PARTIAL, FULFILLMENT OF THE REQUIREMENT FOR

THE DEGREE OF

MASTER OF SCIENCE IN HOME SCIENCE

By

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2019

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Enclosed one original and two copies of bound thesis, forwarded to the Director Resident Instructions, Maharana Pratap University of Agriculture and Technology, Udaipur through the Dean, College of Home Science, Udaipur.

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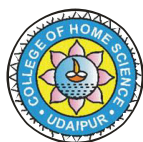
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This is to certify that **Miss Kamakshi Trivedi** (M.Sc. Scholar) has worked under me on “**Adaption and Development of Designs from Traditional Molela Craft of Rajasthan for Design Intervention on Women Apparels.**”

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2. My self and the scholar were in contact with the committee members and the research work was reviewed regularly.
3. The advisory committee members have gone through M.Sc. thesis critically and made the corrections as per requirement.

Dr. Meenu Srivastava
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Place – Udaipur

Date-

Kamakshi Trivedi

CONTENTS

S.No.	Contents	Page No.
	Abstract (English and Hindi)	1-2
1.	INTRODUCTION	3-7
	• Objectives	7
	• Operational definition	7
	• Delimitation of the study	7
2.	REVIEW OF LITERATURE	8-22
	• Molela craft of Rajasthan	8
	• Contemporary form of design development	11
	• Textile enrichment through printing	16
	• Consumer acceptability of design innovation in textiles	19
3.	METHODOLOGY	23-30
	• Locale of the study	23
	• Selection of the sample	23
	• Development of tool	24
	• Data collection	27
	• Analysis of data	30
4.	RESULT AND DISCUSSION	31-97
	• Background information of the respondents	31
	• Specific information about Molela craft	37
	• Selection and development of designs	44
	• Development and evaluation of designed women apparels	62
	• Development of designer women apparel using stencil printing	78
	• Assessment of consumer acceptability and cost of developed women apparels	82
5.	SUMMARY AND CONCLUSION	98-103
6.	RECOMMENDATIONS	104
7.	IMPLICATIONS	105
8.	BIBLIOGRAPHY	106-111
9.	APPENDICES	112-119

LIST OF TABLES

Table No.	Title	Page No.
1.	Percentage distribution of respondents by age	31
2.	Percentage distribution of respondents by education level	32
3.	Percentage distribution of respondents by family occupation	33
4.	Percentage distribution of respondents by family income/month	34
5.	Percentage distribution of respondents by family type	34
6.	Percentage distribution of respondents by time period (years) in molela craft	36
7.	Percentage distribution of respondents by suitability of motifs for Kurti and its ranking	56
8.	Percentage distribution of respondents by suitability of motifs for Gown and its ranking	57
9.	Percentage distribution of respondents by suitability of motifs for Shrug and its ranking	58
10.	Percentage distribution of respondents by suitability of motifs for Skirt and its ranking	59
11.	Percentage distribution of respondents by suitability of motifs for Slole and its ranking	60
12.	Selected motif codes and its acceptance percentage for different Apparels	61
13.	Scores and Percentage distribution of respondents by suitability of design for kurti	74
14.	Scores and Percentage distribution of respondents by suitability of design for Gown	75
15.	Scores and Percentage distribution of respondents by suitability of design for Shrug	76
16.	Scores and Percentage distribution of respondents by suitability of design for Skirt	77
17.	Scores and Percentage distribution of respondents by suitability of design for Stole	78
18.	Coding of women apparels	82

19.	Acceptability score of WA1 on the basis of relative ranking	83
20.	Acceptability score of Woman apparel WA2 on the basis of relative ranking	85
21.	Acceptability score of Woman apparel WA3 on the basis of relative ranking	87
22.	Acceptability score of Woman apparel WA4 on the basis of relative ranking	89
23.	Acceptability score of Woman apparel WA5 on the basis of relative ranking	91
24.	Acceptability score obtained by Woman apparel WA4 on the basis of relative ranking	93
25.	Acceptability score of Woman apparel WA5 on the basis of relative ranking	95
26.	Acceptability score of all the five women apparels on the basis of relative ranking	95
27.	Cost estimation of developed women apparels	96

LIST OF FIGURES

Fig. No.	Title	Page No.
1.	Percentage distribution of respondents by age	32
2.	Percentage distribution of respondents by Education level	32
3.	Percentage distribution of respondents by family occupation	33
4.	Percentage distribution of respondents by family income/month	34
5.	Percentage distribution of respondents by family type	35
6.	Percentage distribution of passed time period by respondents	36
7.	Flow chart showing separation, manipulation of motifs	51
8.	flow chart used for developing women apparels and adaptation of developed motifs on it	52
9.	Percentage distribution of respondent by suitability of motif for kurti	56
10.	Percentage distribution of respondents by suitability of motifs for Gown	57
11.	Percentage distribution of respondents by suitability of motifs for Shrug	58
12.	Percentage distribution of respondents by suitability of motifs for Skirt	59
13.	Percentage distribution of respondents by suitability of motifs for Stole	60
14.	Percentage distribution of respondent by suitability of design for kurti	74
15.	Percentage distribution of respondent by suitability of design for Gown	75
16.	Percentage distribution of respondent by suitability of design for Shrug	76
17.	Percentage distribution of respondent by suitability of design for Skirt	77
18.	Percentage distribution of respondent by suitability of design for stole	78
19.	Score of apparel WA1 on the basis of selected criteria	83
20.	Score of women apparel WA2 on the basis of selected criteria	85

21	Score of women apparel WA3 on the basis of selected	87
	Score of women apparel WA4 on the basis of selected criteria	89
22	Score of women apparel WA5 on the basis of selected criteria	91
23	Acceptability score of the developed women apparels	93
24	Estimation of profit percentage by the sell of apparel items	97

LIST OF PLATES

Plate No.	Title	Page No.
1.	Equipment used in molela art	41
2.	Technique of molela craft	42
3.	Design/motifs of molela in selected five categories. (A) Motifs of Daily life activities (B) Birds and animal motifs (C) Motifs of Ethnic/Religious idols/deity (D) Stylized motifs (E) Motifs of Architecture	45-49 45 46 47 48 49
4.	Adapted 10 Motifs	53-55
5.	Placement of women apparels	63-73
6.	Materials and Tools used in developing women apparels	79
7.	Stencil printing on fabric for women apparel	80
8.	Developed five women apparels with selected design	81
9.	Value added Women Apparel WA1	84
10.	Value added Women Apparel WA2	86
11.	Value added Women Apparel WA3	88
12.	Value added Women Apparel WA4	90
13.	Value added Women Apparel WA5	92

LIST OF APPENDICES

Appendix No.	Title	Page No.
1.	Interview schedule profile of artisans	112-115
2.	Rating scale 1 Part I- Performa for suitability of motif for each product Part II - For the evaluation of suitable placement of Women apparels	116-117 116 117
3.	Rating Scale 2 - Performa for evaluation of acceptability of developed stencil printed women apparels	118
4.	Rating scale 3 - Performa for the Estimation of Profit Percentage	119

MAHARANA PRATAP UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
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Subject: Adaption and Development of Designs from Traditional Molela Craft of Rajasthan for Design Intervention in Women Apparels.

ABSTRACT

Ever since the dawn of civilization man has felt the urge to decorate textile by the means of weaving, printing, and embroidery. The present investigation was undertaken to develop the stencil printed women apparels using molela craft motifs. Molela village is home to numerous artisans and painters who produce a unique craft, the terracotta plaques of Molela. The craft involves the sculpting of idols out of clay on a flat clay base. The study was undertaken with the objective explore, documentation and adaption molela craft design for developing new textile designs for women apparels and to design and develop women apparels using adapted molela motif through stencil printing technique and to access the acceptability and cost of developed women apparels. The study was carried out in molela village and Udaipur city and artisans were selected as sample of the study.

The survey was conducted by Interview schedule which was given to 25 respondents to collect the Molela design and later to select best 10 design for development of new motifs further the selected 10 motifs were adapted to develop 30 women apparel by developing 6 different placements for each women apparels. One best design for each women apparel was selected for development of women apparels using stencil printed method. A 5 point rating scale was given to 30 respondents to find out the acceptability of the developed printed women apparels. Finding of the study revealed that developed products were highly appreciated by all the respondents. Among the developed Kurti (WA1), Gown (WA2), Shrug (WA3), Skirt (WA4) and Stole (WA5), the most preferred women apparel was Kurti (WA1) with first rank acceptability range of all the products ranged from 86.09 percent to more than 93.33 percent. Cost of all products ranged between Rs. 420 To 1000 Rs.

Thus, it can be concluded that developed women apparel; being aspired from traditional clay art of molela craft were found totally fresh and unique by all the respondents.

Major Advisor

Research Scholar

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INTRODUCTION

Ever since the dawn of civilization man has felt the urge to decorate textile by the means of weaving, printing, and embroidery. Most of the India's arts have been great source of tradition are reflected in many of various regions of this country and Rajasthan is famous for its profile art treasures in the form of hand-printed textiles, furniture, leatherwork, jewellery, painting, pottery, metal craft, etc. The use of lively colors and flamboyant, fantasy designs is distinctive in all forms of arts and crafts of Rajasthan.

Every region in India has its own folklore and beliefs centered on the use of earth to create objects. The essence, however, remains the same - a potter's livelihood and tools and techniques are gifts from the God and ancestors. Legend has it that in the beginning of time when the epic churning of the ocean took place and the gods procured amrit or the divine nectar, they needed a vessel to keep it. So, Visvakarma, the celestial artisan, crafted a pot. Clay is regarded as sacred, holding within it the power to create and destroy. It is a symbol of impermanence and change, of regeneration and renewal, created using the three elements: earth, fire and water. There are said to be over one million potters in India, producing a profusion of clay objects - using traditional techniques and shaping and decorating the objects according to the social, religious and utilitarian needs of the regions and consumers.

The different regions of Rajasthan have distinctive style of pottery. Jaipur is famous for its blue glazed pottery that doesn't use simple clay but ground quartz stone, fuller's earth and sodium sulphate. Terra-cotta pottery is also quite popular in Rajasthan. Molela, a village near Udaipur is specialized in making clay images of deities for ceremonial occasions. Alwar is known for its paper-thin pottery while Bikaner's painted pottery is tinted with lac colors. The white and red clay articles of Pokaran are marked with distinct geometric designs. (Anonymous, 2018)

Molela is a small town 45 km north of Udaipur in Nathdwara tehsil of the Rajsamand district of Rajasthan situated on the banks of the river Banas. The small sun-soaked village of Molela in Rajasthan, is home to a vibrant community of terracotta clay artists. Over the years, Molela has emerged as a focal point in the art of making attractive votive plaques or idols of gods, with terracotta.

Terracotta is one of the oldest art forms known to human civilization. The terracotta craft is widespread in Rajasthan since the time of Indus Valley Civilization. Starting utensils for cooking to storage of water to decorative Terracotta pieces Rajasthan is famous for its extraordinary style. The terracotta industry was established in Rajsamand district and since then the district has witnessed the development of it. (Dahiya, 2016)

While the early creations were originally cast as standing idols of local deities and various forms of the Hindu god Vishnu, today these figures are often mounted on tiles or plaques and are hung from the walls of homes and temples. These votive figurines can be multi colored or can have a terracotta hue, as is represented in the various temples in Rajasthan and Gujarat. The Molela craftsmen make votive plaques with images of male and female deities in anthropomorphic forms. Ancestors represented in the forms of snakes and local heroes from folk legends are produced for worship. An interesting form of the Gujar tribe's popular God Deonarain, is created on a horse holding a bhala (spear) and a kamal (lotus). Another popular male deity is Bahiron whose icon is made up of 2 images-kala bhairon and gorabhairon, the dark and the fair. The serpent God, Nagdev or Takhaji has been worshipped in India since ancient times. The Molela potter also makes figures relating to the Tantra cult, a cult which tried to unify the male- female polarities but which denigrated to magic and mysticism. The Molela potter also makes folk heroes and heroines of Rajasthan's oral traditions such as the goddess sisters Lalbai and Phulbai and local heroes and heroines from folk legends dating back in time, who have now taken on divine powers and other forms.

Like most crafts, the traditional art form has been passed from generation to generation through the sons of the family, evolving with each generation. While the potters of Molela are known for producing religious idols, these terracotta creations are produced largely for the sake of enabling the creators' livelihood. In the months of December and January, for example, the production of plaques and the ready-to-be-sold stock increases manifold because these are the months that the local tribal communities (*advise*) visit Molela to purchase plaques for their fairs. It is in these months that the production of religious figurines becomes essential as the potters have to cater to the demand of the local tribal communities—here, the popular figurines include the gods and goddesses worshiped by the local communities. However, as the

market demand for the terracotta pottery expands towards urban centers, the potters have begun to depict on plaques scenes that express what the artisans can see in their everyday rural surroundings. These scenes include everything from mythological stories from Indian epics and historical narrations of the Rajput rulers of Rajasthan to depictions of daily household chores related to agricultural activities and butter churning; natural objects, such as the sun, and social issues, such as women's empowerment, have also become popular themes.

Present scenario

The demand for a potter's work tends to be seasonal. New vessels and votive murtis are needed for rituals at festival and during harvest times. The craftsmen, therefore, turn to agriculture to sustain themselves in the lean months, growing wheat, corn, lentils and chillies.

The terracotta clay work of Molela is slowly coming under a threat from the forces of modernization. More importantly, establishment of new brick factories in near by areas is a great source of concern. As the potters' fear that in coming years, these factories will consume a majority of the red clay that is essential for the potters' art work. Issues such as these need to be tackled through governmental intervention, and increased efforts need to be taken to widen the market demand for the terracotta plaques of Molela to ensure the future life of this age-old craft of pottery. (<http://ichcourier.ichcap.org/en/terracotta-clay-art-of-molela-rajasthan/>)

Indian designs and motifs are a synthesis of the myths of various cultures. Beauty of folk arts, motifs and designs have unfolded possibilities, paving the way to discover a wide range of symbols and pattern. India can proudly lay claim to have the widest possible range of designs in utility, decorative crafts and textiles, the extent to which this is taken for granted by the fore bearers of our heritage, lies in the fact that there is no clear indigenous transformation of the word "Design" itself. Today urban designers both strictly commercial glamour and fashion oriented dabble with hand me down western ideas and perennial Indian motifs to tickle the roving palates of the rich urban clientele. (Gaba, 2005)

Art from the past is always used by the artists as a foundation for their creativity. The craftsmen of today have become aware that hundreds of motifs that are

coming alive are easily adaptable from one craft to another as tradition has shown that it is the form and texture that are pre-eminently important and therefore some motifs and ornamentation may be used very effectively on any material surface. Traditional art and craft have been a great source of inspiration for the designers. Designs may come from a variety of different sources and different designers will have different methods for developing design work from initial ideas. The themes and ideas are used will be selected and subsequent art work based around these theme ideas. (Wilson 2002)

Designing textiles has been an ancient art in India. The history of textile designing includes many methods used from the earliest times in applying colour designs to the surface of cloth. Design in fabric is achieved by a great variety of techniques. It may be created as the fabric is made, or it may be applied to the finished goods. Thus, many designs are structural which are introduced during the construction of fabric, while others are decorative designs which are applied on the surface of the fabric after it has been constructed. Dyeing, printing, painting, embroidery, etc. are the examples of decorative designs. (Jain, 2005)

Textile printing is the process of applying colour to fabric in definite patterns or designs. In properly printed fabrics the colour is bonded with the fibre, so as to resist washing and friction. In printing, wooden blocks, stencils, engraved plates, rollers, or silkscreens can be used to place colours on the fabric.

The art of stenciling on textile fabrics has been practiced from time immemorial by the Japanese, and found increasing employment in Europe for certain classes of decorative work on woven goods during the late 19th century. A pattern is cut from a sheet of stout paper or thin metal with a sharp-pointed knife, the uncut portions representing the part that will be left uncoloured. The sheet is laid on the fabric and colour is brushed through its interstices.

Art form rendered in painting, printing, toys, sculptures, pottery and embroidery play an important role in creating new designs, apart from meeting the ever-increasing demand of customers for exclusiveness. However, Molela craft is restricted itself to the religious idols and plaques scenes of different forms in red clay but was never attempted on textiles. In view of the above, the present investigation on **“Adaption and Development of Designs from Traditional Molela Craft of**

Rajasthan for Design Intervention on Women Apparels” has been planned to develop innovative designs using stencil printing technique in a cost-effective manner which can also be used in entrepreneurship development.

OBJECTIVES OF THE STUDY

1. To explore and collect designs and techniques of traditional Molela craft of Rajasthan.
2. To adapt and develop new textile designs from traditional Molela craft.
3. To develop Women Apparels with new textile designs.
4. To find out acceptability of the developed Women Apparels for consumer.

DELIMITATION OF THE STUDY: The study was delimited to the-

- development of only 5 women apparel i.e. stole, shrug, kurti, gown and skirt.
- use of combination of stencil and hand embroidery techniques for design development.

OPERATIONAL DEFINITIONS

- **Adaption:** A design based on another design but significantly modified and altered to be considered new and different as per application on textile material.
- **Documentation:-** Documentation is a process of recording significant characteristics of a craft; the materials, process, tools and techniques involved in creating it; as well as the applications of the Traditional Craft. The recording process initiates with gathering information through literature study and field survey, which would later take form of a document.
- **Design Development:** -Design development involves designing new products with changes in shape, size, color, surface manipulation, function and utility; exploring new market, applying traditional skills to meet new opportunities and challenges; and the introduction of new materials, new processes, new tools and technologies.

REVIEW OF LITERATURE

The summaries of the writing of recognized authorities and of previous researchers have been subsumed in this chapter. It provides the testimony that the researcher is familiar with what is already known and what is still unknown and untested.

It provides a basis for the theoretical frame work, provides an anticipatory insight into method and procedures, suggests empirical definition of major concept, provides a basis for interpretation of finding and finally support the finding. In view of this, an attempt has been made in this chapter to present an overview of the earlier research work done which has direct to indirect bearing on the present study. The review of literature has been presented into following heads–

2.1 Molela craft of Rajasthan

2.2 Contemporary form of design development

2.3 Textile enrichment through printing

2.4 Consumer acceptability of design innovation in textiles

2.1 MOLELA CRAFT OF RAJASTHAN

Murtikala, the art of making votive murtis or idols of gods with terracotta, exists in Molela, in Rajasthan. While the murtis were originally standing idols of local deities and various Vishnu forms, today the murtis are often mounted on tiles or plaques and are hung from the walls of temples and homes. While the potters of Molela are known for votive murtis, and also procure their livelihood from these, they also depict scenes that express what the artisan can see in his/her surroundings on plaques.(Anonymous 2010)

Sah (2011) conducted an interactive design research and need assessment survey on asharikandi cluster and revealed that the term terracotta is derived from the words 'Terra' and 'Cotta'. 'Terra' means earth and 'Cotta' means baked. Both the words are of Latin and Italian origin. An object of art made of a composition of clay and sand and baked with earthen color, a brownish red, is terracotta. Terracotta is one of the oldest craft that human beings ever introduced on Earth. In Asarikandi traditional potters produced functional ware as well as decorative items. In functional ware they

make pitcher, jars, water containers, earthen utensils, tandoor Oyen, planters, flower vase, parts of tabla and mridang (Indian musical instrument), etc. For decorative products they produce various Idols of god and goddess, animal figures, birds, lamp stands, toys, masks, decorative vase and wall hangings etc. These products price differ as per the market and occasions.

Jaishree (2013) conducted a study on ‘Terracotta Plaques of Molela’. Molela is in Rajsamand district of Rajasthan. It is a small routine village, just like any other village we pass through our journeys. Some thirty families in the village are engaged in this art of clay. This craft is unique in that gods and goddesses are depicted in a two-dimensional way instead of three-dimensional statues elsewhere, and the figurines are hollow.

Terracotta, taken from Latin word terra cotta or baked earth, is the art of creating glazed or unglazed porous earthenware, figurines, and other decorative materials from clay which is dried and fired in temperatures of around 1000°C giving it a distinctly orange, red, brown, yellow, or grey color. It is then covered in sand to allow it to cool down. This color depends not only on the type of clay found in the beds of the water bodies in the area where the artist is based but also on the firing process. Terracotta horse figures, Ganesha idols, as well as idols of local deities like Nag Dev or the serpent god, Bhairav, and other heroes made in Molela are popular in the state. (Anonymous 2015)

Cynthia (2015) reported that Molela is famous for a unique style of ceramics, particularly for its charming narrative plaques and murals. There are about 40 families in Molela producing terracotta sculpture. Only a few families are producing pottery. Each workshop has many works lined up outside to entice shoppers inside. Tour buses stop here occasionally to shop and then continue on their journey.

Kumar (2015) highlights that Terracotta is the art of creating glazed or unglazed porous earthenware, figurines, and other decorative materials from clay which is dried and fired in temperatures of around 1000°C giving it a distinctly orange, red, brown, yellow, or grey color. This color depends not only on the type of clay found in the beds of the water bodies in the area where the artist is based but also on the firing process. For example, if the smoke from firing is allowed to get out through the vents in the kiln, a red or orange color is obtained. On the other hand, if

the vents are sealed, it gives the items a black color. Decorative pieces are either left with their original color or painted in multiple hues to make them more attractive. Terracotta items, when not cracked, give a ring when struck lightly with fingers.

Qureshi (2015) conducted a study under Integrated Design & Technical Development Project in which a detailed survey of the area was made to access the existing design in terracotta craft, the available materials, technical inputs, production process and marketability of product etc. for the development of new designs which can easily be marketed.

According to Sethi (2015), the terracotta water pots, the cooking and storage vessels and the votive offerings either shaped on the wheel or moulded by hand by the Kumbhar potters here are nuanced to suit their village customers. Many villages in Rajasthan practise pottery as a craft form but it is the customary work in the village of Molela, which makes it an important hub on the terracotta map. The images of folk deities sculpted by them are particularly sacred in Rajasthan — like Dev Narainji and Pabuji, Tejaji, Vasuki, Bhuna, Panchmukhi etc.

Textile committee, Government of India, Ministry of Textiles (2015) revealed in Application for Registration of LOGO of Molela clay Work of Rajasthan that Clay is regarded as sacred holding within it the power to create and destroy. It is a symbol of impermanence and change, of regeneration and renewal, created using the three elements: earth, fire and water. There are said to be over one million potters in India producing a profusion of clay objects - using traditional techniques shaping and decorating the objects according to the social, religious and utilitarian needs of the regions and consumers.

Molela clay is dug from the banks of local pond of the village the distinction here lies in the terracotta plaques made here, only here all over India. Like most crafts, murtikala has been passed from generation to generation, through the sons of the family, evolving with each generation. Typically the women do the hard work of getting the clay ready while the men make the murtis and decorate them. (Anonymous 2016)

Prajapat (2016) conducted a study on ‘Terracotta Clay Art of Molela, Rajsamand’ and reported that Terracotta art in Rajasthan is very significant in the State because for these villagers the worship of their terracotta deities is as basic and

essential for survival .unlike the usual icon & model made elsewhere, this craft is unique in design. Once a year the tribals buy the brightly painted terracotta plaques from these potters. The tribal's usually change these votive every year. They consider these Gods as their protectors.

Development commissioner (Handloom) Ministry of Textiles, Government of India (2017) conducted a study on Indian Handicrafts & Handlooms covered under geographical indications (GI) and found that Terracotta is a ceramic material that has been used for building construction and decorative arts since ancient times in cultures around the world. Literally translating to 'baked earth', it is made from natural clay, which gives it a characteristic reddish-brown color.

Sen (2017) revealed that the molela village is home to numerous artisans and painters who produce a unique craft, the terracotta plaques of Molela. The craft involves the sculpting of idols out of clay on a flat clay base. Several Hindu Gods and Goddesses are sculpted and are often colorfully painted resulting in eye-catching sculptures. The sculptures cater to the religious needs of the tribal of nearby regions who buy these sculptures for various ritualistic purposes.

2.2 CONTEMPORARY FORM OF DESIGN DEVELOPMENT

Dedhia (2001) studied on 'Computer Aided Designing by the fusion of Konark and Pipli motifs for printing bed sheets. The bed sheet designs were developed in which consumers preferred the combination of animal and bird motifs of Pipli with the ornamental motifs of Konark. A positive response was obtained with regard to the design acceptability in the Indian market and the experts were of the opinion that the created designs would have good scope in the international market.

Khosla and Randhava (2001) studied 'Design development by an innovative application of Chinese ornamental designs for decorating fabrics'. Chinese porcelain bronze and chois on enamel wear designs were printed using Computer Aided Designing software. Ninety motifs from the above mentioned sources were collected, with thirty motifs in each category of floral, geometrical, animal and bird motifs. The cloth was printed with one color combination using a color printer. The study thus rediscovered the dyeing tradition of Chinese ornamentation and at the same time used the latest technology of Computer Aided Designing to get an instant visual representation of intricate designs on fabrics.

Vamshi *et al.* (2001) studied on 'Adapting tribal art on textiles'. Savara wall painting of Andhra Pradesh confined to the interior walls of savara hamlets of Srikakulam district are a source of inspiration for this researcher. In order to popularize the art and to preserve its reminiscent beauty, adoption of these paintings was done on textiles. These wall paintings were adopted on sarees, salwar kameez sets and bed sheets. Two sarees, 2 salwar kameez sets and 2 bed sheets were designed. Color combinations used for both the back ground and the designs were limited to traditional Kalamkari colors. Light reddish orange and light grey colors were used for back ground while indigo, green, maroon, blue, black colors were used in the selected design. The result of the study indicated that the overall consumer acceptance of the designed sarees salwar kameez sets and bed sheets was good. Among three items designed, the bed sheet designs gained highest consumer acceptance. Cent percent of the consumer opined that these could be find a place in the Indian export market.

Jyotsna and Padma (2003) studied on 'Development of designs from Madhubani paintings on kameez sets'. Apart from the regular paintings of Hindu deities, floral, animal, bird and geometrical designs were also used to fill up the gaps in Madhubani paintings. Based on the subjective evaluation of motifs, three motifs comprising a fish, bird and flower with leaf was selected and modified for use on kameez sets. The designs were adopted on the kameez sets using weaving on jacquard loom. Half white silk yarn of 20 denier as warp and 2/140s mercerized cotton as weft was used in weaving kameez and dupatta while 60s cotton yarn was utilized for salwar. Four colors of dark shades as predominantly used in Madhubani paintings – green, black, red and yellow were used for the woven designs. It was found that all the designed kameez sets were well accepted by the consumers.

Girija and Jacob (2004) conducted a study on 'Design development from Kondapalli toys'. Among the Indian traditional folk arts, Kondapalli toys of Andhra Pradesh are one of the lesser known folk arts. Depending on the end use items, 20 designs were developed for each end use of which, three each were selected by a panel of judges. Kondapalli toy designs were adopted on three sarees, three salwar kameez, two bed sheets and pillow covers. Fabric of 40p/60c blended fabric was used for sarees, 67p/33c blended fabric for salwar suits and dyed long cloth for bed sheets and pillow covers. Designs were screen printed using pigment dyes. From the findings it was clear that animal and bird motifs in stylized form have an edge over the

occupational toy designs. Designs on saree with blouse had the highest consumer acceptance score followed by salwar suits and bed sheets. The study also revealed that these designed items could be popularized on commercial basis.

Pandya and Vishwakarma (2010) attempts to rematerialize the traditional art of rogan painting by documenting its glorious textile which has reached the verge of extinction. The major objectives were to document the craft of rogan painting in detail and authenticate the changes that have come across during the manufacturing process, colours, motifs and products. The art of rogan painting undergone into a tremendous change in production process, tools and equipment's, motifs and colors used.

Jyothi *et al.* (2010) studied on 'Adaption of Mandana design on western dress'. A total of 15 motifs were selected and suitably arranged on jeans and capries with "CAD" and Adobe Photoshop soft wares. Cotton material was used for capries and denim fabric was used for jeans. Designs were transferred onto garments using screen printing, fabric painting, embroidery and patch work. Design acceptability scores by a panel of judges indicated that Mandana designs can be applied successfully on new fashion products meeting the ever changing demands of the customers.

A study was conducted by Dutta and Ruchita (2010) to explore the rich motifs of Madhubani paintings as a source of design for the contemporary use on household products with the aim of making the products more appealing and in turn popularizing Madhubani paintings. Bharni, Kanchi and Goghna styles of Madhubani paintings were studied and one painting from each was modified in three different styles of designs- stylized, geometric and naturalistic. Colour and shape of the motifs were also adapted to contemporary taste. These were applied on four household articles, cushion cover, tablemat, napkin and bag. A preliminary survey was conducted on three categories of respondents- retailers, consumers and derived consumers (twenty-five from each category). Stylized design was the most preferred choice and was applied on all the four articles by using six surface enrichment techniques, screen, stencil and digital printing and three embroidery techniques, machine, hand and embroidery with beads and sequins work. A total of twenty four products were made. Final survey was done to understand the comprehensive acceptance of the products. The modifications in designs, adaptations of colour and shape and their applications on household

products were very well appreciated. All the products were found very suitable for marketing.

According to Krishnaveni and Padma (2012), designers strive to create fabrics and garments that are appropriate and palatable for the most vulnerable group of fashion. To create such designs, designers take inspiration from various sources like nature and man-made objects, which are part of the near environment and that of past traditions. A heterogeneous country like India with its varied cultural and traditional background has taken pride to introduce their culture and traditions through art and crafts of the region. These arts and crafts have gained an important source of inspiration for the textile designers. Adaption of crafts not only helps in the revival of it but also helps in bridging the gap between rural art and modern usage.

Sangama and Rani (2012) developed designs for textiles designing by adapting folk art of Uttarakhand. It was highlighted that household articles and other textile products can be developed utilizing the developed designs by using weaving techniques or the developed designs can be applied on the textile by painting, embroidery or printing.

Kishore *et. al.* (2013) conducted a study on ‘Adaptation of monumental motifs for textile application’ in which designs of monuments were collected and out of these suitable motifs and designs were taken for the development of new designs. The designs were developed with the help of computer software “Corel draw X5”. Designs for different apparels were developed either using the entire motif (monumental design) or by applying components and detailed carvings of the designs.

Srivastava and Rajvanshi (2014) collected the most famous miniature paintings of Rajasthan i.e. Mewar, Marwar, Bundi, Kota, Jaipur, Kishangarh and Bikaner from artisans, various museums and libraries located at Udaipur. Ten miniature painting were identified to simulate two designs from each of the seven selected miniature painting for developing colour ways using CAD technology for use on fashion apparels. The simulated traditional Rajasthani miniature painting designs in three different colour ways were shown to a panel of judges and fifty designs were selected with their most preferred colour ways. The innovative effort of quick visualization of simulated designs from miniature paintings in different colour ways for surface enrichment on fashion apparels was appreciated by all the respondents.

Vedika *et. al.*(2014) screened out suitable *warli* motifs and adapted for development of thirty designs, ten for each apparels including kurti, suits and saris with the help of CAD software. The two most preferred design for each apparel were applied on apparels using prepared block of selected designs. All the prepared products were highly appreciated and well accepted with regards to colour combination, suitability of designs for the end products and surface enrichment technique used, overall appearance and cost effectiveness. It was concluded that *warli* motifs were successfully adapted for designing the apparels using block printing and has paved the way for the plethora of product diversification that could lead to a flourishing market.

Srivastava and Vaishnav (2015) revealed in ‘Adaptation of Warli motifs with computer aided designing for its contemporary uses’. The present investigation was undertaken for adaptation of Warli folk art motifs with computer aided designing for its contemporary uses. To give fineness and required intricacy, the motifs to be separated from all collected paintings were assessed and further manipulated for its co temporization and colour visualization on computer by using suitable software. A total of sixty designs were developed, 20 each for the three selected categories of furnishing items i.e. Dining table cover, Sofa cover set and Diwan cover set for product development followed by selection of three most suitable placements of motifs for each of the selected categories by panel of judges. Corel draw software was used to create customized graphic of selected furnishing articles. The adapted motifs were also simulated on scaled graphics of furnishing articles in different placements.

Radostina *et. al.* (2016) conducted a study on ‘Adaptation of traditional carpet motifs to modern textiles’. Smooth surface carpets are the most typical for the hand woven carpets in Bulgaria. The preservation of the carpets motifs is of importance for the cultural heritage; and their larger dissemination can give them new, meaningful life in the modern times. The study presents basic motifs in the weaving of Chiprovtsi carpet, which are typical, and can be used for designing of new woven items.

Sharma (2017) the present investigation was undertaken to develop the screen-printed silk stoles using blue pottery motifs. For conducting the study preferences were taken from sixty college going girls in the Department of Apparel and Textile Science, College of Home Science, PAU, Ludhiana. An interview schedule was used for collecting data from sixty respondents regarding the preferences for the fabric,

placement, colour combination of motifs, stole designs and surface embellishments, etc. The results of the investigation were interpreted using percentages, mean scores and t-test. Majority of respondents preferred all over repeat for the layout of motifs on stoles. Eighteen designs were developed using hand painting technique with respect to their placement of motifs. Six most preferred designs of stoles by the respondents were selected and developed. The developed designs were evaluated by the respondents on the basis of their design, embellishments and overall appearance of the prepared stoles. Stole S4 was most preferred by the majority of the respondents. Also, majority of the respondents considered the calculated price of the stoles as adequate. An effort was also made to assess the profit margin of prepared stoles and the result showed that all the developed designs of stoles were saleable within a selling price range 1276 - 1595.

Renu *et. al.*(2017) observed through the study on ‘Adaptation of Kasuti Embroidery Motifs for Hand Painted Textile Articles’ that India has always been known as the land that portrays culture and traditional vibrancy through its conventional art and craft. Indian embroidery profoundly expresses the richness of diversity art of embroidery is exhibited by Indians who have been living widely region wise. Kasuti is world famous embroidery of Karnataka that speaks about the people of Karnataka; their traditions, customs and professions. Kasuti embroidery motifs were adapted into contemporary form by creating kasuti embroidery designs with the help of CAD and applying on textiles through time saving economical surface embellishment techniques like fabric painting. The concept behind the theme was to create the new design range by maintaining the ethnic beauty and originality of traditional art of kasuti embroidery.

2.3 TEXTILE ENRICHMENT THROUGH PRINTING

Hann (2005) elaborated that printing on cloth involves the use of carved wooden blocks or cut-paper stencils to impart a pattern or other design to the cloth’s surface. The number of blocks or stencils used in a design depends generally on the number of intended colours; it is the norm to use one block or stencil per colour for each repeating unit of the design.

According to Shiak *et. al.* (2005), stencil may have a fine, delicate design or there may be large spaces through which a great amount of colour can be applied. A stencil design is usually limited to the application of only one colour and is generally

used for narrow widths of fabric. Stencil printing is one of the methods of resist printing and the resisting material used is wax paper or stencil sheet. This can be used for printing design both on paper and cloth. The number of colours to be used on the design is same as the number of stencil sheets cut.

Sharma (2005) developed stencil printing designs for entrepreneurship. The designs in the study were selected for stencil printing technique. The effect produced by different placement of designs using vector graphic was also studied and these selected placements were applied on various articles. This study also aimed at importing technical training to empower rural woman. Such an employment will not only supplement the family income but also enable the rural women in establishing home base entrepreneurship.

Yadav (2013) reported that stencil painting has been applied to the decoration of textile fabrics from time immemorial by the Japanese, the peculiarity of stenciled patterns is certain parts of them have to be left uncut, so as to connect them with each other, and prevent them from falling apart in separate pieces. For instance, a complete circle cannot be cut without its center dropping out, and, consequently, its outline has to be interrupted at convenient points by ties or uncut portions.

Kaur (2015) conducted a study on 'Line development of curtains through stencil printing'. The study was undertaken to identify theme-based motifs suitable for stencil printing and develop designs for curtains. Twenty designs of curtains were developed in CorelDraw X4. Motifs of wild animals were most preferred by the respondents. Maximum respondents, i.e. 67.78 per cent, preferred border layout of motifs. Depiction of pictorial story on a set of curtains was most preferred by the respondents. Most of the respondents preferred cotton fibre for curtains with weighted mean score 4.54, followed by polyester and linen. Maximum respondents preferred multi-colour combination, i.e. 2.76 weighted mean score. The average selling price for C1 to C6 were `2223/-, `1964/-, `2090/-, `1865/-, `2123/- and `2084/- in a sequential order. Profit margin ranged from 25.56 to 29.66 per cent.

Kaur (2015) conducted a study on 'Designing of sari with colour blending and silk painting techniques'. Designs were developed using stylized floral motifs under two categories. In category-A, designing was done on border and the pallu area of sari whereas in category-B, on pleats and the pallu. A total of 30 colour combinations were developed under two categories which were contrast colour scheme and

accented neutral colour scheme. All the designs and colour combination were evaluated by a panel of judges and top preferred two designs were painted on silk saris with the most preferred colour combination of each category using silk painting technique. The painted saris were assessed for their marketability and consumer acceptability. The developed saris were well accepted by consumers as well as by the shopkeepers and as they found them to be innovative, stylish and unique.

Badoe *et. al.* (2015) conducted a study on 'Exploration of innovative techniques in printed textile design' as means of introducing creativity and providing new and varied ways of decorating textile materials. The new techniques were employed to print sample fabrics out of which some were sewn into garments. The study revealed that if existing textile-printing techniques are creatively blended or varied, they could give interesting results in printed textile designs that could provide unique handcrafted printed fabrics to consumers and take over this niche market. This research work shows the need for further inquiry into exploring more techniques for textile printing especially among textile students and small-scale textile designers.

According to Rani (2016), Indian traditional henna art of hand painting played an important role in creating unique designs in order To satisfy the urge of high- end consumers as well as designers own need of creating something new and creative, henna motifs have endless possibilities for combining artistically to form designs for application on apparel and textile products. The diversity of designs and textile designing technique were used to create unique contemporary saris and cater to refined desire of fashion seeker. It clearly elucidated that there are endless experimentation that can be done with the henna motifs and new technique of colour application for creating marvelous effect on many textile products.

According to Gupta and Gangwar (2016), Indian folk arts with painting play an important role in creating new designs. Their effort was targeted towards finding the possibility of applying Madhubani designs on textile articles utilizing the hand painting. Madhubani motifs/designs were adapted for centre and border design. Total thirty-six motifs / designs were developed keeping in mind their suitability for articles like cushion cover, folder and table cloth. Developed design sheets were subjected to visual evaluation for selection of one best design in each category by the panel of thirty respondents to find out the suitability of the developed designs for hand

painting. Finally, three articles were prepared by using selected designs which were highly appreciated by the respondents.

Anonymous (2018) revealed that the art of stenciling on textile fabrics has been practiced from time immemorial by the Japanese. A pattern is cut from a sheet of stout paper or thin metal with a sharp-pointed knife, the uncut portions representing the part that will be left uncoloured. The sheet is laid on the fabric and colour is brushed through its interstices. The cloth to be ornamented passes between the two and the colour is forced onto it through the holes in the stencil by mechanical means.

2.4 CONSUMER ACCEPTABILITY OF DESIGN INNOVATION IN TEXTILES

Amubode (2005) conducted a study on Consumers' acceptability and creative use of traditional woven fabric. The study examined the utilization and acceptability of traditional woven fabric 'aso-oke' in patchwork craft design as bedcover and throw pillows. The 'aso-oke' fabric was sewn using a patchwork technique of clothing construction to produce a bedcover and throw pillows. A questionnaire designed on a 5 point Likert scale was used to collect the data. The result showed a favorable response of Likert mean score 4.17 which indicates a greater acceptability of the fabric and design used in the making of the bedcover and throw pillows.

In an exploratory study done by Gaba (2005) in a study on Design development from the sculptures chaturmukha Jain temple reported that to develop eighteen new designs suitable for different items (i.e. Toppers, Duppatta, Bed sheet) from Chaturmukha Jain temple of Ranakpur using printing technique revealed that cost of designed items was not found very expensive, when compared to other readymade topper, duppatta, and bed sheet available to the market. The author reported that developed designs were highly appreciated by the judges and consumers as shown by their higher acceptability (above 80% for each category of selected clothing items).

Grover (2005) in a study on Designing and Printing of Bed covers using Cad Technology developed fifteen designs using computer aided designing and to assess the acceptability of these designs for screen printing, for Bed covers with the help of 'Coral Draw' and 'Photoshop' programmed by arranging scanned and prepared motifs

and articles prepared were subjected to evaluation in order to assess its market acceptability by fifteen entrepreneurs. All the articles were highly appreciated by the entrepreneur and were also willing to accept these designs.

Adedotun *et. al.* (2015) studied consumer acceptability and creative use of local fabrics as graduation gown for primary school pupils. The study was conducted to assess the acceptability of local fabrics (resist dye and traditional woven fabrics) as graduation gown for primary school pupils and their teachers among the Heads of schools in Abeokuta South Local Government Area of Ogun State, Nigeria. One hundred and sixty nine respondents were selected from both private and public heads of schools in the area using Simple Random Sampling Technique. Questionnaires were designed on four point Likert Scale to obtain relevant information from the respondents. Majority of the respondents have favorable acceptance of the local fabrics as graduation gown for primary school pupils and their teachers emphasizing that its utilization will go a long way in creating employment for youth and promote cultural heritage.

Roy and Babel (2016) studied consumer acceptability and market potential of developed diversified products from cotton rags and waste papers. That study was carried out in three stages. The first stage included to design and develops diversified products from cotton rags and waste papers, second stage was to study the consumer acceptability and third stage was to find out market potential of developed products. Background information was collected from 30 house wives and 30 market personnel. Total 13 products were developed from using cotton rags and waste papers. In second stage the assessment of consumer acceptability and market potential of developed diversified products. Finding of the study revealed that developed products were highly appreciated by all the respondents. Of the products the most preferred was flower pot with first rank followed by basket photo frame. Acceptance percentage of all products ranged between 62 per cent to more than 80 per cent. Cost of all products ranged between Rs. 20 to Rs. 70 per piece.

Gupta and Sangneria (2016) conducted a study on ‘Acceptability of lined jackets made from jute blended and union fabrics’ with an objective to provide diversification for the jute fibre. An attempt was made to study various factors influencing the buying behavior of jackets. A good response towards jackets made out

of jute blended and union fabrics with lining was found through a preliminary study. Jackets were worn by young adults the most and black was found as the most popular colour for jackets. The designs and the fabrics for construction of jackets were selected by a panel of judges. Construction details of jackets and preference towards the constructed jackets was assessed through a structured questionnaire for a purposive random sample of 75 females. The data collected was analyzed by percentage, ranking and two way ANOVA tests. Jacket with halter neckline and black jute-cotton blend fabric was most preferred. Overall appeal and colour were found as the important factors affecting the preference for the constructed jackets while garment and lining fabric was not considered as an important factor. There was an appreciation for such kind of attempt towards diversification for jute fiber in the segment of fashion apparels such as jackets.

Sodhi *et. al.* (2016) conducted a study on “Adaptation of Madhubani painting motifs” for exploring the possibility to strengthen creativity by fusion of traditional painting motifs and Aari work with fabric painting technique. The concept behind the theme was to create new range of textile designs by maintaining the beauty and originality of traditional painting. In this study motifs were collected through secondary sources and fifteen motifs were selected by expert’s preferences for development of designs. Two designs for each selected motifs of the painting were developed using CAD. Thirty designs were developed from fifteen selected motifs using CAD. Three developed designs were selected on the basis of expert’s preferences for adaptation to fabric painting and Aari work. Samples of selected Madhubani painting designs were prepared with fabric painting and Aari work. The prepared samples were got assessed by the experts in terms overall appeal and cost acceptability to fusion of Fabric painting and Aari technique. It was found that the respondents had very high opinion about the developed designs. The cost of prepared samples of Madhubani painting was highly acceptable by the majority of the respondents. The work done in the form of prepared samples was appreciated and preferred for application on wide range of articles. Thus, the motifs explored from Madhubani painting were highly acceptable for product development as variety of designs can be created through the use of CAD technology.

Sharma *et. al.* (2016) conducted a study on Development of cotton: Wool knitwears on khadi system and evaluation of their acceptability with the objective of

designing of cotton wool blended knitted khadi apparels. To attain this objective, cotton and wool fibres were blended in three ratios 90% cotton -10% wool, 80% cotton-20% wool and 70% cotton-30% wool in hand spinning system and hand spun yarns were prepared. Double jersey knit fabrics were prepared on flatbed hand knitted hosiery machine of 10-12 gauge. After that, six prototypes of sweater, top and jacket were developed. The acceptability of designed khadi garments was assessed on the basis of colour combination, uniqueness in design, aesthetic appeal using three point rating scale. It was found that all the khadi garments were accepted by respondents.

Saini *et. al.* (2017) conducted a study on Acceptability level of developed Phulkari embroidered Kurtis by adaptation of traditional Phulkari motifs. The study was conducted in Hisar city of Haryana state. Motifs of Phulkari embroidery were collected from Hisar and Patiala markets and categorized according to their categories i.e. geometrical, floral and animal. These were collected from secondary sources. Out of forty-five motifs only fifteen were selected to develop stylized designs for Kurtis, each were converted into two designs. Then total thirty designs were developed with the help of Coral Draw. Five top ranked designs were selected. Then top five ranked placements of each selected designs were worked in Phulkari embroidery for making Kurtis. Finally, five Kurtis were developed. The opinion of experts was sought the most favorable about the cost of developed kurtis.

METHODOLOGY

This chapter deals with the description of the research procedure, technique and tools used for data collection and analysis in the light of defined objectives. The research procedure followed has been categorized along with relevant details under the following sections-

3.1 Locale of the study

3.2 Selection of the sample

3.3 Development of tool

3.4 Data collection

3.5 Analysis of data

3.1 LOCALE OF THE STUDY

Traditional art and craft have been a great source of inspiration for the designers. The city of Udaipur is famous for its calm surrounds, pictorial lakes and its stylish paintings and delicate handicrafts. A small village, Molela, in Rajasthan is home to numerous artisans and painters who produce a unique craft, the terracotta plaques of Molela.

Since the researcher has focused the present investigation on “Adaption and Development of Designs from Traditional Molela Craft of Rajasthan for Design Intervention in Women Apparels”, in view of this, the locale of the study was purposively selected as Udaipur city and Molela village, which is located in Nathdwara tehsil of Rajsamand district in Rajasthan which helped her in having frequent direct contact with Molela artists to get desired information.

3.2 SELECTION OF THE SAMPLE

The information was purposively collected from the artisans involved in this craft at Molela village, near Udaipur. Three type of sample were selected: -

3.2.1 Sample for documentation of designs of Molela craft

In order to explore and document the traditional designs used in Molela craft, the desired information was purposively collected from all the artisans of Molela craft

residing in the village and solely devoted in this craft since last 15-20 years. At present, there are 25 artisans in the Molela village and all of them were selected as sample of the study. Other secondary sources of information explored were, terracotta plaques adorned at public places, newspaper, magazines, books and Internet websites.

Selection of motifs: Researcher collected total 30 motifs and designs of molela craft, taking six from five category of motifs covering daily life activities, birds and animals, architectural, ethnic and flora and fauna, through judiciously screening for selection of ten designs based on its suitability for development of new motifs/design and also for suitability to be developed in stencils and application in women apparels.

Development of new motifs & its Placement– Using 10 selected designs of molela craft, the researcher created 10 new textile motifs and each of these were developed in 3 different placements using Corel Draw software for further evaluation by experts for selecting 5 best textile designs for application on women apparels.

3.2.3 Sample for consumer acceptability:

In order to find out acceptability of developed women apparels, a sample of 30 women consumer will be selected from two colleges nearby University campus from Udaipur city.

3.3 DEVELOPMENT OF TOOL

Two types of tools were developed –

1. Interview schedule and
2. Rating scales

1. Interview schedule:

Keeping in mind the objectives of the study, an interview schedule was developed as it was considered most appropriate technique to document the history and technique of traditional molela craft. This technique was found to be most practical firstly it provided an opportunity to initiate decision and secondly the artisans were illiterate and this method helped to collect the detailed information from the respondents. The tool consisted of open ended and close ended questions to collect the desired information on following aspects (Appendix I).

Background information of the respondents: Dealt with the background information about the age, caste/religion, education, profession, occupation, monthly income, association with this profession.

Specific information about Molela craft:

- **Historical importance of molela craft**
- **Traditional motifs/designs** used, sources of these themes and motifs, significance of motifs,
- **Type of colours** used, sources of colors –vegetables/synthetics, place of getting colors, method of preparation of colours, time required in preparation, material required in preparation, cost of colors, significance of colors, color scheme/combination used etc
- **Technique of Molela craft**, Procurement and preparation of raw materials such as clay and other basic materials, preparations needed, tools required, procedure of making terracotta plaques, design engraving, time required for completion etc.
- **Beliefs associated with molela craft and its uses**

Other related information:

- Mode of selling
- Profit margin on terracotta plaques and tiles of molela
- Present day demand
- Problems and constraints faced

2. Rating scales:

Three types of rating scale were developed.

Rating scale 1: For evaluation of developed motifs and its placements

Based on the result of preliminary survey, the researcher explored and identified 30 ethnic motif/design from Molela craft for adaption and development of ten motifs. These adapted ten motifs were used to develop six different placements each for application on selected five women's apparel. For evaluation of these developed motifs and its best placement, rating scale-1 was developed by the researcher for selection of 5 best textile designs for application on women apparels. (Appendix II). The parameters were-

- Suitability of direction of motif
- Suitability of placement of motif
- Overall appearance

The data under each category was recorded on a five-point rating scale ranging from-

- Highly suitable
- More suitable,
- Suitable,
- Fairly suitable to
- Less suitable

Rating scale 2: For evaluation of women apparels

Rating scale-2 was developed for the evaluation of developed five women apparels and finding out its acceptability by the consumers on following parameters.

- Suitability of the fabric
- Suitability of design for stencil printing
- Suitability of the design for women apparels
- Placement of developed designs on women apparels
- Acceptability of the concept
- Overall appearance

The data under each category was recorded on a five-point continuum i.e. excellent, good, fair, poor, very poor and scores 5, 4, 3, 2 and 1 were assigned respectively. (Appendix III).

Rating scale 3: For cost estimation of women apparels

Rating scale 3 was used to get the desired information from 30 respondents (women consumer). Following parameters were considered by researcher to find out the cost of each of the developed women apparel.

- Cost of raw materials (Fabric, fabric colors, threads, etc.)
- Cost of stencil development
- Labour charge
- Proposed profit

The cost of the stencil development was calculated on the basis of size and intricacy of each of the selected motif.

3.4 DATA COLLECTION

The data collection comprised of following phases-

Phase 1

Survey and Collection of Molela designs

The data was collected through well-developed interview schedule. The respondents were personally approached and interviewed to collect desired information. Survey was conducted for getting complete information about the Molela craft, ethnic motif /design used, technique of molela craft, products made, etc. For this, researcher made several visits to native village of Molela craft and nearby areas where these craft is being decorated /displayed (such as Railway station of Udaipur city, Craft Centre's, Shilp Gram, Udaipur, etc.), besides exploring secondary sources to collect ethnic designs of molela craft, such as books, magazines and internet etc. The researcher collected 30 motifs/design for documentation and further experimentation.

Adaption & development of new motifs & its Placement

Selected 30 motifs/designs of molela craft were carefully screened by the researcher for selection of ten most appropriate designs. Adobe photoshop and Corel Draw software were used by the researcher for adaption and development of ten new motifs/design along with six different placements of each developed motif based on its suitability for application on women apparels. These developed motifs and its placement were evaluated by a panel of judges to select the 5 best textile designs for the development of stencil for women apparels.

Phase 2

Development of stencils for printing

Printing with the help of stencils is one of the basic fabric ornamentation techniques. This is an art through which designing, printing and decoration can be experimented on different materials apart from fabrics. For development of new textile design on women apparels, the researcher used the stencil printing technique. The process of Stencil making and printing with the stencil is the first step to modern screen-printing technique.

Stencil making involves cutting a design through a thin sheet and then transferring colour on to the surface to be printed through the cut out of the design. The researcher developed five selected motifs on stencils. Each of the selected motif was separated according to desired color. The stencils were developed according to the required dimensions of each design and placement by the researcher.

Design development on women apparel

The designs developed on the stencils were printed on fabric of different women apparel by the use of fabric colours. These developed stencils of selected five motifs were carefully printed on the fabric in five selected placements of motifs as design on the fabric for further development of women apparels.

The researcher also used hand embroidery method for value addition of the developed textile prints. Thus, five women apparel items were developed using selected 5 developed textile prints by taking one best design for each of the five-women apparel category. These were-stole, shrug, kurti, gown and skirt.

Phase 3

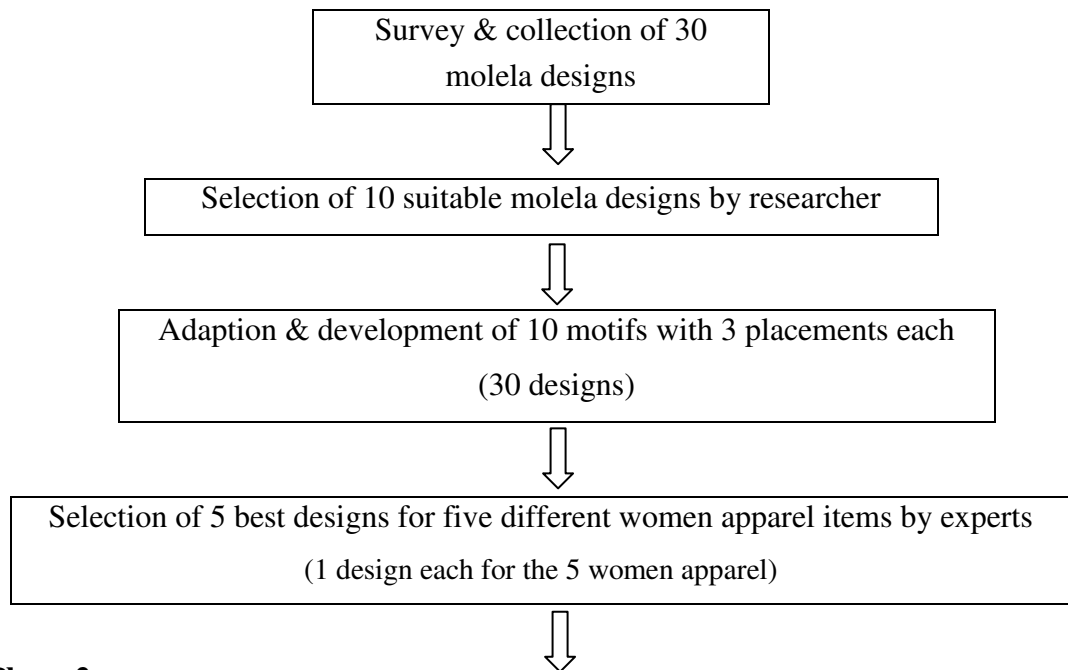
Consumer acceptability of developed women apparel

In order to assess the consumer acceptability, all the developed women apparel items were properly displayed at one place, based on ease and feasibility of the researcher to get it evaluated by the 30 selected women consumer as sample subjects using rating scale-2.

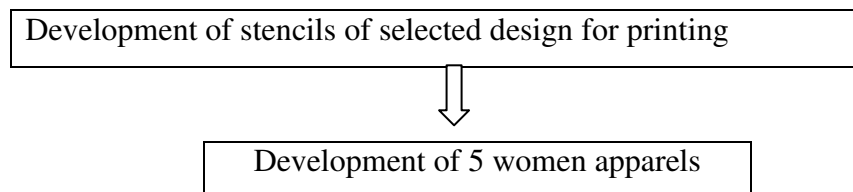
Estimation of cost effectiveness of developed apparels

An attempt was made by the researcher to find out the approximate cost of each of the developed five women apparel using adapted molela designs by using rating scale 3. The desired information was obtained from same group of sample subjects used earlier to know consumer acceptability.

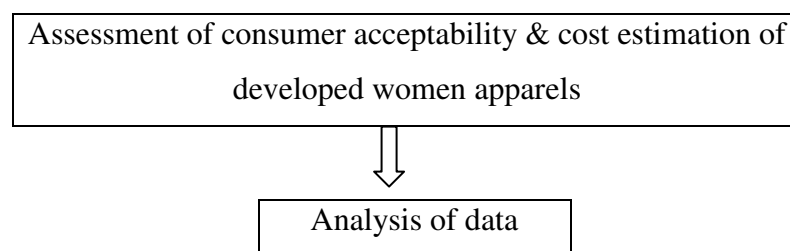
Phase 1



Phase 2



Phase 3



Flow diagram of plan of work

3.5 DATA ANALYSIS

To achieve the objectives of the present study the data was transferred on the table and tally sheets. It was processed, tabulated, classified, and analyzed statically in the light of objectives of the study.

Statistical Measures Used: -

- a) **Frequency-** This method was used to analyze the data regarding background information and information regarding other aspects like materials used, motifs and design category, marketing pattern of molela craft, etc.
- b) **Percentage:-** The rating obtained by developed designs of women apparels were tabulated according to the scores obtained and converted in percentage.
- c) **Ranking-** The opinion of the respondents (women consumers and experts of Textile and Apparel Designing Department) was recorded on a separate rating scales.

The total scores obtained by each women apparels were ranked in order of acceptance.

Acceptability Index:

To assess the percentage acceptability of the developed women apparels an acceptability index was set up:-

$$A.I = \frac{\text{Total scores of each woman apparel}}{\text{Maximum score obtained}}$$

RESULTS AND DISCUSSION

This section of study sets forth clearly and precisely the findings and interpretation in the context of major objectives of the study, thus providing a bird's eye view of the complete study which makes this section the most significant and crucial part of the research work.

The results of the study have been systematically illustrated with the help of tables and figures tracing the objectives of the present study, and have been presented under following heads: -

4.1 Background information of the respondents

4.2 Specific information about Molela craft

4.3 Selection and development of designs

4.4 Development and evaluation of designed women apparels

4.5 Development of designer women apparel using stencil printing

4.6 Assessment of consumer acceptability and cost of developed women apparels

4.1 BACK GROUND INFORMATION OF THE RESPONDENTS

The general background characteristics of the respondents have been analysed in terms of age, educational qualification, caste, family type, family occupation and family income per month. All the respondents reside in Molela village and inherently involved in Molela craft. The absolute and percentage distribution of respondents according to each of the above-mentioned factors are given in tables and discussed briefly.

4.1.1 Age: The researcher selected 25 respondents from Molela village. The age wise distribution of these respondents has been presented in Table-1 and fig.-1.

Table 1: Percentage distribution of respondents by age

n=25

Variables (Age in years)	Respondents	
	Frequency (f)	Percentage (%)
20-39 years	10	40
40-59 years	11	44
Above 60 years	4	16

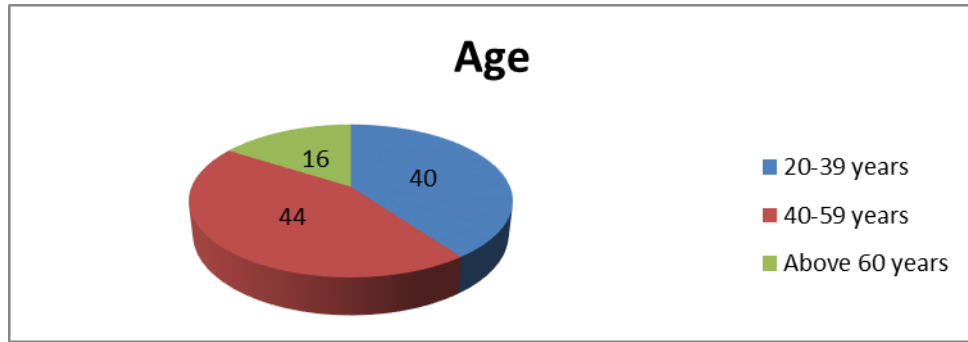


Figure 1: Percentage distribution of respondents by age

Perusal of data reveals that the maximum percentages (44%) of the respondents were found in the age group of 40-59 years followed by (40%) in 20-39 years and remaining (16%) respondents were in the range of above 60 years.

4.1.2 Sex: It was found that cent percent respondents of the molela craft were male. Typically, the women do the hard work of getting the clay ready, firing, etc. while the men make the murtis and decorate them.

4.1.3 Education:

The percentage distribution of respondents by education level has been presented in Table-2.

Table- 2: Percentage distribution of respondents by education level

n=25

Variables	Respondents	
	Frequency (f)	Percentage (%)
Uneducated	4	16
Middle school	10	40
High school	6	24
Graduate	3	12
Post graduate	2	8

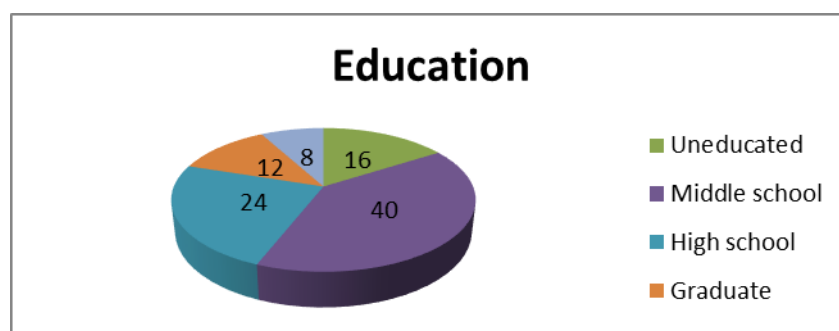


Figure 2: Percentage distribution of respondents by Education level

The data pertaining to education in Table-2 and Fig.-2 shows that most of the respondents were well educated except 16 percent respondents, who were illiterate. Majority of them 40 percent had educational qualification up to middle school followed by 24 percent respondents who had education up to High school. It was interesting to note that few respondents 8 percent possessed post-graduation degree also.

4.1.4 Caste: It was found that all the respondents belongs to the Caste of Kumhar (Also known as Prajapat).

4.1.5 Family occupation- Cent percent respondents were involved in molela craft, it is a family occupation inherited by them. The occupational profile of the respondents has been presented in Table 3.

Table 3: Percentage distribution of respondents by family occupation
n=25

Variables	Respondents	
	Frequency (f)	Percentage (%)
Molela craft only	16	64
Molela craft +Business	2	8
Molelacraft+Agriculture	7	28

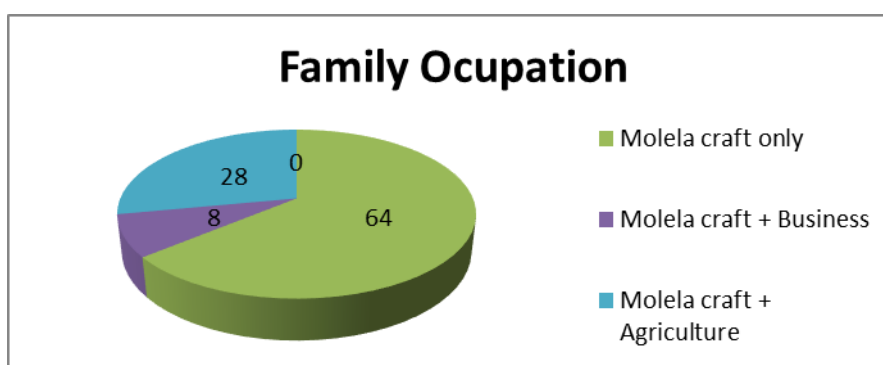


Figure 3: Percentage distribution of respondents by family occupation

Data in Table-3 and fig.3 portrays that more than half of the respondents (64%) were involved in molela craft work only. In most of the family, all the members helped in making terracotta items. However, one fourth of the respondents (28%) turn to agriculture and rest of respondents (8%) were engaged in other family

business along with molela art to sustain themselves in lean months. Agriculture is a secondary source of income for them.

4.1.5 Family income- The percentage distribution of respondents by family income/month has been presented in Table 4 and fig.4.

Table 4: Percentage distribution of respondents by family income/month (in Rs)

n=25

Variables (Income in Rs)	Respondents	
	Frequency (f)	Percentage (%)
10,000-20,000	18	72
20,001-40,000	7	28

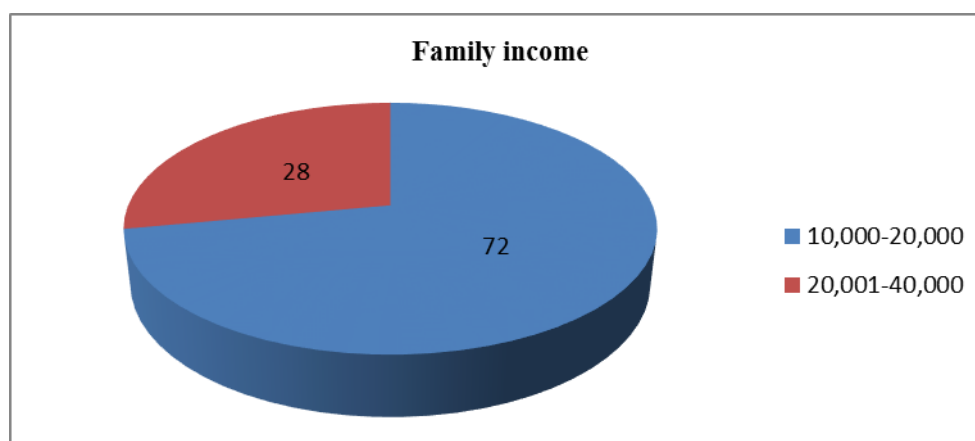


Figure 4: Percentage distribution of respondents by family income/month

Table 4 and Figure 4 illustrates that family income of majority of respondents (72%) was found in the range of Rs. 10,000-20,000/- per month while remaining respondent's (28%) family income was in the range of Rs. 20,001-40,000/- month.

4.1.6 Family type- The percentage distribution of respondents by family type has been presented below in table-5.

Table 5: Percentage distribution of respondents by family type

n=25

Variables	Respondents	
	Frequency (f)	Percentage (%)
Nuclear	9	36
Joint	16	64

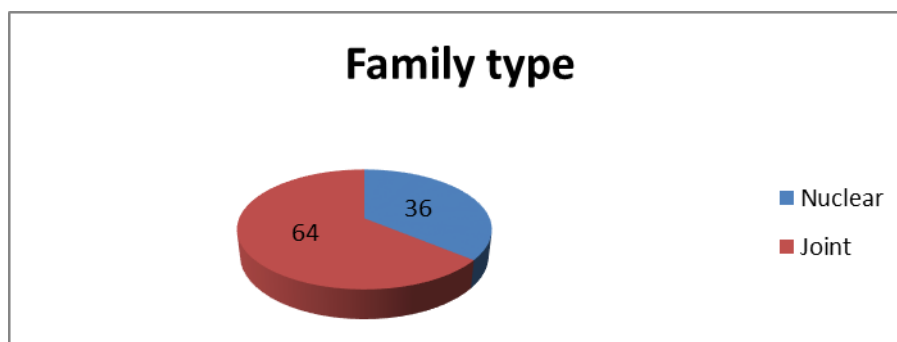


Figure 5: Percentage distribution of respondents by family type

The data reveals that majority of respondents (64%) belonged to joint family and remaining 36 per cent respondents belonged to nuclear family. At the time of data collection, the researcher also observed that the respondents having nuclear family had 2-3 children. Similarly, the number of family members among respondents of joint family also ranged from 6-8 including their older parents.

4.1.7 Mode of learning-

This art is above 5000 years old and everyone have learnt it from their forefathers only. All the respondents said that molela craft is their ancestral work. None of them had undergone any special training to learn this art and all the skills of profession had been acquired from their family members like fathers, elder brother and each artisan trains himself by the method of learning by doing. Two of the villagers were awarded National Award and one was awarded by Padam Shree Award.

Thus, it can be said that the molela craft is practiced by family members and imparted to succeeding generation, that clearly shows that it is a profession in which son is trained in the hands of elder member of family.

4.1.8 Time period

It was observed that artisans at young age were involved in their family craft as helping hand but later on they are fully engaged with this craft. The percentage distribution of respondents by the time period in molela craft has been presented in following Table-6.

Table-6: Percentage distribution of respondents by time period (years) in molela craft

n=25

Variables (Time period in years)	Respondents	
	Frequency (f)	Percentage (%)
10 years	2	8
20years	4	16
30 years	8	32
40 years	11	44

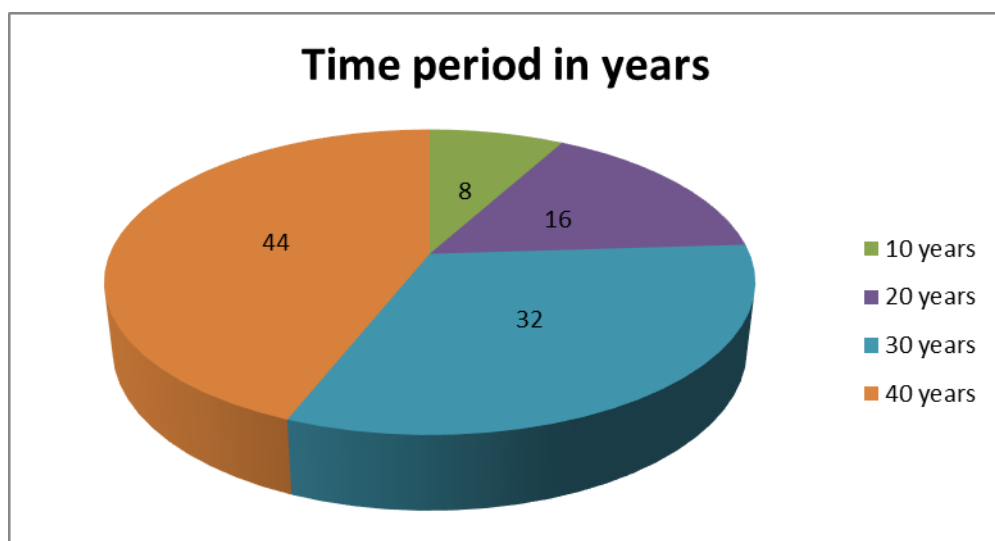


Figure 6: Percentage distribution of passed time period by respondents

The data reveals that majority of the respondents (44%) were involved in their ancestral occupation since last four decades followed by 32 percent respondents who were involved in molela craft for 30 years. Few young respondents (8%) were also found since last 10 years.

It was interesting to note that few artisans got national recognition and received several awards-

- *Mohanlal Chaturbhuj Kumhar is an artisan of Molela. He is awarded by Kala shree Award 1991, Raj Ratan Award 1997, State Award 1984, Master Craftman National Award 1988, Maharana shajansingh Award 2001, Shilp Guru Award 2003, and Padma Shri Award 2012.*

- **Mr. KhemrajKumhar**, the head of a large family of potters (sons, daughters, daughter in laws, and grand-children) was himself one of four sons trained with his father; who was nationally known and respected as a **terracotta-sculptor- potter**.
- **Mukesh Prajapat** is a young talented Molela terracotta artist. He has inherited the skill of turning clay into diversified forms from his father. He has setup a studio in his village Molela under the name “**Bhairav Terracotta Art Centre**“, which can cater to 30 participants in learning the art form.

4.2 SPECIFIC INFORMATION ABOUT MOLELA CRAFT

Respondents were interviewed to get desired information related to historical background of Molela craft, technique of molela craft, places they sell their products, Time period of involvement in molela craft etc. The frequency and percentage distribution of the respondents according to the above mentioned aspects is presented below.

4.2.1 Historical importance of molela craft

Rajasthan terracotta tradition, dating back to the Indus Valley Civilization, boasts of its distinctive art styles. Molela village in Rajsamand district of Rajasthan has been a witness of the phenomenon of turning clay into objects of worship by its potters, conveying an intimacy with religion and belief woven into daily life, a practice, which has until recently, been unchanged in a millennium. The potters believe that their ancestors have come from Abu to Nadol (in Pali district) and then finally to the village of Molela.

Even today, on important religious occasions, they go to worship their kul Devi, Ashapura Devi, whose main temple is in Nadol in Pali district .Since the past 11-12 generations, the potters have settled in Molela. It seems that prior to coming to Molela, the potter families were primarily making the usual earthenware domestic utensils like water pots, lamps, containers for clarified butter, containers to keep curd etc. but after settling in Molela, the destiny of these potters, took a turn. One night a blind potter had a dream in which Lord Dharamraj / Deonarayan revealed him in the form of a shadow and instructed that the potter should make an image of his. When

the potter replied that since he could not see it was impossible for him to do so, Lord Deonarayan blessed him with sight. When the potter asked how he would sell his wares, he was told that the buyers would come to him, so he need not worry on that count. From then onwards, the potters of Molela have been making votive (presented to God as a sign of thanks) plaques of local Gods and Goddesses like Deonarayan, Dharamraj (is caretaker of justice and keeps an account of the 'karma' of a person. He is an accomplice of Yamraj, the God of dead), Kala Bhairon (black and ferocious) and Gora Bhairon (white and compassionate), Sheshavatar (incarnation of Vishnu – in form of a snake), Chamunda, Kalika, Awanmata, Durga, Ganesh.

4.2.2 Traditional motifs/designs

It was reported by the cent per cent respondents that the deities whose images appear on Molela terracotta is part of the mainstream Hindu pantheon (Chamunda, Kali, Durga, Ganesha) or more commonly, regional divinities whose reverences are rooted in animistic belief systems (for example, Nagadeva) or in folk legends. Nine incarnations of Durga, Dashavataras, Nav grihas, Shrinathji, Gauri nritya (religious dance from southern Mewar), scenes from Ramayana and everyday village life are more popular depictions in Molela clay craft. The most important figures are that of **Devnarayan (Dharmaraja) and Nagaraja (the snake God).**

4.2.3 Colour and its sources

Cent per cent respondents reported that for the colours, they use natural stone and mineral colours. Palewa is the clay slip and makes different colours when mixed with other elements. Slips (claycolours) are only used on the functional wares. Molela clay is muddy in colour. It is dug from the banks of Banas river, 2 Kms away from Molela on Nathdwara Road Near Udaipur. Respondents reported that generally terracotta plaques are made in their original and stunning red-brown colour but sometimes on demand they are painted in different colours and then lacquered. First, white colour is applied, this is powdered Mica (quartz rich rock), turning a greenish white after firing. Respondents used to make black colour by mixing carbon scrape from bread pans and burnt coconut skins in water.

4.2.4 Raw materials and equipment used

- Clay (both pure clay and sandy clay)
- Donkey dung

- Saw dust
- Pindi
- Bhaldi
- Patiya
- Kiln
- Paint (oil paint, stone paint, asian paint etc.)
- Wheel (hand wheel, machine wheel)
- Measuring scale

4.2.5 Technique of Molela craft

The red clay of village Molela in Rajasthan is very special. It is collected on the banks of Banas river near village and mixed with donkey manure in a ratio of 1:4 to give the clay desired pliability. Rice husk is also added to the clay mixture by hand kneading for strengthening and as temper. The slabs or tiles are made first, with the help of a pindi, which is used for pounding and flattening the clay. A pindi is made of rounded stone with a groove at the top for holding it. The clay slab is then smoothened using a small flat piece of wood, about 1 foot by half a foot and approximately 1 inch thick. The scene to be depicted or the idol or murti to be made is then fashioned on the tile. Having cut the main shape, thick coils are made, flattened and added to the main slab to make a shape. Thin coils are used for detailing. For instance, for making a face, pasting of the slab is done in such a way that it generates overall facial form. Square coils are used to make nose shapes and jewellery out of minutedroplets of clay. The final product is dried in the sun and the dried plaques are then fired in the kiln slowly. The fired product is painted with natural bright colours. Often small, round kalash are made on the wheel and added to the murti. The design and the line work on the clay are done with the bhaladi - a small flat chisel-like instrument made of metal. Both ends of the bhaladi are used, one end for drawing lines and patterns on the clay, and the other end for making holes. The murtis are allowed to dry before they are considered ready for firing. If the final colour of the murti is terracotta, the red geru is mixed with glue and is used to cover the murti before the firing. The panels are left to dry in the workshop courtyard before they are stacked ready to be fired in a circular open kiln made from brick called an Awara. The kiln is 5feet in height, by 6 feet in diameter with 4 stoking ports around its base. The

work is loaded onto steel bars which are supported on brick piers leaving a 2-foot fire chamber below which can be fuelled from the ports. Thirty panels at a time can be fired in one firing, and packed around the top and in any narrow spaces are placed smaller items such as clay lamps and temple bells. The kiln is then sealed with three layers of pottery shards. It is then fired for 5-6 hours at a temperature of 500 to 600 degree Celsius. To begin with the kiln is stoked with dry corn stalks and cobs. This is followed by cow dung cakes, to initially warm them it through.

After few hours of slow warming the fire ports are fuelled with bigger fragments of timber. Temperature is increased until the pottery shards covering the kiln start to turn to a carbon black colour and slowly changes to a glowing red over the top indicating the maximum temperature. It is then left-over night to cool down before being unpacked invoked before beginning any new task. Devnarain, mounted on a horse holding a bhala, a spear and a lotus, is worshipped by the Gujars. God Devnarain always accompanied with a serpent, cows, cowherds and peacocks.

4.2.6 Taking help from other

Cent per cent respondents reported that they took help from both i.e. family members as well as from their fellow workers in the process of making terracotta items.

4.2.7 Time required for completion

It was found that currently many types of plaques and tiles are made besides idols of deity. Cent per cent respondents revealed that the time required for completion of one plaque of standard size of 1x1 fit ranged from 2-3 days including colouring and finishing. Depending on the size and design, the different products require varied time period for its completion.



Furnace



Pindi, bhaldi, patiya



Machine wheel



Hand wheel



Oil paint

Plate 1: Equipment used in molela art



Dry clay



Kneading and smoothing the clay



Measuring the plaque



Making the sculpture



Preparation for firing the sculpture



Final sculpture



Coloured sculpture

Plate 2: Technique of molela craft

4.2.8 Products made

At the time of data collection, researcher observed that majority of respondents (60%) of Molela make an assortment of devotional plaques, large panels depicting rural village scenes and smaller items such as temple bells and domestic ware. It was reported by them that earlier, square tiles depicting scenes of day-to-day life in the village were arranged in a single large panel which gave birth to the contemporary secular plaques. Later, these amazingly variant panels also led to adaptation of traditional subjects by cluttering together of various unrelated gods, goddesses, folk heroes and symbols into one single panel.

Among the various products made, hand-modelled hollow relief votive plaques are most famous. These products make extremely charming visual narratives of their customs and everyday life. Different product categories like tiles, vases, toys and the increasingly-becoming-popular murals that are mostly custom-built to be mounted in contemporary, urban buildings.

4.2.9 Mode of selling& profit margin

Cent percent respondents revealed that they sell on order also besides selling from their shop/house in the village. They keep sufficient stock. Molela terracotta items are sold on the basis of size, intricacy of design, time required in completion, hard work required and beauty of the developed item. For example, a tile of 1 square feet size is being sold at the rate between Rs 200-300/-per piece according to their hard work and design. It was revealed by the respondents that profit margin is not very generous in this craft and sometimes they did not get adequate money of their hard work, but still continuing with their ancestral craft as their livelihood.

4.2.10 Consumers of molela plaques

Respondents stated that clay plaques depicting the images of the Gods are mostly bought by the (Adivasi) tribe Bhil, Gujjar and Gujarat communities who arrive here accompanied by their priests in order to buy new votive images of their deities.

Anonymous reported that during the month of January, every year, these and other tribal groups like the Gujars and Garijats, travel to Molela to buy clay plaques depicting the images of the Gods who have fulfilled their wishes. These tribal groups

replace these votive icons every three to five years, in gratitude for the blessings received (<http://forhex.org/crafts-rajasthan-votive-terracotta-molela>)

4.2.11 Present day demand

The inherent charm of these plaques attracts buyers from far off places but the demand for these plaques tends to be seasonal. New vessels and votive murtis are generally needed at festival and harvest times by local tribal. At present, murals are very much in demand at public places/buildings of nearby areas for beautification purpose. Respondents anticipate that market demand for the terracotta pottery may expand to urban clientele also.

4.3 SELECTION AND DEVELOPMENT OF DESIGNS

Traditional designs of molela craft collected as a result of survey were documented followed by screening of designs in terms of suitability for adaption on women apparels by the researcher. These 30 collected designs/motifs of terracotta clay craft of Molela artisans were arranged into five categories-

- **Daily life activities** - Daily household chores, Agricultural activities etc.
- **Birds and animal motifs** – Horse, Camel, Peacock, Bird etc.
- **Ethnic/Religious idols/deity** - Rajput heroes, Local deities, Sun etc.
- **Stylized motifs** – peacock in stylized manner, Leaves with ethnic motifs etc.
- **Architecture Motifs** – Dome of palace, Jharokha, Jopdi etc.

Plate -3 Shows the selected design/motifs of molela in selected five categories.



Code 1



Code 2



Code 3



Code 4



Code 5



Code 6

Plate 3 (A) : Motifs of Daily life activities



Code 7



Code 8



Code 9



Code 10



Code 11



Code 12

Plate 3 (B): Motifs of Birds and animal motifs



Code 13



Code 14



Code 15



Code 16



Code 17



Code 18

Plate 3 (C): Motifs of Ethnic/Religious idols/deity



Code 19



Code 20



Code 21



Code 22



Code 23



Code 24

Plate 3 (D): Stylized motifs



Code 25



Code 26



Code 27



Code 28



Code 29



Code 30

Plate 3 (E): Motifs of Architecture

4.3.1 Selection of designs for adaption

Based on the suitability of design for adaption into new motifs/design and also for suitability to be developed in stencils and application in women apparels, researcher selected ten designs. Design code No. 4, 6, 7, 9,15,16,19,23,27,28 were found most suitable for adaption of motifs.

The selected ten motifs from five design category were as follows:-

- | | |
|--------------------------|------------------------------|
| 1. Daily household chore | 2. Agricultural activities |
| 3. Horse Motif | 4. Rabbit Motif |
| 5. Dhol Maru Motif | 6. Krishna lila Motif |
| 7. Sun and moon motif | 8. Leaves with ethnic motifs |
| 9. Jharokha | 10. Jopdi |

4.3.2 Adaption of designs

The selected ten designs of molela were carefully edited on computer to make it more appealing and suitable for stencilling. Each of the selected designs were further manipulated for its varied placement on selected womens apparels on computer with the help of suitable softwares i.e. Adobe Photoshop and Corel Draw.

Photoshop software was used for separation and manipulation of motifs. Following figure shows the flow chart used for separation and manipulation of motifs.

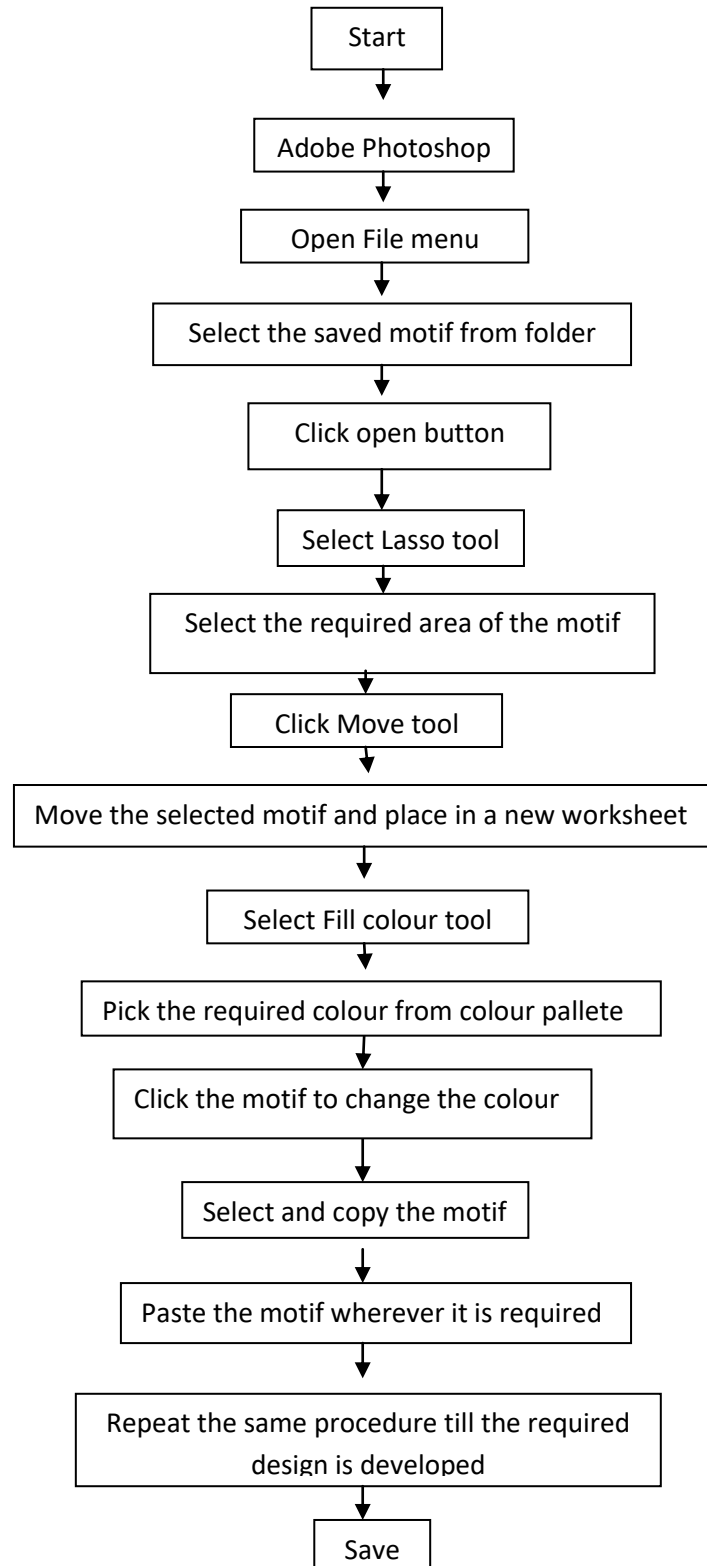


Fig. 7: Flow chart showing separation, manipulation of motifs

Corel Draw software was used by researcher for development of different women apparels on computer and depicting varied placement of adaption of developed motifs on women apparels.

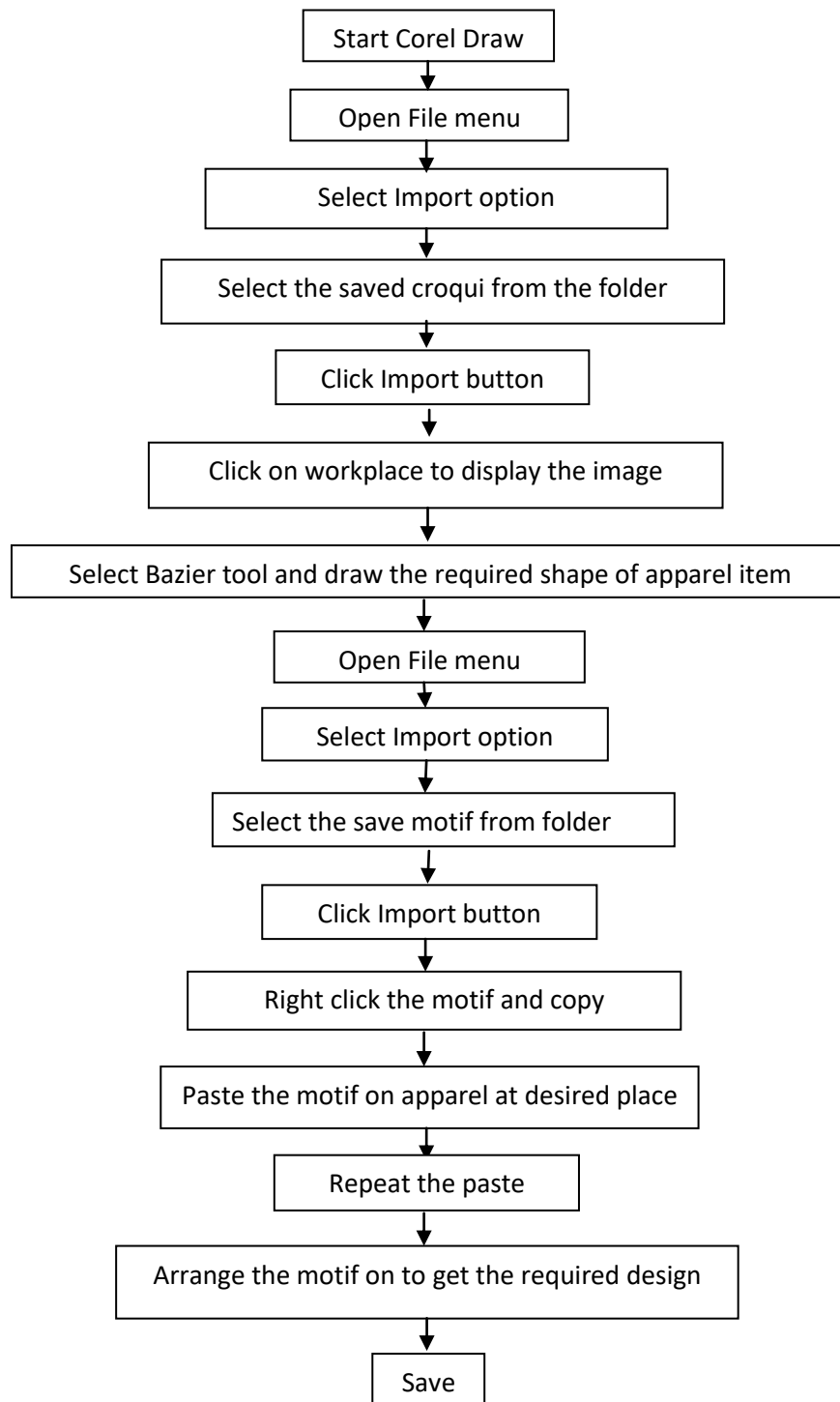


Fig. 8 shows the flow chart used for developing women apparels and adaptation of developed motifs on it.

Adapted ten motifs of molela craft were arranged in six different placements on selected five category of women's apparels. Thus total 30 placements were made for five women apparels.

Plate - 4 shows adapted 10 motifs from selected designs.


Original motif/Design of Molela	Separated motif	Adapted motif
		
		
		

Plate 4: Adapted 10 Motifs

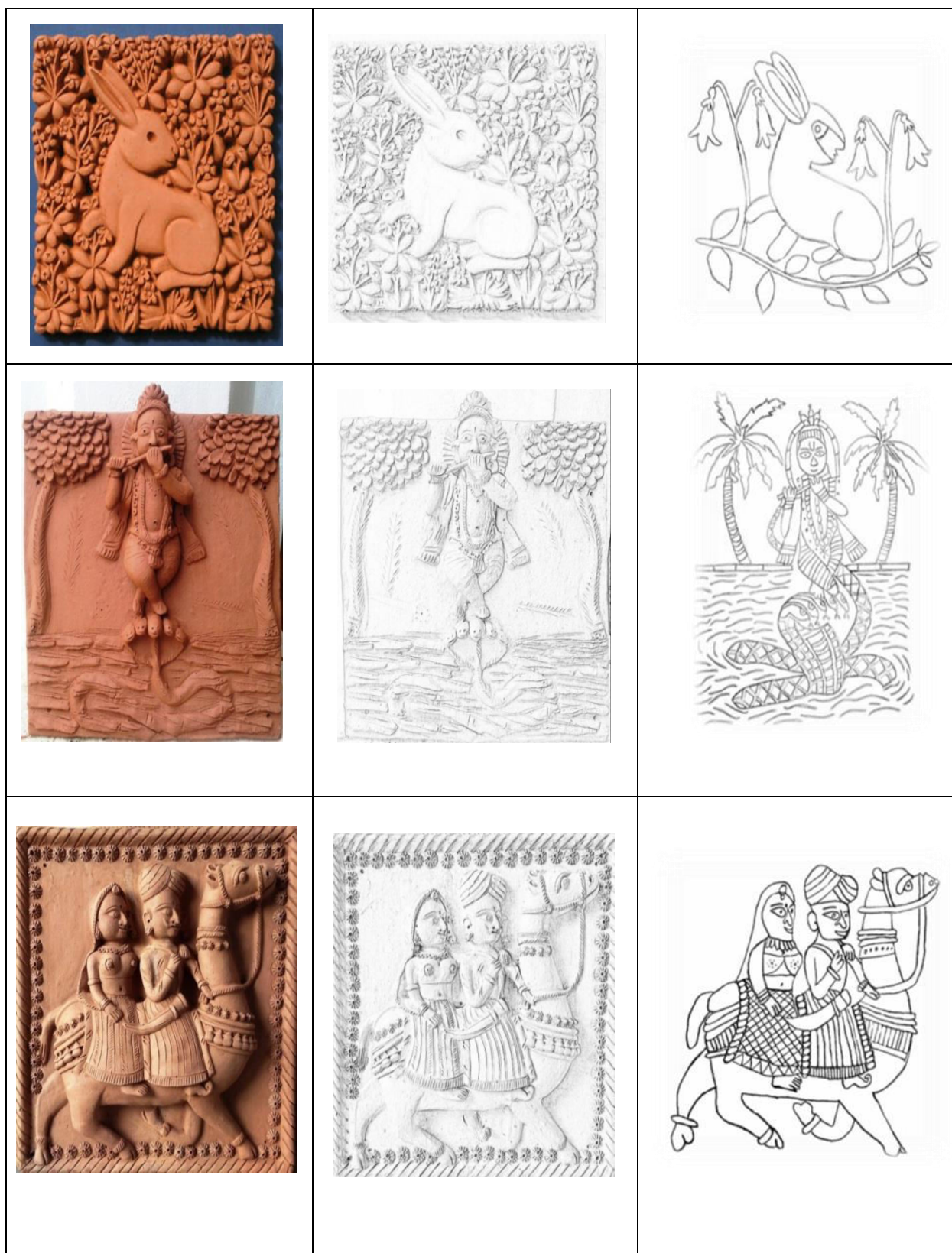


Plate 4: Adapted 10 Motifs



Plate 4: Adapted 10 Motifs

4.3.4 Evaluation of adapted motifs: - Adapted molela motifs were evaluated by 5 experts of Clothing and Textile using rating scale-1 (A) to select two best designs for each end use item (i.e. stole, shrug, kurti, gown and skirt).

4.3.4.1 Evaluation of adapted motif for its suitability for kurti

The various score obtained by judging the suitability of motif for kurti placement and its ranking has been presented in table-7.

Table 7: Percentage distribution of respondents by suitability of motifs for Kurti and its ranking

(n=5)

Motif Code No.	Percentage (%) of respondents	Ranking
4	96	I
6	72	VI
7	88	III
9	72	VI
15	60	X
16	80	IV
19	92	II
23	76	V
27	68	VIII
28	64	IX

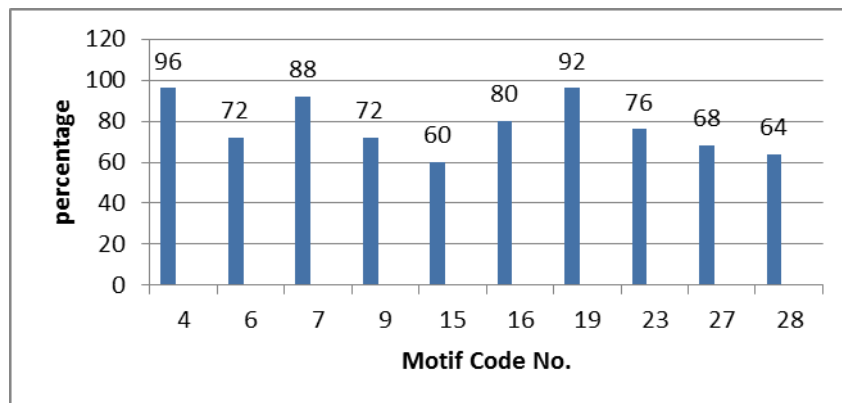


Figure 9: Percentage distribution of respondent by suitability of motif for kurti

Table 7- reveals that motif code number 4 was liked most by 96 per cent of respondents and code number 19 was liked by 92 per cent of respondents in terms of

its suitability for use on kurti. Third rank was obtained by motif code 7 as shown in the table.

4.3.4.2 Evaluation of adapted motif for its suitability for Gown

The various score obtained by judging the suitability of motif for Gown has been converted into percentage. Table-8 depicts the motif code number and its ranking based on the percentage of respondents.

Table 8: Percentage distribution of respondents by suitability of motifs for Gown and its ranking

(n=5)

Motif Code No.	Percentage (%)	Ranking
4	72	VI
6	68	VII
7	64	IX
9	88	I
15	60	X
16	76	IV
19	80	III
23	76	IV
27	84	II
28	68	VII

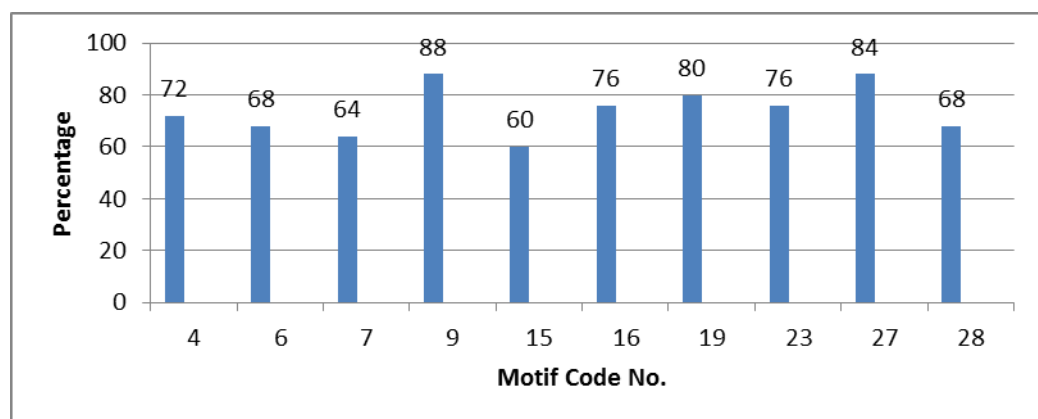


Figure 10: Percentage distribution of respondents by suitability of motifs for Gown

Data in table 8 reveals that motif code no.9 was liked by maximum respondents (88%), and code no. 27 was liked by (84%) while motif code no. 15 was liked by only 60 per cent respondents. Thus, motif code No. 9 and 27 were found most suitable for application on gown as both of them ranked first in order.

4.3.4.3 Evaluation of adapted motif for its suitability for Shrug

Table-9 depicts the motif code number and its ranking based on the percentage of respondents for its suitability for Shrug.

Table 9: Percentage distribution of respondents by suitability of motifs for Shrug and its ranking

(n=5)

Motif Code No.	Percentage (%)	Ranking
4	92	I
6	64	X
7	72	VII
9	72	VII
15	80	V
16	84	IV
19	76	VI
23	92	I
27	68	IX
28	88	III

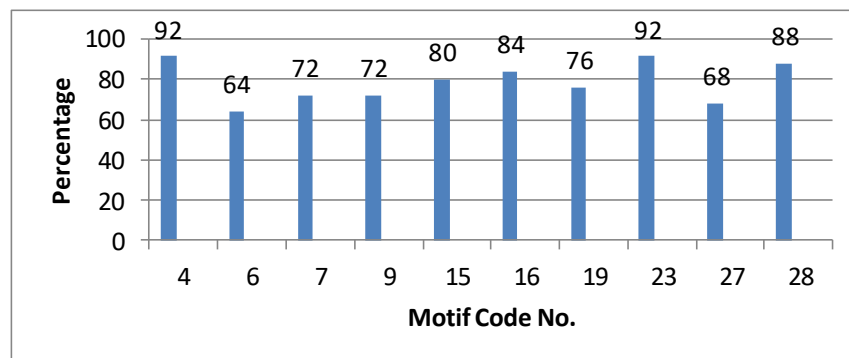


Figure 11: Percentage distribution of respondents by suitability of motifs for Shrug

It was interesting to note that all the adapted motifs secured good scores in terms of suitability for use on shrug and was liked by more than 64 per cent of

respondents. Motifs code No. 4 and 23 were ranked first and found most suitable for designing Shrug. Maximum percentage of respondents (92%) liked motif code no. 4 and 23 followed by motif code 28.

4.3.4.4 Evaluation of adapted motif for its suitability for Skirt

Table 10 depicts the motif code number and its ranking based on the percentage of respondents by suitability for designing skirt.

Table 10: Percentage distribution of respondents by suitability of motifs for Skirt and its ranking

(n=5)

Motif Code No.	Percentage (%)	Ranking
4	60	X
6	88	I
7	72	VI
9	68	VII
15	64	VIII
16	84	III
19	80	IV
23	64	VIII
27	76	V
28	88	I

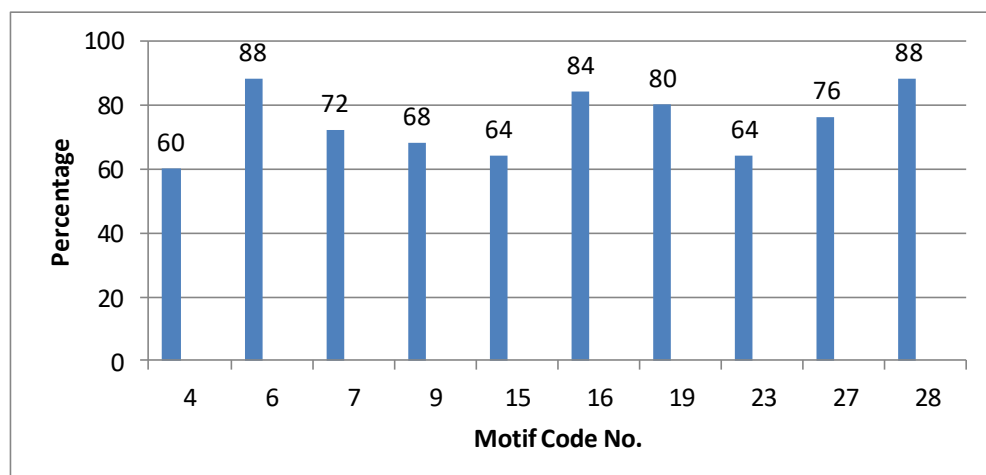


Figure 12: Percentage distribution of respondents by suitability of motifs for Skirt

Motifs code No. 6 and 28 were found most suitable for skirt placement, as both the motif were equally liked by maximum percentage (88%) of the respondents followed by code no. 16 which got third rank in terms of its suitability for designing women apparels.

4.3.4.5 Evaluation of adapted motif for its suitability for Stole

Table-11 depicts the motif code number and its ranking based on the percentage of respondents by suitability for designing stole.

Table 11: Percentage distribution of respondents by suitability of motifs for Stole and its ranking

(n=5)

Motif Code No.	Percentage (%)	Ranking
4	76	VI
6	68	IX
7	92	II
9	80	V
15	84	IV
16	96	I
19	88	III
23	64	VII
27	68	IX
28	72	VII

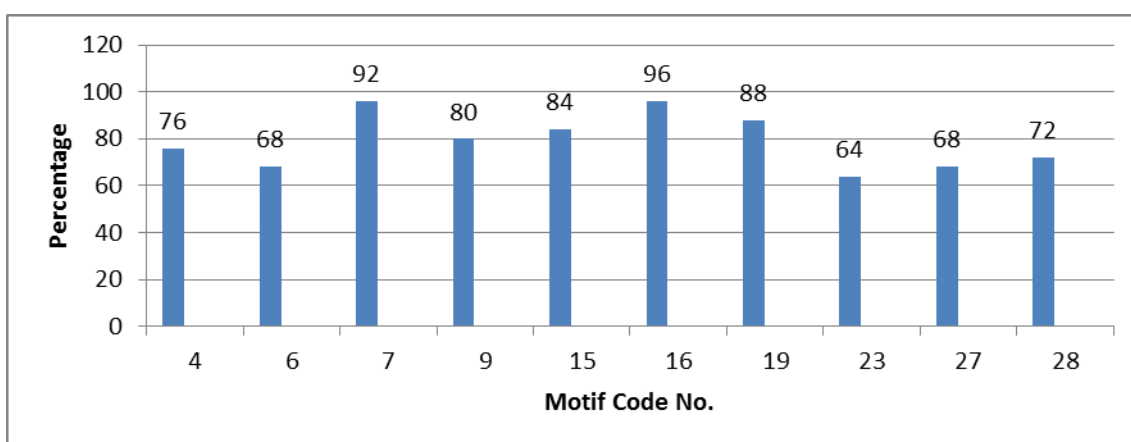


Figure 13: Percentage distribution of respondents by suitability of motifs for Stole

Motifs code No. 7 was liked most and code No. 16 was liked the second most for stole placement as revealed by maximum 96% and 92% respondents respectively while motif code no. 6 and 27 were liked by 68 percent respondents.

Selected two best motifs for designing each apparel

Researcher's efforts in developing new motifs by adaption of molela design were appreciated very much. Esteemed expert opined that the motifs were very creative. Table 12 shows the best two adapted motifs and their relative percentage in terms of their suitability for developing new designs with varied placement on each of the five women apparels.

Table12: Selected motif codes and its acceptance percentage for different Apparels

n=5

Apparel Items	Selected Motif codes number	Acceptance % of respondents
Kurti	4	96%
	19	92%
Gown	9	88%
	27	84%
Shrug	4	92%
	23	92%
Skirt	6	88%
	28	88%
Stole	7	92%
	16	96%

Data in table 12 reveals the selected motif codes and its percentage for different women apparel items. Motif code no. 4 and. 19 were selected for kurti by 96 per cent and 92 per cent of the respondents. Regarding the appropriateness of the motifs for Gown, motif code no 9 and. 27 were selected as responded by 88 percent and 84 percent of the respondents. Both motif code no 4 and 23were selected for shrug by 92 percent respondents and 88 percent of the respondents and motif code no 6 and 28 for skirt. Motif code no. 7 and. 16 were selected for stole by 92 per cent and 96 per cent of the respondents.

4.3.5 Development of Stencils

The traditional techniques of stencil printing was selected to develop women apparels using adapted designs. The stencils of all the thirty selected motifs were prepared by the researcher herself. Stencils for making designs were made of paper by applying wax onto it. Stencils were formed by removing sections from material (paper) in the form of a motif.

4.4 DEVELOPMENT AND EVALUATION OF DESIGNED WOMEN APPARELS

4.4.1 Designing of women apparels with different placements

Adapted ten motifs of molela craft were arranged in six different placements on selected five category of women's apparels. Thus total 30 placements were made for five women apparels.

Plate 5 - shows details of women apparels with design placement.



Placement No. 1 with motif
code no. 4 and 19 (kurti)



Placement No. 2 with motif
code no. 4 (kurti)



Placement No. 3 with motif
code no. 19 (kurti)

Plate 5: Women apparels placement (A)



Placement No. 4 with motif
code no. 4 and 19 (kurti)

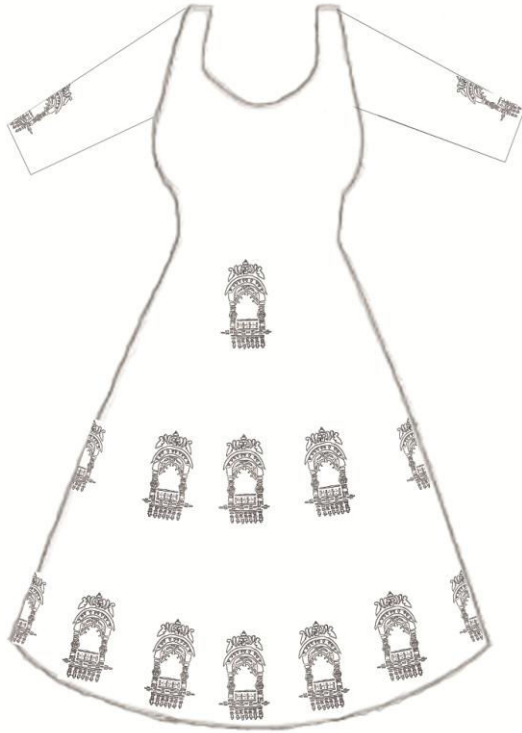


Placement No. 5 with motif
code no. 4 and 19 (kurti)

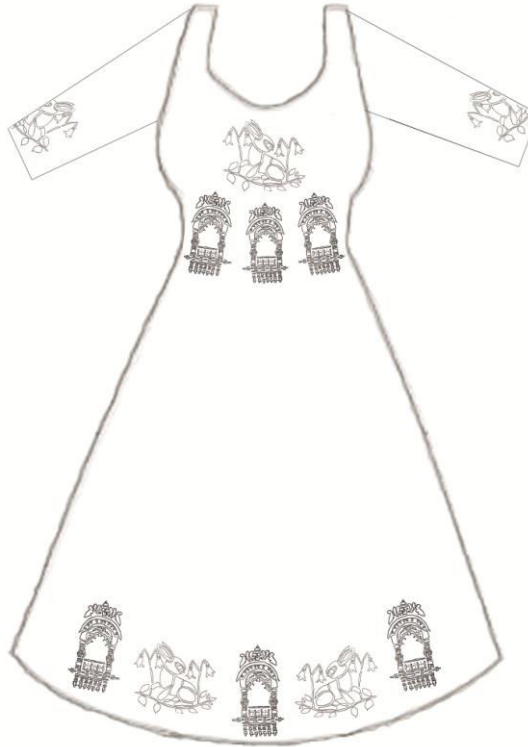


Placement No. 6 with motif
code no. 4 and 19 (kurti)

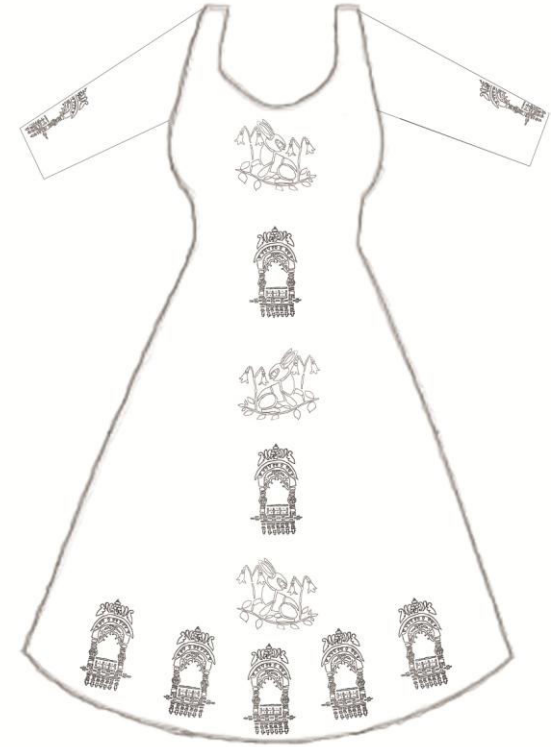
Plate 5: Women apparels placement (B)



Placement No. 1 with motif
code no. 27 (Gown)

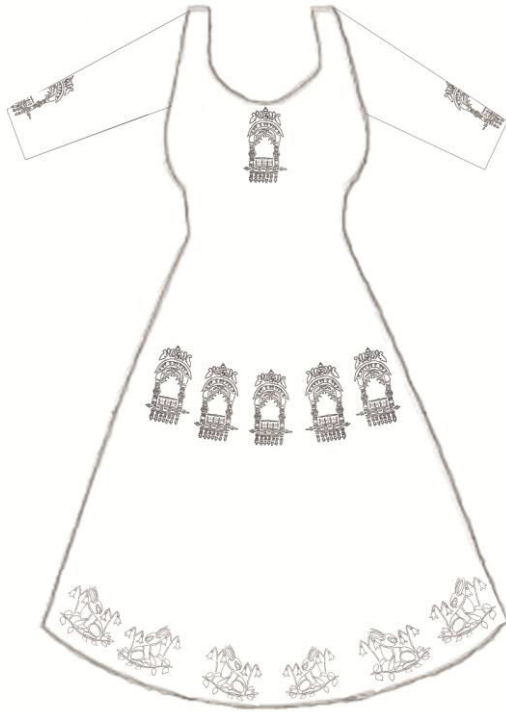


Placement No. 2 with motif
code no. 9 and 27 (Gown)

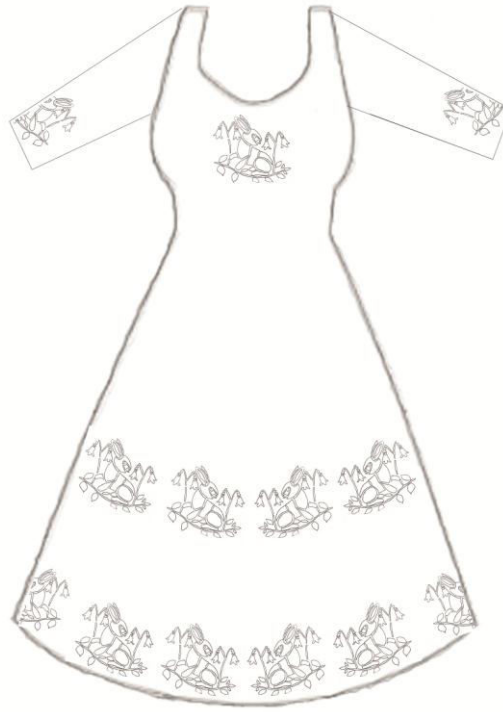


Placement No. 3 with motif
code no. 9 and 27 (Gown)

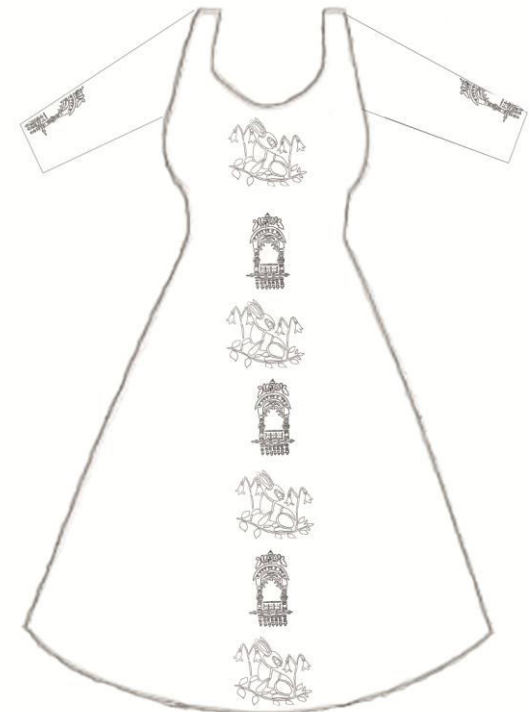
Plate 5: Women apparels placement (C)



Placement No. 4 with motif
code no. 9 and 27 (Gown)

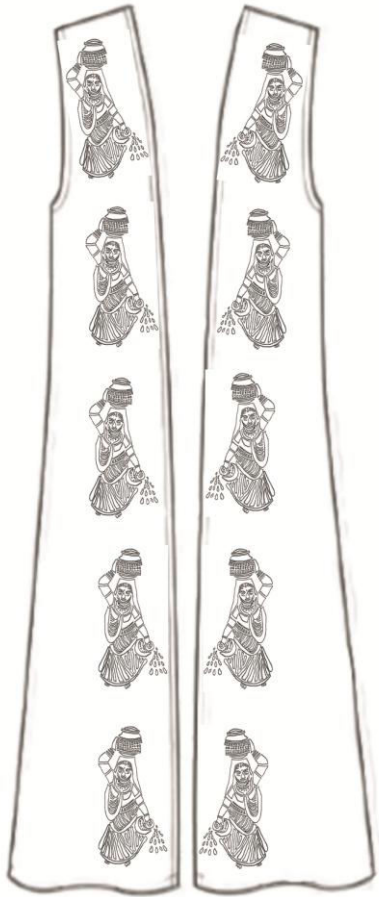


Placement No. 5 with motif
code no. 9 (Gown)



Placement No. 6 with motif
code no. 9 and 27 (Gown)

Plate 5: Women apparels placement (D)



Placement No. 1 with motif
code no. 4 (Shrug)



Placement No. 2 with motif
code no. 4 and 23 (Shrug)

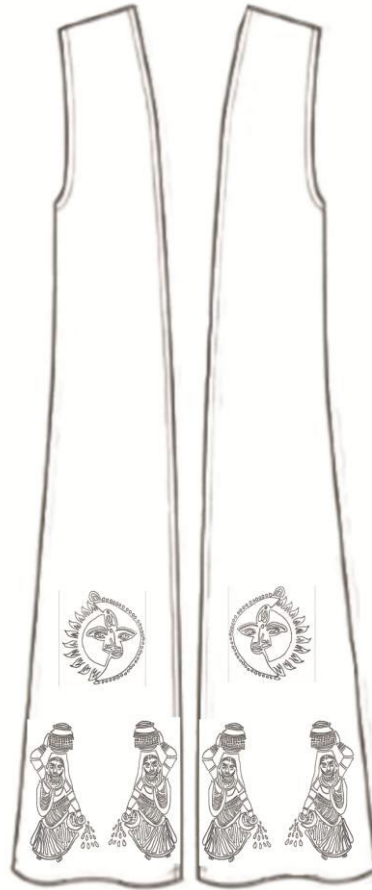


Placement No. 3 with motif
code no. 23 (Shrug)

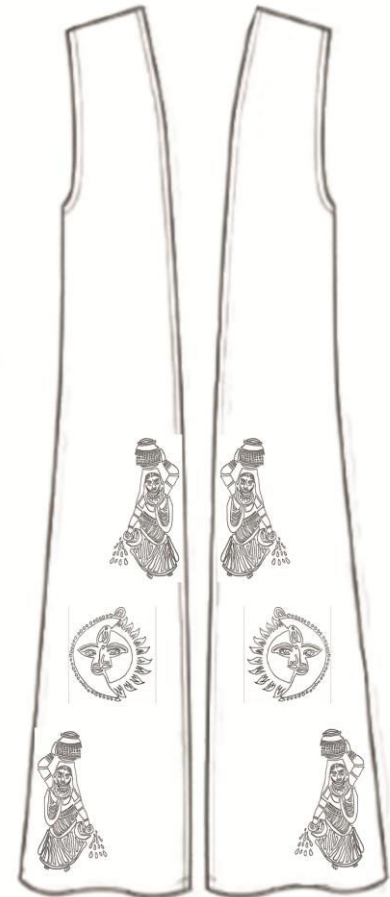
Plate 5: Women apparels placement (E)



Placement No. 4 with motif
code no. 4 and 23 (Shrug)



Placement No. 5 with motif
code no. 4 and 23 (Shrug)



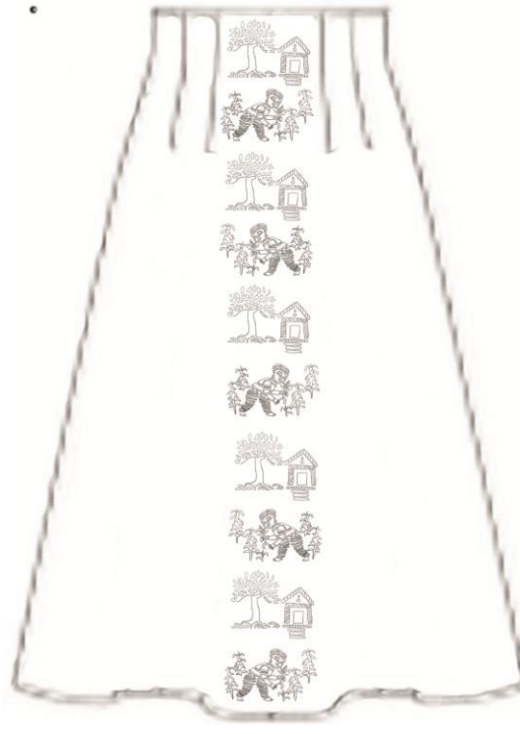
Placement No. 6 with motif
code no. 4 and 23 (Shrug)

Plate 5: Women apparels placement (F)



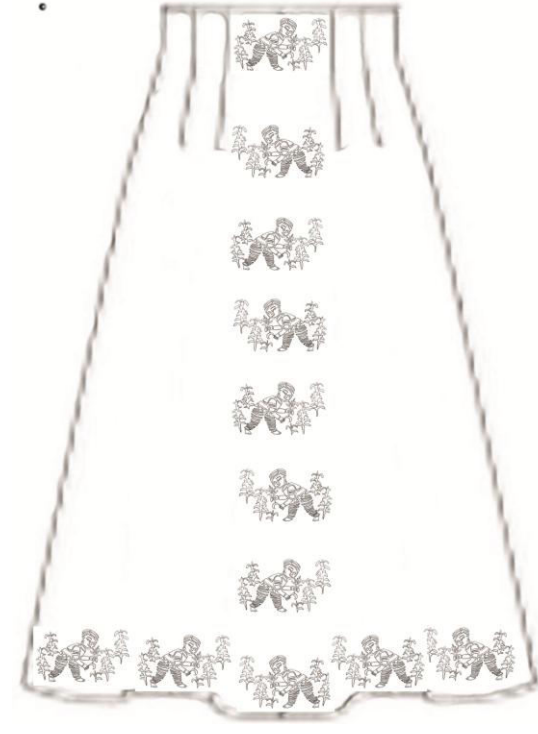
Placement No. 4 with motif

code no. 28 (Skirt)



Placement No. 5 with motif

code no. 6 and 28 (Skirt)



Placement No. 6 with motif

code no. 6 (Skirt)

Plate 5: Women apparels placement (H)



Placement No. 1 with motif
code no. 6 and 28 (Skirt)

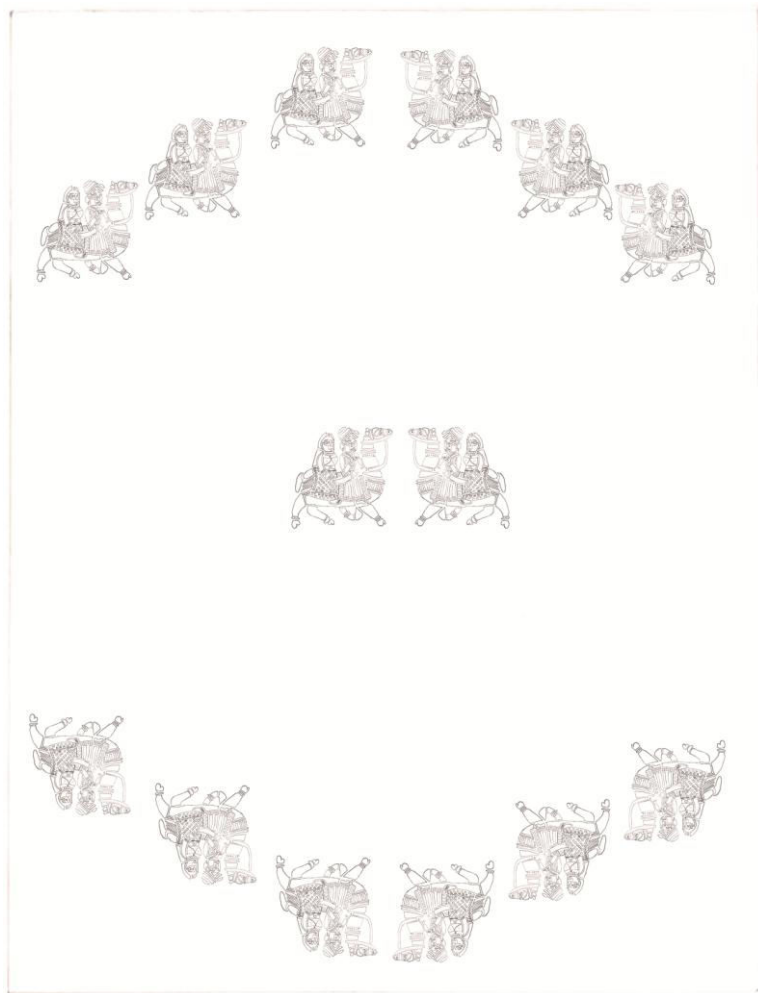


Placement No. 2 with motif
code no. 6 and 28 (Skirt)



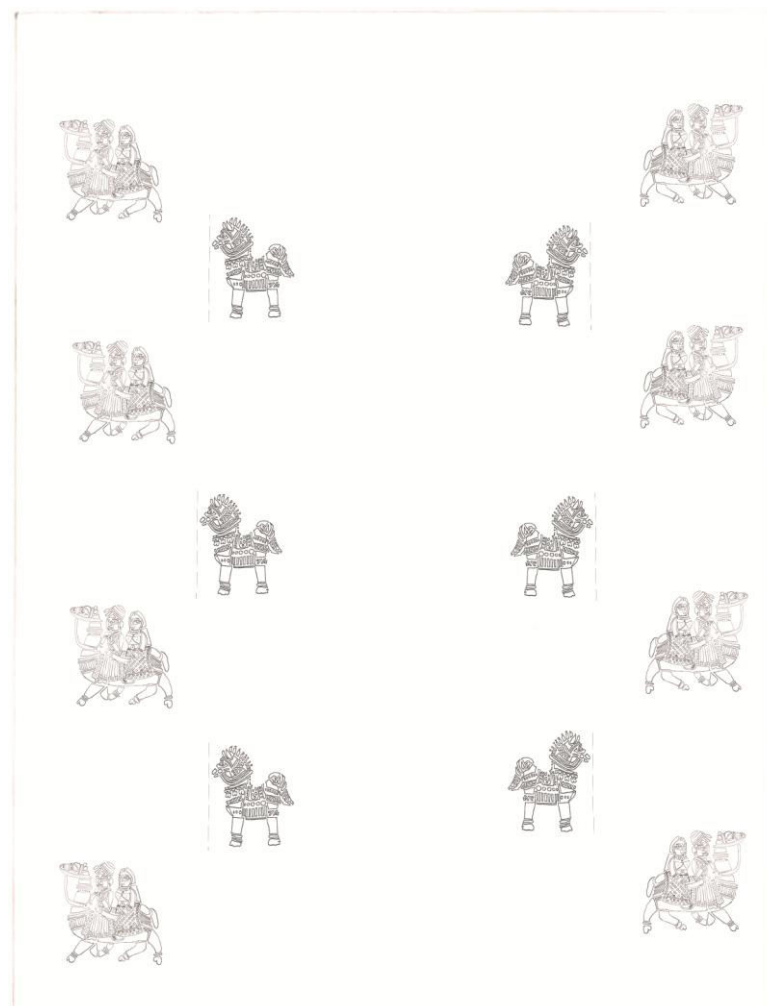
Placement No. 3 with motif
code no. 6 and 28 (Skirt)

Plate 5: Women apparels placement (G)



Placement No. 1 with motif

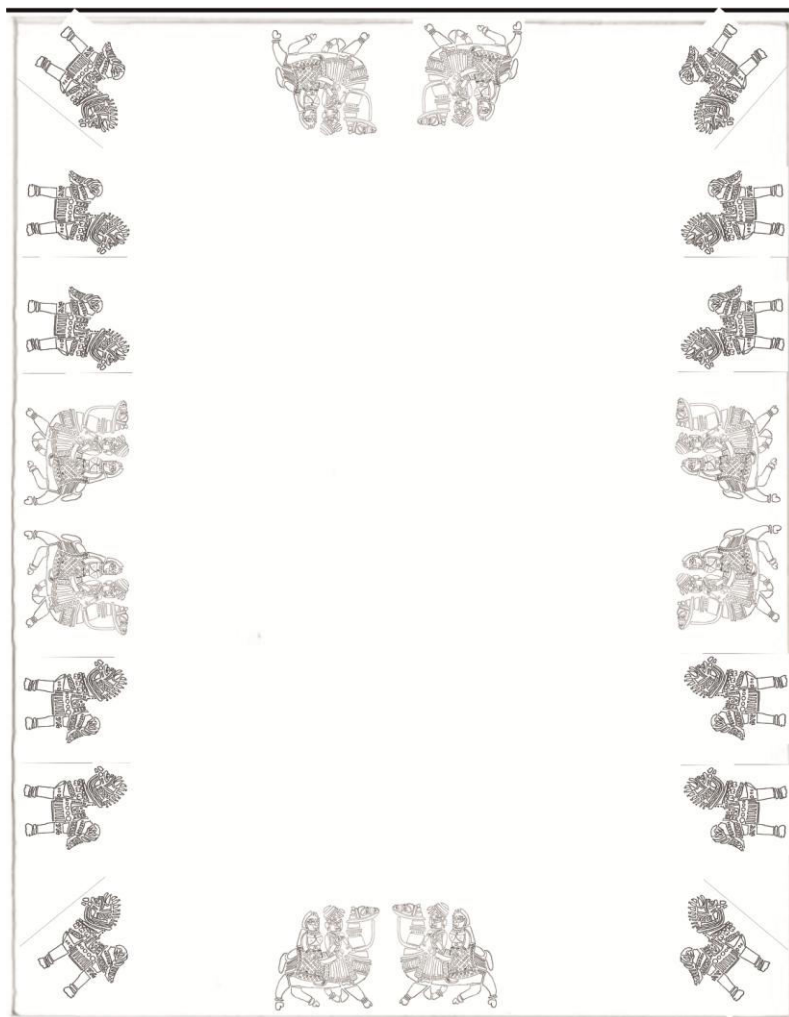
code no. 16 (Stole)



Placement No. 2 with motif

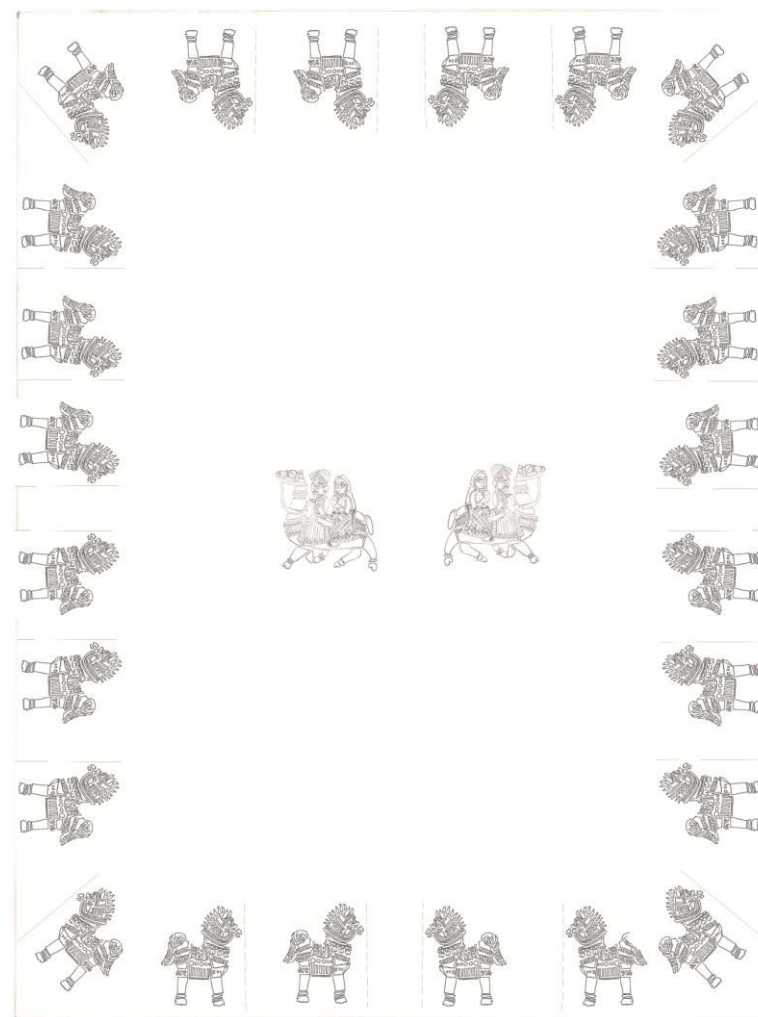
code no. 7 and 16 (Stole)

Plate 5: Women apparels placement (I)



Placement No. 3 with motif

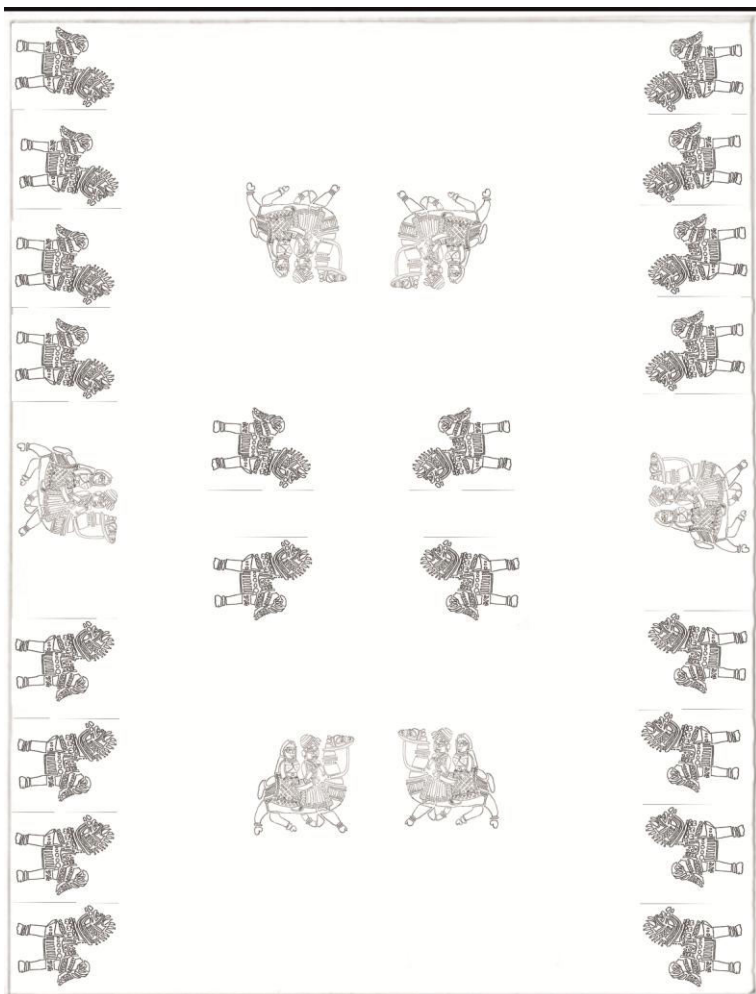
code no. 7 and 16 (Stole)



Placement No. 4 with motif

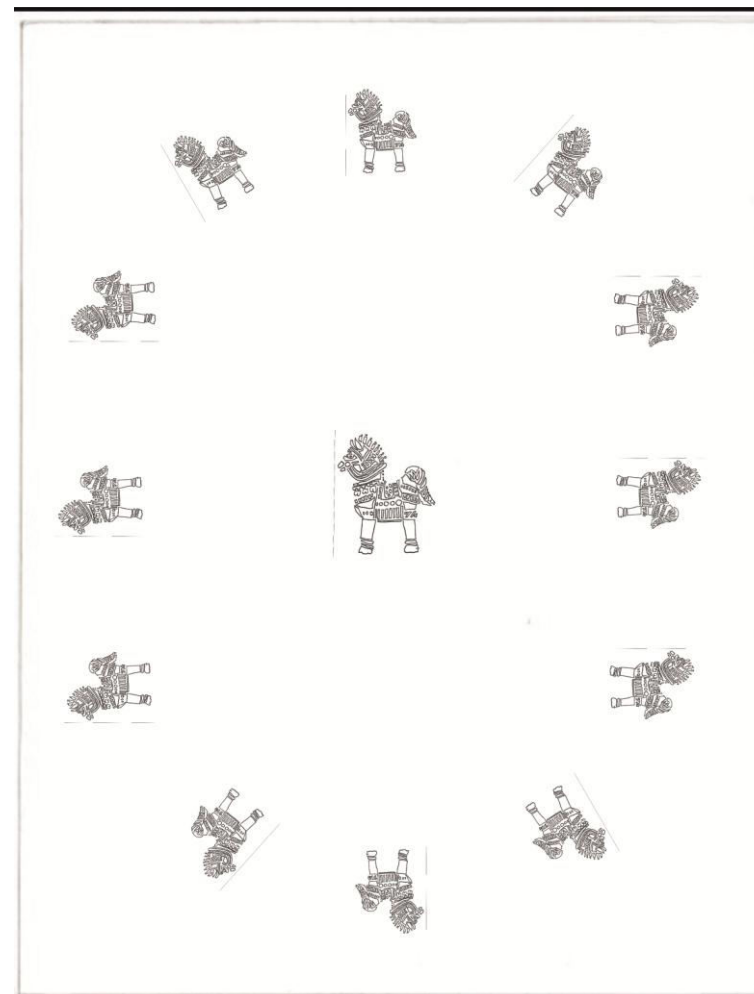
code no. 7 and 16 (Stole)

Plate 5: Women apparels placement (J)



Placement No. 5 with motif

code no. 7 and 16 (Stole)



Placement No. 6 with motif

code no. 7 (Stole)

Plate 5: Women apparels placement (K)

4.4.2 Evaluation of designed women apparels

The selected two motifs in each women apparel item category were used to design six different placements for each apparel item on computer using Corel Draw software and these were evaluated by same panel of experts to select one best placement for each category of women apparels per the selected criteria's i.e. suitability of direction of motif, suitability of placement of motif and overall appearance. Scores and percentage of each design were calculated and ranks were given.

4.4.2.1 Evaluation of designed women kurti –The scores and percentage of designed kurti with six different placements have been presented in Table-13.

Table 13: Scores and Percentage distribution of respondents by suitability of design for kurti

(n=5)

Designed kurti Code No.	Score	% of respondents
K1	73	97.33
K 2	66	88
K 3	69	92
K 4	64	85.33
K 5	61	81.33
K 6	60	80

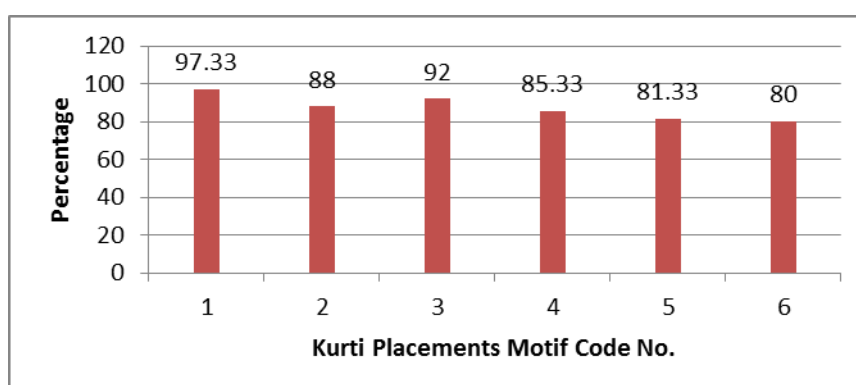


Figure 14: Percentage distribution of respondent by suitability of design for kurti

Finding of the design of kurtis in terms of ratings obtained on selected parameters revealed that design code no K1 got 1st rank (97.33%) followed by design code 3as shown in the table 13 and figure 14.

4.4.2.2 Evaluation of designed women gowns

Data in Table 14 depicts the score and percentage of second women apparel, i.e. gown designed with six different placements of selected two motifs.

Table 14: Scores and Percentage distribution of respondents by suitability of design for gown

(n=5)

Designed gown Code No.	Score	% of respondents
G1	63	84
G2	64	85.33
G3	60	80
G4	70	93.33
G5	59	78.66
G6	68	90.66

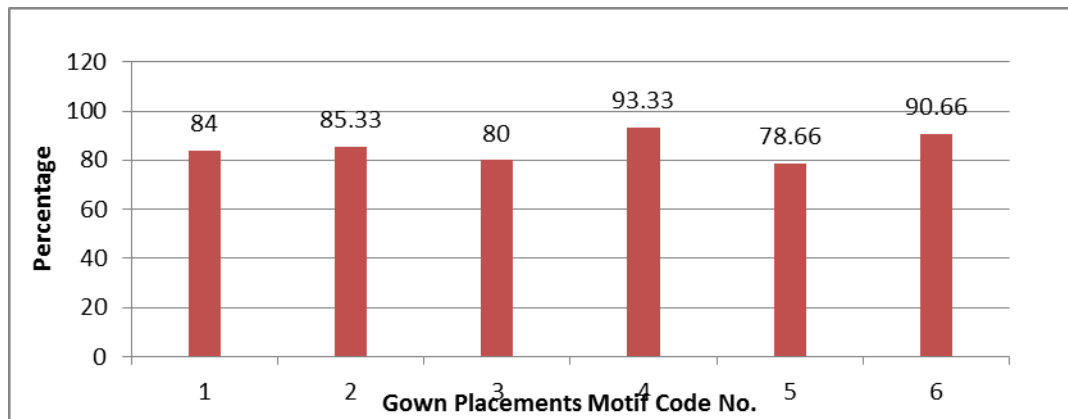


Figure 15: Percentage distribution of respondent by suitability of design for gown

It can be seen clearly that on the basis of selected parameters, design code no G4 got 1st rank (93.33%) followed by design code no G 6 which obtained second rank.

4.4.2.3 Evaluation of designed women Shrugs

Data in Table 15 depicts the score and percentage of third women apparel, i.e. shrug designed with six different placements of selected two motifs.

Table 15: Scores and Percentage distribution of respondents by suitability of design for shrugs

(n=5)

Designed Shrug Code No.	Score	% of respondents
SH1	61	81.33
SH2	72	96
SH3	69	92
SH4	66	88
SH5	65	86.66
SH6	63	84

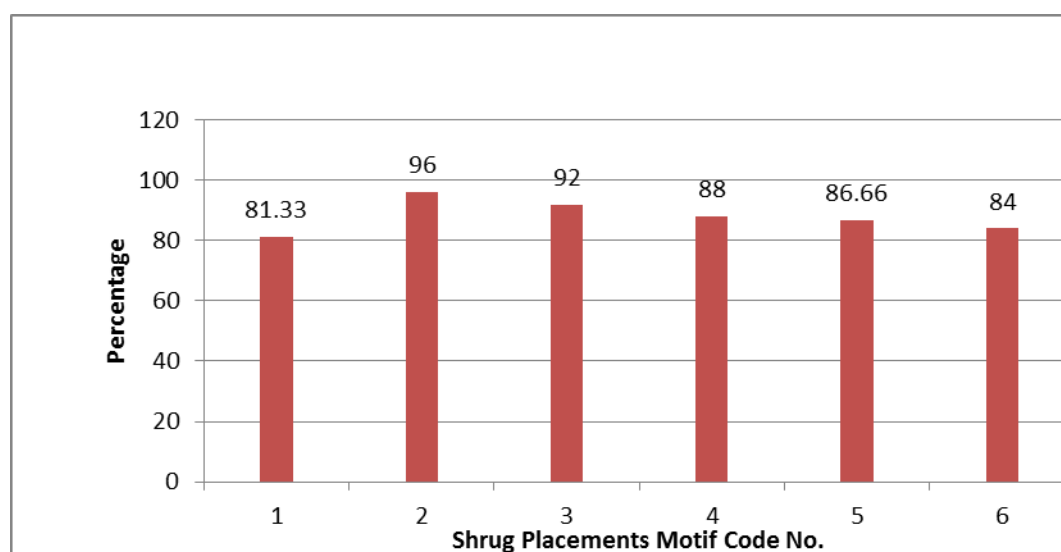


Figure 16: Percentage distribution of respondent by suitability of design for shrug

Data reveals that based on specific parameters for evaluation of designed shrugs, design code no.SH 2 got 1st rank (96%).All the designs of shrugs scored above 60 and highly liked by the judges.

4.4.2.4 Evaluation of designed women skirts

Table-16 and fig 17 - depicts the score of six designed skirts in terms of suitability based on the ratings of judges.

Table 16: Scores and Percentage distribution of respondents by suitability of design for skirts

(n=5)

Designed Skirt Code No.	Score	% of respondents
SK1	65	86.66
SK2	66	88
SK3	70	93.33
SK4	57	76
SK5	60	80
SK6	55	73.33

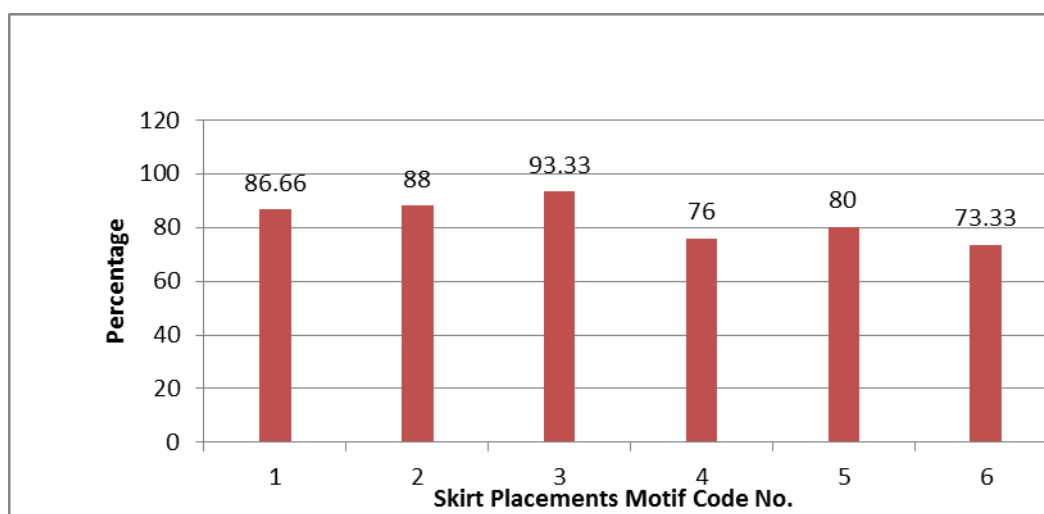


Figure 17: Percentage distribution of respondent by suitability of motif for skirt

Among six different designs of Skirt developed by the researcher, code no SK 3 was liked very much by the judges as shown by maximum score and 1st rank it obtained.

4.4.2.5 Evaluation of designed women skirts

Data in Table 17 depicts the score and percentage of fifth women apparel, i.e. stole designed with six different placements of selected two motifs.

Table 17: Scores and Percentage distribution of respondents by suitability of design for stole

(n=5)

Designed Stole Code No.	Score	% of respondents
ST1	64	85.33
ST 2	66	88
ST3	69	92
ST4	61	81.33
ST5	72	96
ST6	62	82.66

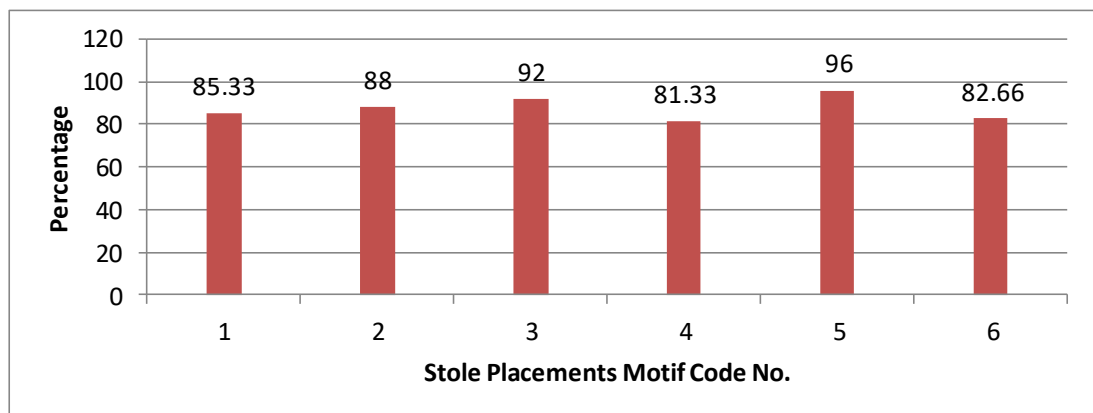


Figure 18: Percentage distribution of respondent by suitability of design for stole

Design code no ST5 got 1st rank (96%) for Stole in terms of rating obtained on selected parameters.

4.5 DEVELOPMENT OF DESIGNER WOMEN APPAREL USING STENCIL PRINTING

One best design scoring highest rating by judges was further used by researcher to develop each woman's apparel with the help of stencil printing using fabric colours. Soft cotton material with good drapability was selected for developing apparel items from local market.

4.5.1 Construction of women apparel

Researcher herself developed one kurti, one Gown, one Shrug, one skirt and one stole. These women apparel were embellished with hand embroidery also using anchor embroidery threads.

4.5.2 Finishing of women apparel – Steam ironing was done on women apparel to give the final finishing.

Plate-6 shows the materials and small tools used in developing women apparels.



Cotton fabric



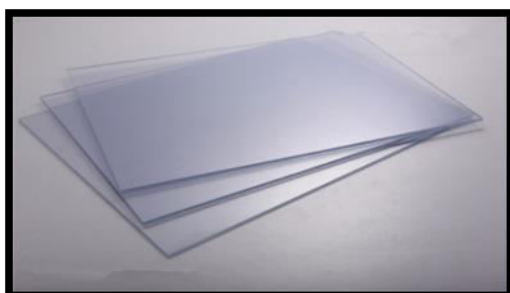
Sewing kit



Fabric colours



Brush



Transparency sheet



Cutter



Marker



Embroidery thread

Plate 6: Materials & Tools used in developing women apparels



Stencil printing on Kurti



Stencil printing on Gown



Stencil printing on Shrug



Stencil printing on Skirt

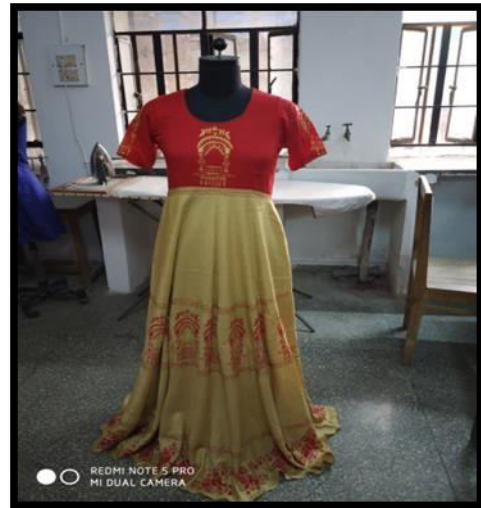


Stencil printing on Stole

Plate 7: Stencil printing on fabric for women apparel



WA1-kurti



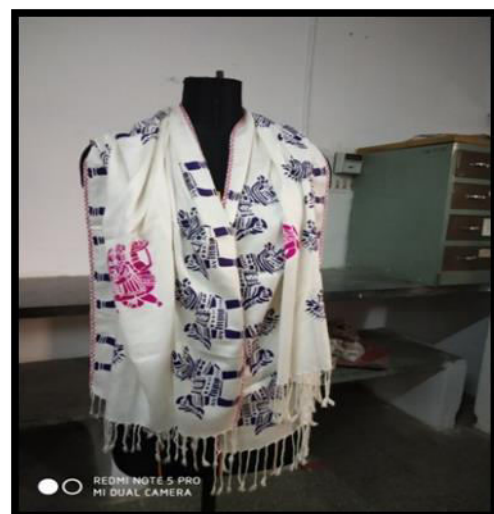
WA2-gown



WA3-shrug



WA4 -Skirt



WA5-Stole

Plate 8: Developed five women apparels with selected design

4.6 ASSESSMENT OF CONSUMER ACCEPTABILITY AND COST OF DEVELOPED WOMEN APPARELS

Once the printing was completed on the women apparel, these women apparel were evaluated by 30 women from two colleges nearby University campus from Udaipur city to find their relative rating and consumer acceptability.

4.6.1 Acceptability of the developed women apparel

In order to assess the acceptability of the stencil printed women apparel, a rating scale was developed based on five point continuum and was given to the respondents.

Table 18: Coding of women apparels

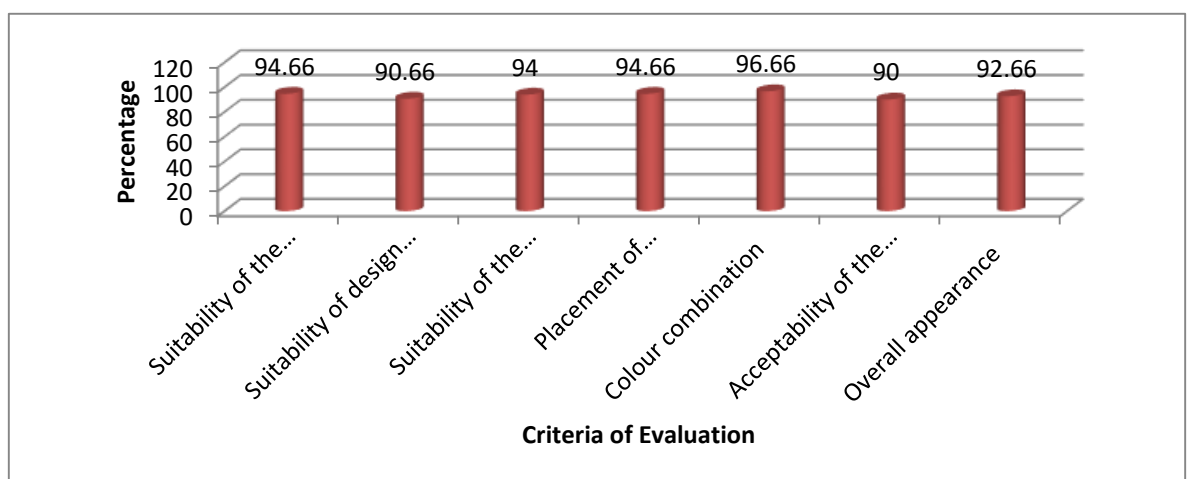
Code No.	Women apparels
WA1	Women apparel – 1 (Kurti)
WA2	Women apparel – 2 (Gown)
WA3	Women apparel – 3 (Shrug)
WA4	Women apparel – 4 (Skirt)
WA5	Women apparel – 5 (Stole)

The responses derived by respondents for each women apparel were coded and presented in tables below. Table 19 depicts the acceptability score obtained by women apparel WA1.

Table 19: Acceptability score ofWA1 on the basis of relative ranking**n=30**

S. No.	Criteria of Evaluation	Score	Percentage (%)
1	Suitability of the fabric used	142	94.66
2	Suitability of design for stencil printing	136	90.66
3	Suitability of the design for women apparel	141	94
4	Placement of developed designs on women apparels	142	94.66
5	Colour combination	145	96.66
6	Acceptability of the concept	135	90
7	Overall appearance	139	92.66
	Total score obtained	980	
	Acceptability Index	93.33	

Table 4.19 shows that all the respondents gave maximum score 980 out of 1050. Acceptability index of women apparel WA1 was found 93.33% .*Acceptability of the concept* of women apparel WA1 got maximum score of 145. *Suitability of the fabric used, Suitability of design for stencil printing, Suitability of the design for women apparel, Placement of developed designs on women apparels, Colour combination and Overall appearance* selected got 142, 136, 141, 142, 145 and 139 scores respectively out of total score of 150.

**Figure 19: Score of apparel WA1 on the basis of selected criteria**



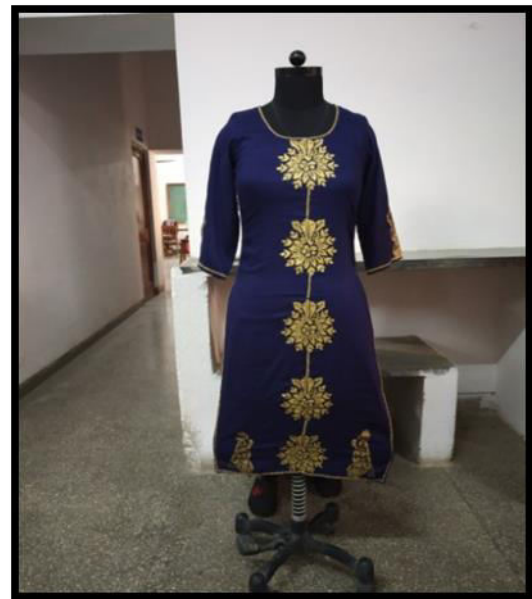
Motif Code No. 4



Motif Code No. 19



Placement No. 1 (Kurti)



Developed women apparel WA1

Plate 9: Value added Women Apparel WA1-kurti with motif code no 4 and 19.

Table 20 depicts the acceptability score obtained by women apparel WA2-

Table 20: Acceptability score of Woman apparel WA2 on the basis of relative ranking

(n=30)

S. No.	Criteria of Evaluation	Score	Percentage
1	Suitability of the fabric used	137	91.33
2	Suitability of design for stencil printing	134	89.33
3	Suitability of the design for women apparel	135	90
4	Placement of developed designs on women apparels	128	85.33
5	Colour combination	135	90
6	Acceptability of the concept	133	88.66
7	Overall appearance	131	87.33
	Total score obtained	933	
	Acceptability Index	88.85	

Table 20 shows that Women apparel WA2 got score 933 out of 1050. Acceptability Index of women apparel WA2 was found 88.85% by the respondents. *Suitability of the fabric used* of women apparel WA2 got maximum score of 137. *Suitability of design for stencil printing*, *Suitability of the design for women apparel*, *Placement of developed designs on women apparels*, *Colour combination*, *Acceptability of the concept* and *Overall appearance* selected got 134, 135, 128, 135, 133 and 131 scores respectively out of 150 as shown in the above table.

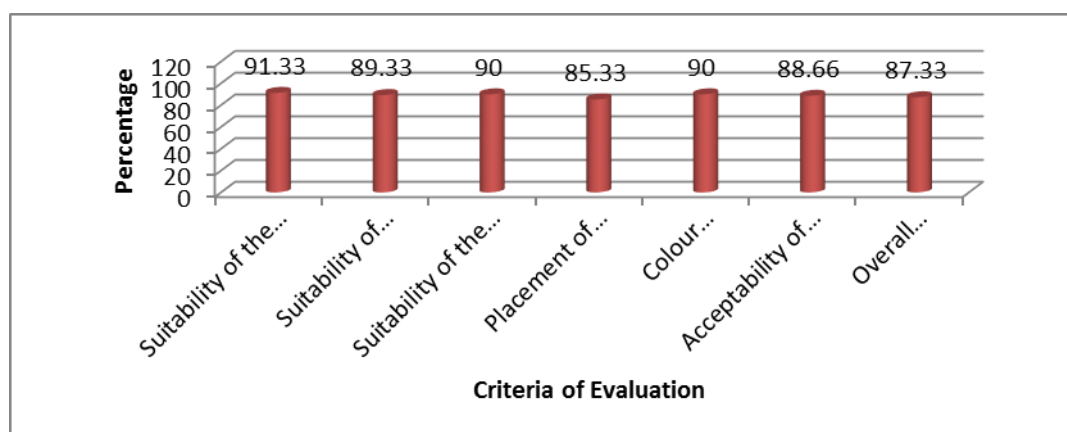


Figure 20: Score of women apparel WA2 on the basis of selected criteria



Motif Code No. 9



Motif Code No. 27



Placement No. 4 (Gown)



Developed women apparel WA2

Plate 10: Value added Women Apparel WA2

Table 21 depicts the acceptability score obtained by women apparel WA3.

Table 21: Acceptability score of Woman apparel WA3 on the basis of relative ranking

n=30

S. No.	Criteria of Evaluation	Score	Percentage
1	Suitability of the fabric used	133	88.66
2	Suitability of design for stencil printing	133	88.66
3	Suitability of the design for women apparel	138	92
4	Placement of developed designs on women apparels	135	90
5	Colour combination	140	93.33
6	Acceptability of the concept	135	90
7	Overall appearance	138	92
	Total score obtained	952	
	Acceptability Index	90.66	

Table 21 shows that Women apparel WA3 got score 952 out of 1050. Women apparel WA3 was rated (90.66%) by the respondents. *Colour combination* of women apparel WA3 got maximum score of 140. *Suitability of the fabric used*, *Suitability of design for stencil printing*, *Suitability of the design for women apparel*, *Placement of developed designs on women apparels*, *Acceptability of the concept* and *Overall appearance* selected got 133, 133, 138, 135, 135 and 138 respectively out of total score 150.

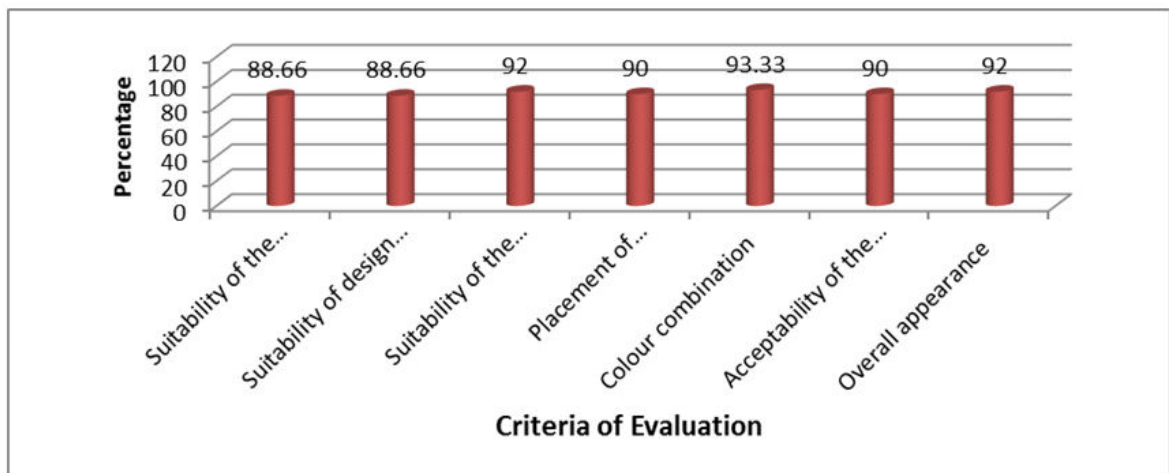


Figure 21: Score of women apparel WA3 on the basis of selected criteria



Motif Code No. 4



Motif Code No. 23



Placement No. 2 (Shrug)



Developed women apparel WA3

Plate 11: Value added Women Apparel WA3

Table 22 depicts the acceptability score obtained by women apparel WA4

Table 22: Acceptability score obtained by Woman apparel WA4 on the basis of relative ranking

(n=30)

S. No.	Criteria of Evaluation	Score	Percentage
1	Suitability of the fabric used	129	86
2	Suitability of design for stencil printing	126	84
3	Suitability of the design for women apparel	132	88
4	Placement of developed designs on women apparels	128	85.33
5	Colour combination	130	86.33
6	Acceptability of the concept	130	86.33
7	Overall appearance	129	86
	Total score obtained	904	
	Acceptability Index	86.09	

Table 22 shows that Women apparel WA4 got score 904 out of 1050. Acceptability Index of women apparel WA4 was rated 86.09% by the respondents. *Suitability of the design for women apparel WA4* got maximum score of 132. On parameters of *Suitability of the fabric used*, *Suitability of design for stencil printing*, *Placement of developed designs on women apparels*, *Colour combination*, *Acceptability of the concept* and *Overall appearance* got 129, 126, 128, 130, 130 and 129 scores respectively out of 150 .

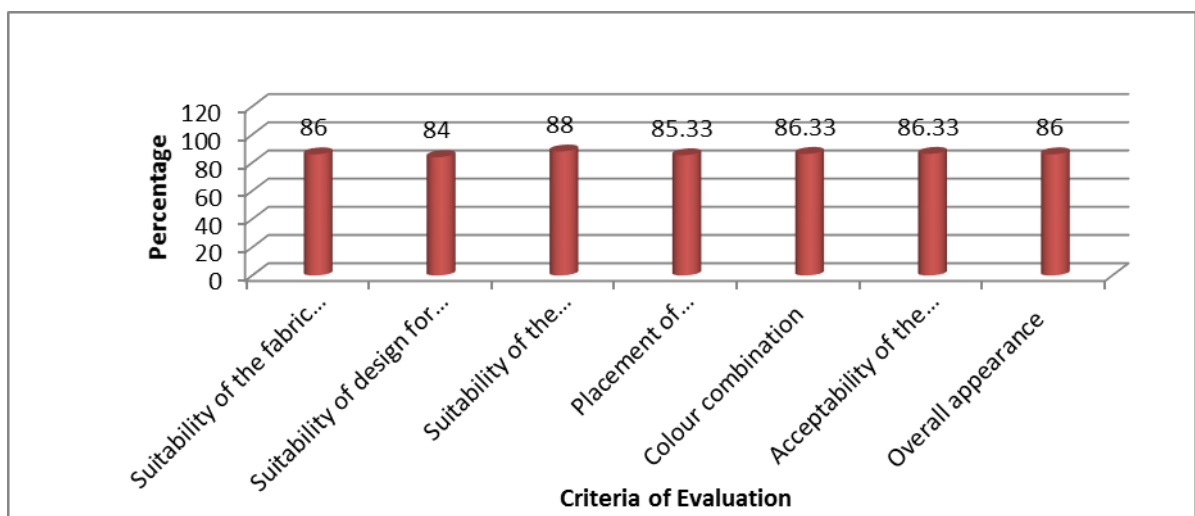


Figure 22: Score of women apparel WA4 on the basis of selected criteria



Motif Code No. 6 and 28



Placement No. 3 (Skirt)



Developed women apparel WA4

Plate 12: Value added Women Apparel WA4

Table 23 depicts the acceptability score obtained by women apparel WA5

Table 23: Acceptability score of Woman apparel WA5 on the basis of relative ranking

(n=30)

S. No.	Criteria of Evaluation	Score	Percentage
1	Suitability of the fabric used	139	92.66
2	Suitability of design for stencil printing	140	93.33
3	Suitability of the design for women apparel	137	91.33
4	Placement of developed designs on women apparels	131	87.33
5	Colour combination	138	92
6	Acceptability of the concept	133	88.66
7	Overall appearance	136	90.66
	Total score obtained	954	
	Acceptability Index	90.85	

Table 23 shows that Women apparel WA5 got score 954 out of 1050. Acceptability Index of women apparel WA5 was rated 90.85% by the respondents. *Suitability of design for stencil printing* of women apparel WA4 got maximum score of 140. *Suitability of the fabric used*, *Suitability of the design for women apparel* *Placement of developed designs on women apparels*, *Colour combination*, *Acceptability of the concept* and *Overall appearance* selected got 139, 137, 131, 138, 133 and 136 scores respectively out of 150.

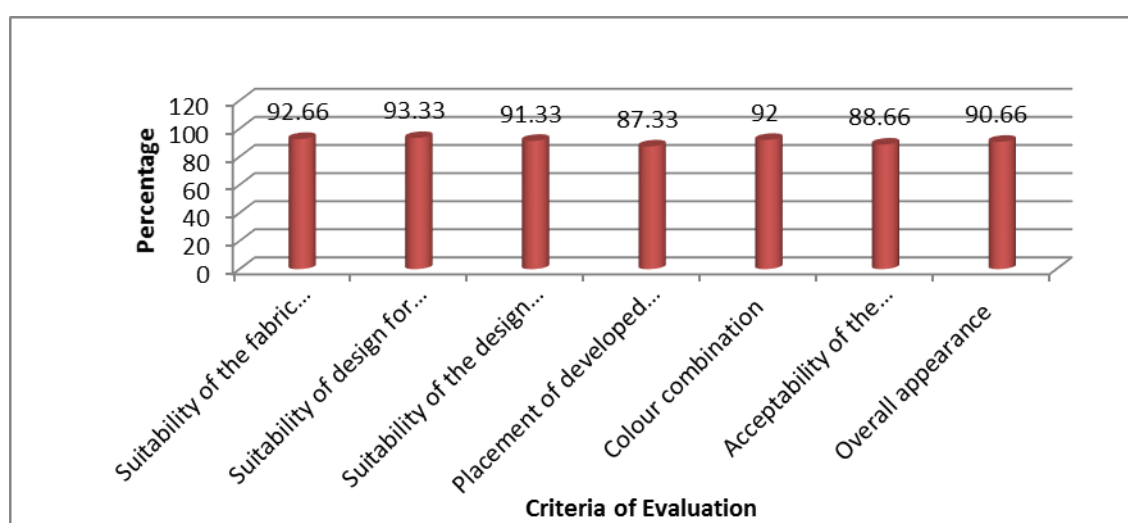


Figure 23: Score of women apparel WA5 on the basis of selected criteria



Motif Code No. 16



Motif Code No. 7



Placement No. 5 (Shrug)



Developed women apparel WA5

Plate 13: Value added Women Apparel WA5

Table 24: Acceptability score of all the five women apparels on the basis of relative ranking

S. No.	Criteria of Evaluation	Score				
		WA1	WA2	WA3	WA4	WA5
1	Suitability of the fabric used	142	137	133	129	139
2	Suitability of design for stencil printing	136	134	133	126	140
3	Suitability of the design for women apparel	141	135	138	132	137
4	Placement of developed designs on women apparels	142	128	135	128	131
5	Colour combination	145	135	140	130	138
6	Acceptability of the concept	135	133	135	130	133
7	Overall appearance	139	131	138	129	136
	Total score obtained	980	933	952	904	954
	Acceptability Index	93.33%	88.85%	90.66%	86.09%	90.85%

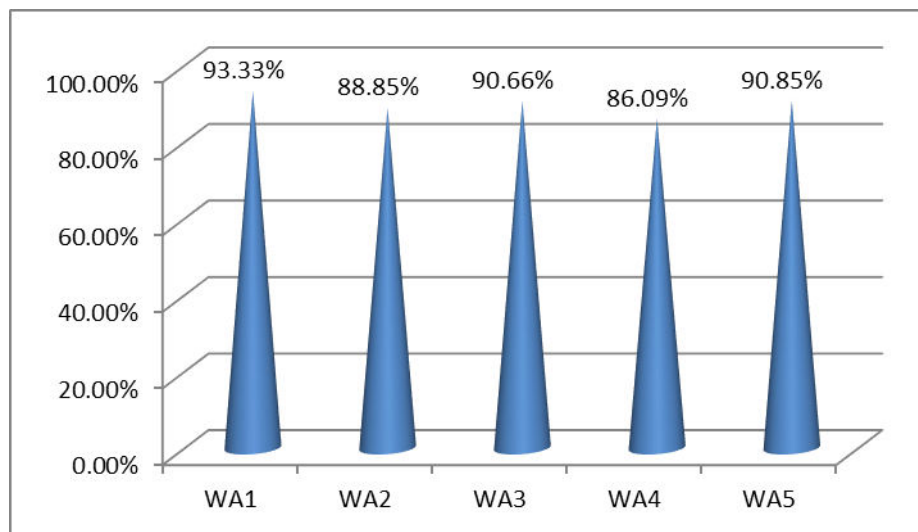


Figure 24: Acceptability score of the developed women apparels

Researcher was curious to find out which women apparel got maximum score. It was interesting to record that women apparel WA1, WA5, WA3, WA2, WA4 got 1st, 2nd, 3rd, 4th and 5th ranks with the score 980, 954, 952, 933 and 904 respectively.

The researcher tried to collect information about maximum score obtained by selected criteria of acceptability of women apparels. On first criteria, women apparel

WA1 obtained maximum score with *Suitability of the fabric used* i.e. 142 out of 150 score and minimum score obtained by women apparel WA4 i.e. 129 out of 150 score.

Women apparel WA5 obtained maximum score with *Suitability of design for stencil printing* i.e. 140 out of 150 score and minimum score obtained by women apparel WA4 i.e. 126 out of 150 score.

With reference to *Suitability of the design for women apparel* to women apparel WA1 obtained maximum score i.e. 141 out of 150 score and minimum score obtained by women apparel WA4 i.e. 132 out of 150 score.

Women apparel WA1 obtained maximum score with *Placement of developed designs on women apparels* i.e. 142 out of 150 score and minimum score obtained by women apparel WA4 and WA2 i.e. 128 out of 150 score.

Women apparel WA1 obtained maximum score with *Colour combination* i.e. 145 out of 150 score and minimum score obtained by women apparel WA4 i.e. 130 out of 150 score.

With reference to *Acceptability of the concept* to women apparel WA1 and WA3 obtained maximum score i.e. 135 out of 150 score and minimum score obtained by women apparel RP4 i.e. 130 out of 150 score.

On basis of *Overall appearance* Women apparel WA1 obtained maximum score i.e. 139 out of 150 and minimum score obtained by women apparel WA4 i.e. 129 out of 150 score.

Hence, it can be concluded from table that women apparel WA1 is highly acceptable by the respondents because each section criteria of women apparel WA1 was highly suitable according to respondents.

4.6.2 Cost estimation of developed women apparels

Cost is one of the most important factors of any designed article. Table 25 depict the cost of the developed woman apparels.

Table 25: Cost estimation of developed women apparels

S. No.	Criteria of cost estimation	Women Apparels				
		WA1	WA2	WA3	WA4	WA5
1	Cost of fabric ₹	350	400	250	250	150
2	Cost of material ₹ (colours + accessories)	70	100	70	70	70
3	Stitching charge ₹	250	300	200	200	-
4	Making stencil charge ₹	50	50	50	50	50
5	Labour charge ₹ (stitching charge)	150	150	150	150	150
	Total cost	870 ₹	1000 ₹	720 ₹	720 ₹	420 ₹

Data in Table 25 shows the cost of fabric, cost of material, making stencil charge and labour charge for developing women apparels. Women apparels WA2 got maximum cost, because in this design, maximum fabric was used and printing work was also intricate.

Table 26: Estimation of profit gained in by the sale of women apparels

S. No.	Profit Percentage (%)	WA1	WA2	WA3	WA4	WA5
1	20	174 ₹	200 ₹	144 ₹	144 ₹	84 ₹
2	30	251 ₹	300 ₹	216 ₹	216 ₹	126 ₹
3	50	435 ₹	500 ₹	360 ₹	360 ₹	210 ₹
4	more	More than 435 ₹	More than 500 ₹	More than 360 ₹	More than 360 ₹	More than 210 ₹

The Table 26 shows that WA1 if sold for $870+174=1044\text{₹}$ than it would benefit the seller by 20%, if sold for $870+251=1121\text{₹}$ than it would benefit the seller by 30%, if sold for $870+435=1305\text{₹}$ than it would benefit the seller by 50%, and if sold for more than 1305₹ than the profit would be more than 50%.

The Table 26 shows that WA2 if sold for $1000+200=1200$ ₹ than it would benefit the seller by 20%, if sold for $1000+300=1300$ ₹ than it would benefit the seller by 30%, if sold for $1000+500=1500$ ₹ than it would benefit the seller by 50%, and if sold for more than 1500 ₹ than the profit would be more than 50%.

The Table 26 shows that WA3 if sold for $720+144=864$ ₹ than it would benefit the retailer by 20%, if sold for $720+216=936$ ₹ than it would benefit the seller by 30%, if sold for $720+360=1080$ ₹ than it would give seller by 50% benefit, and if sold for more than 1080 ₹ than the profit would be more than 50%.

The Table 26 shows that WA4 if sold for $720+144=864$ ₹ than it would benefit the seller by 20%, if sold for $720+216=936$ ₹ than it would benefit the seller by 30%, if sold for $720+360=1080$ ₹ than it would benefit the seller by 50%, and if sold for more than 1080 ₹ than the profit would be higher than 50%.

The Table 26 shows that WA5 if sold for $420+84=504$ ₹ than it would benefit the seller by 20%, if sold for $420+126=546$ ₹ than it would give 30% benefit to seller, if sold for $420+210=630$ ₹ than it would benefit the seller by 50%, and if sold for more than 620 ₹ than the profit would exceed 50%.

Estimation of Profit Percentage:

The researcher after calculating the cost of the developed apparel items also tried to find out the approximate percentage of profits that can be gained, if sold in the market. The data collected shows a bright prospect to the researchers in terms of profit margin. The profit percentage found to be varied for different developed apparel items.

Table 27: Estimation of profit percentage for women apparels by respondents
n=30

S. No.	Profit %	Apparel items					Total	Percentage
		WA1	WA2	WA3	WA4	WA5		
1.	20%	16	-	19	22	5	62	41.33
2.	30%	9	6	7	6	9	37	24.67
3.	50%	2	8	4	2	14	30	20
4.	More than 50%	3	16	-	-	2	21	14

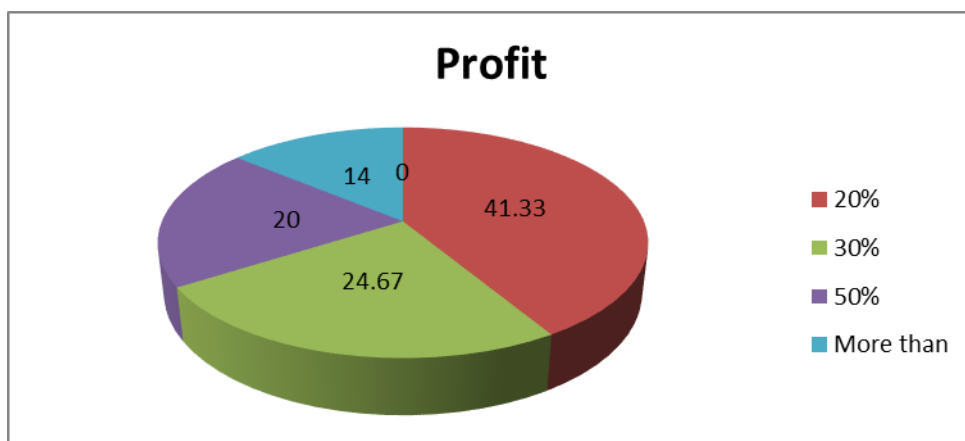


Figure 25: Estimation of profit percentage by the sell of apparel items

Table 27 and Figure 25 shows that all the respondents agreed to give profit for the designed items and 14 per cent of respondents agreed for profit even more than (50%).

Majority of the respondents 41.33 percent of respondents agreed for profit on (20%) thought the price was adequate. Over one-fourth of the respondents 24.67 percent were willing to pay more than (30%) profit.

SUMMARY AND CONCLUSION

Ever since the dawn of civilization man has felt the urge to decorate textile by the means of weaving, printing, and embroidery. Most of the India's arts have been great source of tradition are reflected in many of various regions of this country and Rajasthan is famous for its profile art treasures in the form of hand-printed textiles, furniture, leatherwork, jewellery, painting, pottery, metal craft, etc. The use of lively colors and flamboyant, fantasy designs is distinctive in all forms of arts and crafts of Rajasthan.

Terracotta is one of the oldest art forms known to human civilization. The terracotta craft is widespread in Rajasthan since the time of Indus Valley Civilization. Starting utensils for cooking to storage of water to decorative Terracotta pieces Rajasthan is famous for its extraordinary style. The terracotta industry was established in Rajsamand district and since then the district has witnessed the development of it. (Dahiya, 2016)

Art form rendered in painting, printing, toys, sculptures, pottery and embroidery play an important role in creating new designs, apart from meeting the ever - increasing demand of customers for exclusiveness. However, Molela craft is restricted itself to the religious idols and plaques scenes of different forms in red clay but was never attempted on textiles. In view of the above, the present investigation on **“Adaption and Development of Designs from Traditional Molela Craft of Rajasthan for Design Intervention on Women Apparels”** has been planned to develop innovative designs using stencil printing technique in a cost-effective manner which can also be used in entrepreneurship development.

The present study was undertaken with following objectives:

- To explore and collect designs and techniques of traditional Molela craft of Rajasthan.
- To adapt and develop new textile designs from traditional Molela craft.
- To develop Women Apparels with new textile designs.
- To find out acceptability of the developed Women Apparels for consumer.

Methodology

The present study was carried out in Udaipur city and Molela village of Rajasthan.

Selection of the sample: - Sample were collocated by researcher from craftsmen involved in molela art at molela village and 30 women were selected to get acceptability of women apparels and their cost. 3 types of sample were collected in this study is as following.

- **Sample for documentation of designs of Molela craft**
- **Sample for assessed developed new motifs & its Placement**
- **Sample for consumer acceptability:**

Development of tool:

Two types of tools were developed –

1. Interview schedule and
2. Rating scales

Data collection:

The data collection comprised of following phases-

Phase 1

- **Survey and Collection of Molela designs**
- **Adaption & development of new motifs & its Placement**

Phase 2

- **Development of stencils for printing**
- **Design development on women apparel**

Phase 3

- **Consumer acceptability of developed women apparel**

Data Analysis:

Statistical Measures Used: -

- a) **Frequency-** This method was used to analyze the data regarding background information and information regarding other aspects like materials used, motifs and design category, marketing pattern of molela craft, etc..

b) Percentage:- The rating obtained by developed designs of women apparels were tabulated according to the scores obtained and converted in percentage.

c) Ranking- The opinion of the respondents (women consumers and experts of Textile and Apparel Designing Department) was recorded on a separate rating scale.

Acceptability Index:

To assess the percentage acceptability of the developed women apparels an acceptability index was set up:-

Major Findings:-

Background information of the respondents:-

- The maximum percentages of the respondents were found in the age group of 40-59 years and cent percentage of the respondents were belongs to prajapat, Hindu caste.
- All respondents of the molela craft were male. Maximum percentages of the respondents (40%) were educated up to middle school.
- Half of the respondents (64%) were involved in molela craft work only. one fourth of the respondents (28%) turn to agriculture and rest of respondents (8%) were engaged in other family business along with molela art.
- Family income of majority of respondents (72%) was found in the range of Rs. 10,000-20,000/- per month while remaining respondent's (28%) family income was in the range of Rs. 20,001-40,000/- month.
- Majority of respondents 64 percent belonged to joint family and remaining 36 per cent respondents belonged to nuclear family.
- Majority of the respondents (44%) were involved in their ancestral occupation since last four decades and also few young respondents (8%) were found since last 10 years.

Similar findings were reported by Kumar (2016) in his article 'Terracotta clay art of molela, Rajasthan' that Molela work depicts scenes from mythological stories from Indian epics and historical narrations of the Rajput rulers of Rajasthan to depictions of daily household chores related to agricultural activities and butter churning; natural objects, such as the sun, and social issues, such as women's empowerment

Specific information about Molela craft: -

- Respondents were interviewed to get desired information related to historical importance of molela craft, Traditional motifs/designs, Colour and its sources, Raw materials and equipment used in molela craft, technique of Molela craft, Time required for completion a Artical.etc.
- Cent percent respondents revealed that they sell on order also besides selling from their shop/house in the village. Molela terracotta items are sold on the basis of size, intricacy of design, time required in completion, hard work required and beauty of the developed item.
- Clay plaques depicting the images of the Gods are mostly bought by the (Adivasi) tribe Bhil, Gujjar and Gujarat communities.
- The inherent charm of these plaques attracts buyers from far off places but the demand for these plaques tends to be seasonal.

Selection and development of designs: -

- The 30 collected designs/motifs of terracotta clay craft of Molela artisans were arranged into five categories daily life activities, birds and animal motifs, ethnic/religious idols/deity, stylized motifs and architecture motifs.
- Researcher selected ten designs. Design code No. 4, 6, 7, 9,15,16,19,23,27,28 were found most suitable for adaption of motifs.
- The selected ten designs of molela were carefully edited on computer. Each of the selected designs were further manipulated for its varied placement on selected womens apparels on computer with the help of suitable softwares i.e. Adobe Photoshop and Corel Draw.
- Motif code no. 4 and. 19 were selected for kurti by 96 per cent and 92 per cent of the respondents. Regarding the appropriateness of the motifs for Gown, motif code no 9 and. 27 were selected as responded by 88 percent and 84 percent of the respondents. Both motif code no 4 and 23 were selected for shrug by 92 percent respondents and 88 percent of the respondents and motif code no 6 and 28 for skirt. Motif code no. 7 and. 16 were selected for stole by 92 per cent and 96 per cent of the respondents.

- The stencils of all the thirty selected motifs were prepared by the researcher herself.

Development and evaluation of designed women apparels

- Adapted ten motifs of molela craft were arranged in six different placements on selected five category of women's apparels. Thus total 30 placements were made for five women apparels.
- To select one best placement for each category of women apparels per the selected criteria's i.e. suitability of direction of motif, suitability of placement of motif and overall appearance. Scores and percentage of each design were calculated and ranks were given.
- For design of kurtis design code no K1 got 1st rank (97.33%), design code no G4 got 1st rank (93.33%) for design of Gown. Design codes no SH 2 got 1st rank (96%) designs of shrugs. Code no SK 3 was liked very much by the judges as shown by maximum score and 1st rank it obtained (93.33%) for Skirt. Design code no ST5 got 1st rank (96%) for Stole in terms of rating obtained on selected parameters.

Development of designer women apparel using stencil printing

- One best design scoring highest rating by judges was further used by researcher to develop each woman's apparel with the help of stencil printing using fabric colours.
- Researcher herself developed one kurti, one Gown, one Shrug, one skirt and one stole. These women apparel were embellished with hand embroidery also using anchor embroidery threads.

Findings are in concurrence with Prajapat (2016) that the tribal prefer bright colours for Gods and there are specific colours to depict each God. For instance, Blue is used for Kaladev and Orange is used for Goradev. The tribals usually change these votive every year. They consider these Gods as their protectors.

Assessment of consumer acceptability and cost of developed women apparels

- Researcher was curious to find out which women apparel got maximum score. It was interesting to record that women apparel WA1, WA5, WA3, WA2,

WA4 got 1st, 2nd, 3rd, 4th and 5th ranks with the score 980, 954, 952, 933 and 904 respectively.

- All the respondents agreed to give profit for the designed items and 14 per cent of respondents agreed for profit even more than (50%). Majority of the respondents 41.33 percent of respondents agreed for profit on (20%) thought the price was adequate. Over one-fourth of the respondents 24.67 percent were willing to pay more than (30%) profit.

Conclusion:

Thus it can be concluded that all five women apparels were liked by all the respondents. It is very unique, in term of selection, documentation, development of new designs, placement of the designs, colour combination by simulating the textile designs, being inspired from molela art, give a new way to discover something unique for respondents for an alternative to choose this calls for textile designers, students and teachers express their creativity and develop some fresh design. Molela art could be useful as self employment in making different designs of women apparels for sale through boutique or retailers.

RECOMMENDATION

1. Similar study may be under taken on other textile craft of India.
2. A similar study can be conducted to develop new textile designs being inspired from any other printing and painting.
3. The students can be motivated to make efforts to develop some new designs suitable for other textile items like Saree, Bed Sheet, Divan set and household items.
4. Further studies can be conducted using different technique like Screen, Block for adapting the developed molela motif on apparel and furnishing items.
5. Documentation of motif and themes of other textile art of India and their similarities and dissimilarities can be studied in terms of cultural significances.

IMPLICATION

1. The study will provide a proper documentation of molela craft.
2. The present study will provide a good source of references material for textile designing students.
3. The exploration and documentation of traditional molela craft of Rajasthan will preserve our rich cultural heritage.
4. The present study will serve as a guideline for new designers to develop innovative textile designs from other traditional art & craft.
5. The study will be providing useful knowledge to the researcher and producers about the new textile designs in women apparel.

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Interview schedule

Profile of Artisans

1. Name of the respondent _____
2. Age _____
3. Caste & religion _____
4. Education Qualification _____
5. Family occupation _____
6. Total Family income _____
7. Family Type
 - a. Nuclear
 - b. Joint
8. Number of family member _____
9. What is the other source of family income?
 - a. Agriculture
 - b. Business
 - c. job
 - d. other
10. From whom did you learn Molela craft?
 - a. Forefather
 - b. Trainer
 - c. workshop
 - d. other
11. How long you have been in to this field?
 - a. Since 5 year
 - b. Since 10 year
 - c. Since 15 year
 - d. more than 15 year
12. How much time do you spend time in a day in Molela craft?
 - a. 2-4 hours
 - b. 4-6 hours
 - c. 6-8 hours
 - d. 8-10 hours
13. Do you take help from?
 - a. Wife
 - b. Children
 - c. Both
 - d. other
14. What is the common size of Molela craft?
 - a. 1 sq. feet
 - b. 5 sq. feet
 - c. 10 sq. feet
 - d. More than 10 sq. feet

15. How much time is required to complete one article of 5 sq. feet?

- a. 1 day
- b. 1 - 5 days
- c. 5 - 10 days
- d. More than 10 days

16. How to differentiate different styles of Molela craft?

- a. Nature
- b. Methodology
- c. Architecture
- d. All of this

17. What is the technique of Molela craft?

18. What is the design source of the Molela craft?

- a. Books
- b. old Molela craft
- c. Own imagination
- d. All of this

19. On which basis you select motifs and themes?

- a. Self decision
- b. As per consumer demand
- c. As per design given by consumer
- c. All of this

20. Which type of motifs is commonly used in Molela craft?

21. Which type clay is used in Molela craft?

22. From where do you get this clay?

- a. Pond
- b. River
- c. Other

23. Which type colors are used in Molela craft?

24. From where do you get this color?
- a. Local market
 - b. Regional market
 - c. Surrounding environment
 - d. Other
25. In how much quantity the raw materials are purchased?
- a. As per require
 - b. bulk
 - c. both
26. Do you get order?
- a. Regularly
 - b. Irregularly
27. If you get order from wholesalers then the final articles:
- a. Collect by wholesaler
 - b. You have to supply the finished article to wholesaler
28. Where do you sell?
- a. Local market
 - b. In the state
 - c. Interstate
 - d. Export
29. Where do you sell the finished article?
- a. To wholesaler
 - b. To any other retailer
 - c. At own shop
 - d. At own residence
30. Do you face any problem in selling Molela craft article?

31. Do you have any personal website for selling your own craft?

- a. Yes
- b. No

32. How much profit do you get on one article?

- a. 10-15%
- b. 15-20%
- c. 20-25%
- d. other

33. Do you have stock of Molela art?

- a. Yes
- b. No

34. Do you have a shop?

a. Yes

b. No

35. What is the basis of sell?

a. Cash payment

b. Cheque

36. What is the physical problem faced by artisan?

a. Skin problem

b. Eyes problem

c. Physical problem

d. other

Rating Performa 1 (A)

Performa for suitability of motif for each product

<div>Motif code</div> <div>Products</div>	1	2	3	4	5	6	7	8	9	10
Stole										
Shrug										
Kurti										
Gown										
Skirt										

5 point continuum Rating scale

5. Highly suitable 4. More suitable 3. Suitable 2. Fairly suitable 1. Less suitable

Rating Performa 1 (B)

For the evaluation of suitable placement of Women apparels

Name:-

Designation:-

Women apparels code no.	Direction of motif	Placements of motifs	Overall appearance
1			
2			
3			
4			
5			
6			

Highly suitable-5 , More suitable-4, Suitable-3 , Fairly suitable -2 , Less suitable-1

Rating scale 2

Performa for evaluation of acceptability of developed stencil printed women apparels

Criteria of evaluation	Women apparels				
	Kurti	Gown	Shrug	Skirt	Stole
Suitability of the fabric used					
Suitability of design for stencil printing					
Suitability of the design for women apparels					
Placement of developed designs on women apparels					
Colour combination					
Acceptability of the concept					
Overall appearance					

Rating scale 3

Performa for the Estimation of Profit Percentage

Women apparels	Cost of women apparels	Profit added			
		20 %	30 %	50 %	more
WA1	870				
WA2	1000				
WA3	720				
WA4	720				
WA5	420				