

# **CREATING BLOUSE PATTERNS FOR ADULT WOMEN**

**BY**

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A THESIS SUBMITTED TO THE AVINASHILINGAM INSTITUTE FOR HOME SCIENCE  
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IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE IN TEXTILES AND CLOTHING

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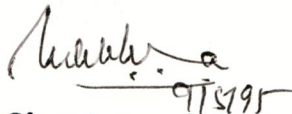
**R. MAHALAKSHMI**

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in partial fulfilment of the  
requirements for the Degree of  
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Certified as bonafide research work



Signature of the  
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Guide

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## ACKNOWLEDGEMENT

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## **CONTENTS**

## LIST OF CONTENTS

CHAPTER		PAGE NO.
	LIST OF TABLES	
	LIST OF PLATES	
	LIST OF FIGURES	
	LIST OF APPENDICES	
I	INTRODUCTION	1
II	REVIEW OF LITERATURE	
	A. Importance of Dress Making	5
	B. Clothing for Adult Women	7
	C. The Concept of Pattern	8
	D. Importance of Variety in Clothing	10
	E. Taking Body Measurements	11
	F. Need for Standardisation	13
	G. Dress Designing	14
	H. The Process of Creative Sewing	15
III	EXPERIMENTAL PROCEDURE	
	A. Study of Blouse Designs	17
	B. Standardising the Body Measurements of Early Adult Women	
	1. Selection of the Age Group	18
	2. Selection of the Sample	19
	3. Taking the Body Measurements	19

**CHAPTER****PAGE NO.**

4.	Grouping the Body Measurements	21
5.	Standardising the Body Measurements	22
C.	Preparing the Basic Pattern for Blouse	
1.	Selection of Dress	23
2.	Preparation of Instructions for the Blouse	23
3.	Drafting the Basic Pattern	24
D.	Creating Blouse Patterns	
1.	Creating Blouse Patterns	25
2.	Selecting the Patterns Created for the Blouse	25
3.	Drafting Paper Patterns for the Selected Blouse Patterns	26
E.	Constructing the Blouses with the Selected Blouse Patterns	
1.	Selection of the Material	27
2.	Preparation of the Fabric for Cutting	28
3.	Cutting the Material	28
4.	Constructing the Blouses Introducing the Selected Blouse Patterns	29
F.	Evaluation of the Constructed Blouses	35
G.	Evaluation of the Patterns Created in the Blouses	36

CHAPTER

PAGE NO.

IV	RESULTS AND DISCUSSIONS	
	A. Grouping the Body Measurements of Early Adult Women	37
	B. Standardising the Body Measurements of Early Adult Women	40
	C. Finding out the Preference of the Early Adult Women Regarding the Blouse Patterns	45
	D. Evaluation of the Constructed Blouses	
	1. Fitness of the Constructed Blouses	47
	2. Effectiveness of the Constructed Blouse Patterns	52
V	SUMMARY AND CONCLUSION	54
	BIBLIOGRAPHY	
	APPENDICES	

## LIST OF TABLES

TABLE NO.		PAGE NO.
I	DETAILS OF THE BLOUSE PATTERNS	26
II	GROUPING OF BUST MEASUREMENTS OF EARLY ADULT WOMEN	38
III	STANDARDISED BODY MEASUREMENTS OF EARLY ADULT WOMEN	42
IV	PERCENTAGE OF WOMEN PREFERING BLOUSE PATTERNS	46
V	FITNESS OF THE CONSTRUCTED BLOUSES	48
VI	EVALUATION OF THE PATTERNS CREATED IN THE BLOUSES	53

## LIST OF PLATES

PLATE NO.		PAGE NO.
I	BLOUSE - B <sub>1</sub>	31a
II	BLOUSE - B <sub>2</sub>	31a
III	BLOUSE - B <sub>3</sub>	31b
IV	BLOUSE - B <sub>4</sub>	31b
V	BLOUSE - B <sub>5</sub>	32a
VI	BLOUSE - B <sub>6</sub>	32a
VII	BLOUSE - B <sub>7</sub>	33a
VIII	BLOUSE - B <sub>8</sub>	33a
IX	BLOUSE - B <sub>9</sub>	33b
X	BLOUSE - B <sub>10</sub>	33b
XI	BLOUSE - B <sub>11</sub>	34a
XII	BLOUSE - B <sub>12</sub>	34a
XIII	BLOUSE - B <sub>13</sub>	34b
XIV	BLOUSE - B <sub>14</sub>	34b
XV	BLOUSE - B <sub>15</sub>	34c

## LIST OF FIGURES

FIGURE NO.		PAGE NO.
I	TAKING THE BODY MEASUREMENTS	20
II	GROUPING THE BODY MEASUREMENTS OF EARLY ADULT WOMEN	39
III	STANDARDISED BODY MEASUREMENTS OF EARLY ADULT WOMEN	41

## LIST OF APPENDICES

APPENDIX NO.		PAGE NO.
I	BODY MEASUREMENTS OF EARLY ADULT WOMEN	x
II	THE DEVELOPED INSTRUCTIONS FOR DRAFTING THE BLOUSE PATTERN	xv
III	PROFORMA USED FOR SELECTING THE BLOUSE PATTERNS	xxiii
IV	THE SELECTED BLOUSE PATTERNS	xxiv
V	THE SELECTED MATERIALS FOR THE BLOUSES	xxix
VI	RATING SCALE USED TO EVALUATE THE FITNESS OF THE CONSTRUCTED BLOUSES	xxx
VII	RATING SCALE USED TO EVALUATE THE PATTERNS CREATED IN THE BLOUSES	xxxiii

# **INTRODUCTION**

## I. INTRODUCTION

Dress making is the process of making garments from cloth or other materials. Every article of clothing is the personal art expression of people who created it. In addition to satisfying a specific need for body protection and decoration, each article reflects their feeling for suitability of design and their skill as craftsman. Dress making is a technical accomplishment requiring knowledge and skill in construction.

Clothes express oneself and show individuals taste in clothing. Erwin and Kinchen (1970) feels that the trend is toward interchangeability of parts of the wardrobe to effect greater variety. Carefully chosen accessories will bring sparkle to any conservative outfit. Accessories and apparel carryout a fashion trend. The most fascinating phase of clothing is fashion. Fashion is one of the greatest forces in everybody's life opine MC Jimsey (1973). Fashion radiates one's personality and motivates a person to express one's individuality to a large extent.

Fashions in cloth keep changing, but the principles of garment designing, pattern drafting and the techniques of construction remain basically the same, states Mary Mathews (1985). A knowledge of pattern designing will assist the dress maker in accomplishing her work with speed and satisfaction.

A pattern is made in one of the three ways namely drafting, draping fabric on a dress form, and flat pattern designing, explain Erwin and Kinchen (1970). In all the methods, designers make up samples or models in muslin for criticism and change them before they are developed in expensive fabrics or copied as patterns.

Changing status of women creates demand in the change of clothing. Hurlock (1976) views that interests in clothing remains strong or may even increase in intensity if the individual become aware that attractive expensive clothing will help her succeed in an area that is important to her in adulthood period. Nearly every women is attempting to express her personality and her sense of becomingness reflected in her various garments and also they are wearing many types of garments in a variety of combinations for the same garment and occasions. Women who have job needs more clothing than the house wives who remain at home. Fashion must be now functional and purposeful as well as stylish.

A dress should not be simply considered as a garment made of good durable material and serviceable colour but instead as an expression of artistic qualities like the means of expressing oneself. Today's dress include formal, semiformal, sports, casual and work clothing. Dresses which are all purposes are usually wiser to buy. In that colour and design are fundamental art in

dress. Good design and good workmanship are the basic qualities of beautiful and satisfying craftsmanship and also a design is a plan or an arrangement of lines to form shapes which when combined make up the whole.

The active adult women of today, needs clothing that is truly functional in design, clothing that is suited to a specific activity-whether it is for work or play. Women who live and work in large metropolitan districts are more fashion conscious. Because they live where fashions are born, made and marketed their styles are likely to be more extreme unusual and up-to-the minute clothes in the country and scattered rural villages are usually even more conservative in taste.

Dresses add beauty and colour to woman. No law or custom prevents any woman from buying the newest and most prestigious styles in dresses. Today's women have more speed of fashion cycles in the way they use that income. The Indian women's wardrobe is centred around the 'Sari' which can be complemented by well tailored and matching blouses. There should be some kind of balance between the material of the sari and the blouse, that is if the sari is simple, the blouse should be striking either in design or colour. The beauty of the entire outfit can be enhanced by introducing styles in blouses according to the prevailing fashion. A variety can be created in the saree blouse, since blouse is the soul of our dress.

Considering the above, the investigator felt the need to create different patterns in the blouse. Keeping this in mind, the investigator has taken a study on creating blouse patterns for adult women with the following objectives.

- Taking, grouping and standardising the body measurements of adult women.
- Finding out the preference of the adult women regarding the blouse patterns.
- Developing the basic pattern for blouse using standardised body measurements.
- Constructing the blouses for adult women, using the basic pattern.
- Constructing the blouses using the selected blouse patterns.
- Evaluating the fitness of the constructed blouses and the patterns created to suit the blouses.

It is hoped that this study would help the adult women in planning a good wardrobe with blouses in different patterns which suit them and also keeping in line with fashion. The investigator also hopes that this study would enable the dress designer to create designs thereby satisfy the consumers.

**REVIEW OF LITERATURE**

## II. REVIEW OF LITERATURE

The review of literature pertaining to this study are reviewed under the following headings.

- A. Importance of Dress Making
- B. Clothing for Adult Women
- C. The Concept of Pattern
- D. Importance of Variety in Clothing
- E. Taking Body Measurements
- F. Need for Standardisation
- G. Dress Designing
- H. The Process of Creative Sewing

### A. IMPORTANCE OF DRESS MAKING

Dress making can be made an enjoyable experience by adopting a simplified method of pattern making for garment construction which saves time, money and provide good fitting, state Rajar and Bhalla (1988). Dress making is a means to an end, not an end itself, says Oerke (1957). Dress making is a traditional craft and comes down us to from very early times and seems to have been practised whenever mankind needed clothing as a protection from climatic conditions, views Randell (1970). Bane (1973) supports that the sewing is a combination of art and science.

Hedge (1983) suggests that Dress making satisfies ones unfulfilled desire by having the opportunity to design, colours and fabrics of different textures for the home and the client. Buckley (1974) suggests that many regard dressmaking as a hobby and many as a vocation. Hall (1953) points out that dressmaking becomes an interesting past time when each operation develops perfectly. Shoban (1988) feels that sewing can be a relaxation, fun and it is easy to learn, a well dressed women can have more clothes by making them herself.

Dressmaking has become the most popular hobby for teenage girls and course in clothing constructions are in great demand in adult education programme, Iowa Home Economic Association (1972). Seton (1962) states, in dressmaking there is no one process more important than another. Fitting the pattern, cutting, marking, stitching and pressing all must be done thoroughly and carefully. Lucy (1957) is of the opinion that the need of the present time has drawn more girls than ever before to the study and practice of dressmaking. Leppman and Erskins (1974) suggest that the use of colour, the type and quality of fabric, its texture, pattern, and shape, cut and fit of a garment are all part of the creative art of dressmaking and contribute to the final result.

## B. CLOTHING FOR ADULT WOMEN

Clothing is one of the means of value expression used by individuals, families and society as a whole, Indian Textile Journal (1993). Hurlock (1976) suggests that early adulthood is the "Setting down" age. It is also a time of many personal, social and vocational problems leading to emotional tension, a time of value changes and a time when the individual ordinarily approaches the peak of his achievement and creativity. Jones (1969) opines that more than males, females use clothing as an expressive vehicle and that females would be more sensitive than males, to the clues inherent in different clothing styles.

Bhushan (1958) suggest that in India the twentieth century opened with a slight change in the dress western influence crept into feminine clothes and fashion conscious women strove to incorporate the new styles into than own without loosing their own individuality. Kamala (-) views that the originality in selecting and enhancing the beauty of a particular fabric rests with the wearer who must choose choli fabric to match the pattern in the sari fabric and also choose other accessories to complete the ensemble. Young adults have more leisure time today than in the past, their opportunities for recreation are limited by environmental or economic obstacles. They include such activities as sewing, knitting, crocheting, painting etc., views Hurlock (1976).

Interest in clothing remains strong during early adulthood, views Hurlock (1976). Dorris Flynn (1971) suggest that, the upper garment that goes with sari is a blouse and it is a bodice developed from an earlier indigenous garment which used to be worn next to the skin as a breast support. Also he points out that the earlier garment was called choli, and even now, after its evolution to the present form it is called a choli as well as blouse. Thangam Subramaniam(1987)says that blouse is commonly used with a saree what the Indian women calls her blouse is a variation of the older close fitting bodice called choli. Anwani (1985) views that blouse can be cut and stitched in many ways and the blouse unlike the sari lends to some tailoring skill and has room for individuality by the way of novelties in necklines and sleeves.

### **C. THE CONCEPT OF PATTERN**

Encyclopedia Britannica (1973) defines a pattern as a model or shape serving as a guide in constructing anything, paper pattern for dress, embroidered design, painted, woven or stamped as an ornament on any kind of material, fashion, in accordance with a model, shape of garment, used as a guide in dressmaking. Erwin (1979) points out that successful dressmaking begins with a pattern of a right size, based on actual body measurements. Patterns are designed on standardised specifications. Each pattern has

an allowance over the basic measurements to provide ease of action and to secure design interest. Also he feels that length of shoulder seams and curves of armholes vary, both with fashion and the pattern company.

A pattern, according to IOWA Home Economic Association (1972) is usually half of a garment cut in paper used as a guide in cutting out the garment in cloth. Patterns are cut with varying amounts of ease, depending on the style of the garment. MC Jimsey (1973) states that since textile patterns vary so much in their colour, size and design, they need to be chosen with care in relation to their intended use, the wearer and the style created. Pattern making has become an important business, says Wingo (1953). Pattern making is a skilled trade and the enormous increase in the number of patterns sold is an indication of the needle women's appreciation of that skill in assisting her to have a good looking, excellently fitting garment of her own making views Mary Evan (1963).

Rouse (1989) feels that fashion is a luxury. The look of fashion is an intangible thing difficult to analyse, but easier to achieve, Mc calls sewing book (1984). Paola and Mueller (1986) suggest that fashion is a complex word meaning glamour and excitement to many and creativity and business opportunity to a few. Websters New College Dictionary defines fashion as, "the

prevailing style during a particular time". Stone and samples (1976) admire that, just about everything that we do our daily lives is affected by fashion. Style in a dress or any other art, refers to the characteristic or distinctive form, outline or shape, an article possesses views Erwin (1979). Styles change slightly from year to year but some version of these styles are always popular, suggest Lewis - et - al. (1960). Harriet (1976) stresses that fashion is the widely accepted current version of a style, the seasonal fluctuations, variations and interpretation of different styles. Bane (1973) feels that the fashion cycle is merely the rise culmination and decline in popular acceptance of any style.

#### D. IMPORTANCE OF VARIETY IN CLOTHING

Farmer and Gotwals (1982) state that the desire for creativity and self reliance is evident in every segment of our society. Toynbee (1962) considers human creativity as man's greatest asset. Jackson (1962) regards it, as one of the most highly valued qualities.

Singh (1981) feels that creativity is the quality which leads to the production of something new and desirable. Hurlock (1978) views that creativity must be regarded as a process by which something new, either an idea or an object in a new form or an arrangement is produced. Also he points out that all creativity

involves the combination of old ideas or products into new forms, but the old are the basic for the new.

Mc.Jimsey (1973) suggests that fine design is the happy marriage of unity with variety. Variety is the "Spice of life", feels Morton (1962). The kind and variety of clothes available today seem almost limitless, as a result of the new technology and its accompanying mass production of garments, view Mildred and Oris (1961). Many a women would like to make all or some of the clothes for members of her family, whether for reasons of economy, or to fill up her free time or simply to give expression to her creative talents through designing and construction of beautiful clothes views Mary Mathews (1985). Bull (1958) explains that collars and cuffs, interesting belts, gay scarves, waistcoats, jackets and yoke pieces may be used for creating variety.

#### **E. TAKING BODY MEASUREMENTS**

Gupta -et- al. (1989) say that body measurements play an important role in the good fitting of the garment, therefore accurate body measurements are needed for all garment construction. Mathews (1985) suggests that the outcome of the final pattern will depend upon the accurate body measurements. And also the measurements need will depend on the type and style of the garments and the age and sex of the wearer. Lewis-et-al. (1966) feels that the

success of any sewing venture depends at large parts upon the patterns which in turn is made of accurate body measurements.

While taking measurements the person should stand with her height evenly distributed on both legs and in her normal standing position. Coles (1989) opines that precise measurements are the first step towards a perfect fit. Measurements are a major factor in the developments of the basic pattern set. Evelyn (1983) states that, taking body measurement is a task that should not be considered lightly, unless they are to be taken accurately, they are of little value. Hedge (1983) points out that measurement should be taken before a new garment is made because the figure has a habit of changing frequently.

Lester (1983) feels that body measurements should be taken over smooth fitting under garments. According to Warburton (1974), measurements around the figure must not be taken too tightly or too loosely. Pleasantville (1976) says that while taking measurements one should stand on the rightside of the person because by standing on the right side one can see whole front and back sides. Anwani (1987) points out that one should start first lengthwise measurements then widthwise measurements and then other measurements. The amount of fullness needed for ease depends upon the kind of the material and the style of the dress, points out Iowa Home Economics Association (1963).

## F. NEED FOR STANDARDISATION

According to Helen (1971) and Sherleker (1981), a standard is a criteria of measurements which is used as a basis of comparison and grading over a period. Mee and Purdy (1987) say that standardisation is important so that the designer is always working from the same base. The main objective of statistical analysis is standardisation is to obtain a single value that represents the characteristics of the entire universe, says Gupta (1991). Khuller (1978) views that by classifying the individuals on the basis of bust, the description of each size, group can be completed by arranging the values of each belonging to that size. Mode is that value of the variable which occurs most frequently, feels Sitaraman (1965).

The United State Bureau of Standard (1968) has set up Standard Body measurements to which all pattern companies are asked to conform, companies use these standard body measurements as a guide for making their basic pattern from which all other patterns are made.

Simplification of styles almost to the point of standardisation has resulted in simpler methods of dress making. Standard sizing in both readymades and patterns has improved considerably and has helped to reduce the cost of living, Say Erwin and Kinchen

(1970). Further they say that successful dressmaking begins with a pattern of the right size based on actual body measurements, not age and these patterns are designed on standardised specifications.

#### G. DRESS DESIGNING

Designing clothing for an occasion like a party or festival is an art, states Kumar (1962). Clothing can be a means of self expression if it is properly designed. Sutherland (1989) feels that an attractive dress is like a beautiful building of landscape, naturally reflects the fundamentals of good design. Chamber and Moulton (1961) suggest that good design in dress is more than the proper use of line and colour. It is the combination and integration of many factors colour, line, texture, workmanship, fit, form, shape, materials, proportions and balance.

Gupta - et - al. (1989) says that while designing a dress, one has to understand the figure and personality of the wearer. Helen and Verna (1961) are of the opinion, that every individuals is a designer, in as much as he puts together all the components of dress into one picture and the well dressed person is natural and never gives the impression of artificiality. Two of the things noticed about a person are physical body and clothing inference.

A person's age, sex and athletic ability result from impressions of physical body, whereas values, attitudes and mood are conveyed through clothing, so clothes must be designed carefully and artistically, suggests Stone (1962). According to Hollen (1971) the right type of trimming adds smartness to any dress. Decorative buttons, embroidery, laces, bows, belts, piping, pins, clips, cards and tassels are some of the trimmings that give attraction to the dresses.

#### **H. THE PROCESS OF CREATIVE SEWING**

Sewing is the pleasant occupation that can be put to many uses, opines Lynch (1952). Erwin and Kinchen (1970) feel that sewing is an outlet for creative ability which involves the use of imagination, to find the best solution for problems leading often to new ideas and application. Now-a-days, stitching charges have gone up so high, the mothers are becoming more inclined to stitch garments, views Gayal (1988). Rathbone and Tarplay (1959) state that if one has the ability to sew and the time for it, she will find many advantages in making her own clothes.

Picken (1959) suggests that, sewing is the most rewarding of all hobbies and it is not only an outlet for her creative impulse, a way to make use of her sense of design, enjoyment of colour and texture, but the things she makes can beautify her home

and provide for herself and her family the kind of clothing most becoming to them at a great saving over the cost of buying such items.

Mary Lurch (1965) says that women can make many of the basic and costly items in her wardrobe at a fraction of their retail cost and with the money she has saved, she can buy the elegant accessories which are so much of a mark of the well dressed woman. Bane (1956) suggests that piping or cording a seam give an added decorative touch and such seams are used to finish the sleeve, seamline, neckline and waistline or readymade garments.

## **EXPERIMENTAL PROCEDURE**

### III. EXPERIMENTAL PROCEDURE

The experimental procedure adopted for the study comprised of the following aspects.

- A. Study of Blouse Designs.
- B. Standardising the Body Measurements of Early Adult Women.
- C. Preparing the Basic Pattern for Blouse.
- D. Creating Blouse Patterns
- E. Constructing the Blouses with the Selected Blouse Patterns
- F. Evaluation of the Constructed Blouses.
- G. Evaluation of the Patterns Created in the Blouses.

#### A. STUDY OF BLOUSE DESIGNS

Leppman and Erskins (1974) say that one should observe ready to wear garments and fashion magazines for recent trends in style and fashion details regarding fabric, colour and design. Rouse (1989) points out that most women get to know about new fashions by looking in the shops, looking at what other women are wearing and also by reading magazines.

Keeping this in mind, the investigator studied various fashion books and journals namely Femina, Womens era, Clothes line, Chirag, Jasmine, Dressage, the Bombay Catalog and also visited

boutique shops to get an ideas about the prevailing blouse patterns suitable for early adult women.

## **B. STANDARDISING THE BODY MEASUREMENTS OF EARLY ADULT WOMEN**

The procedure adopted to standardise the body measurements of the early adult women comprised of the following steps.

1. Selection of the Age Group
2. Selection of the Sample.
3. Taking the Body Measurements
4. Groupingthe Body Measurements
5. Standardising the Body Measurements

### **1. Selection of the Age Group**

According to Hurlock (1976), the adulthood period is divided into three. They are early adulthood (18 - 40 years), Middle adulthood (40-60 years) and Late adulthood (60-till death). Newman (1981) states that the entering of adulthood is between 22-30 years. Laura and Alpha Latzke (1969) say that those years between 18 to 25 are among the most important in or young persons life for the establishment of social and business relationships and also they spend more time and money towards clothing. Considering

the above, the investigator selected the early adulthood period (18-25 years) for the study.

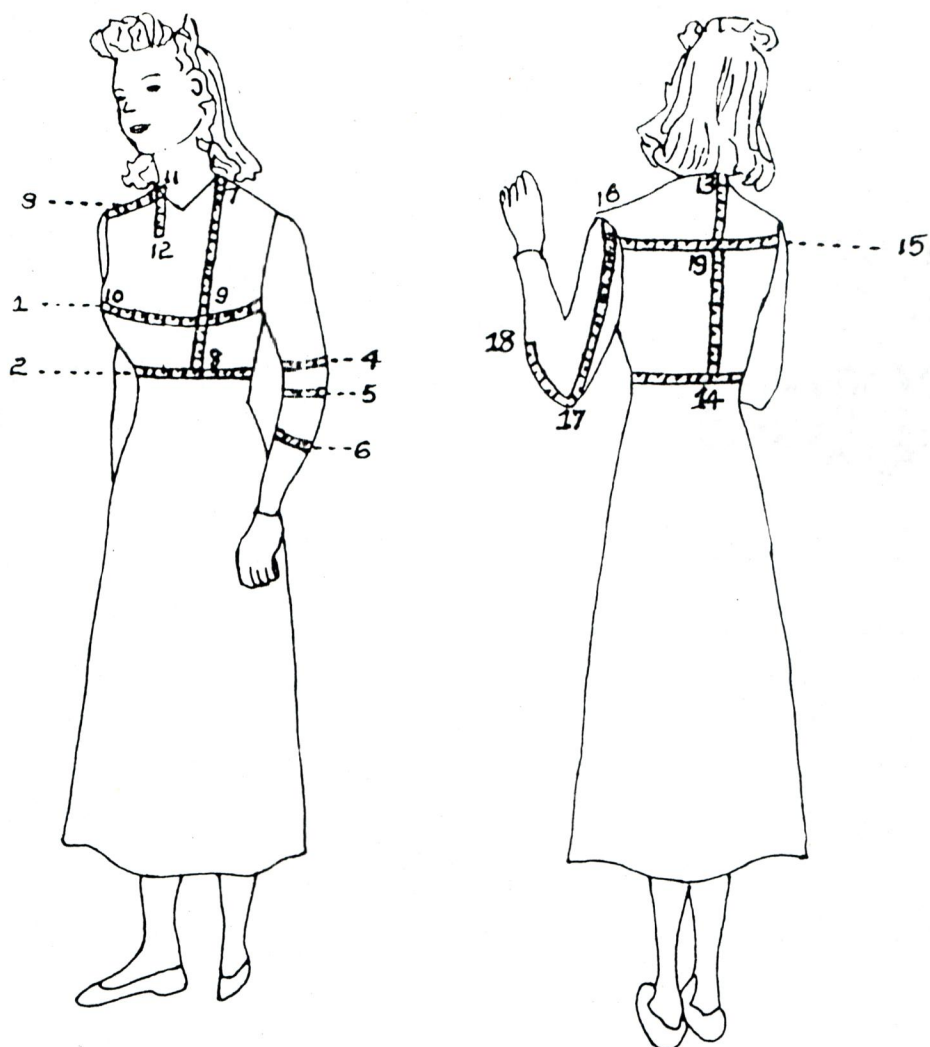
## **2. Selection of the Sample**

Rossi-et-al (1983) remark that a sample is most generally defined as a subset from a large population. Kothari (1990) views that random sampling ensures the law of statistical regularity that on an average the sample chosen is a random one, the sample will have the composition and characteristics as the universe.

Based on the above, one hundred early adult women were selected at random from Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, for the study because it was convenient for the investigator to take body measurements required for the blouse at their leisure time.

## **3. Taking the Body Measurements**

Mathews (1985) remarks that in order to construct garment that fit well, body measurements must be taken with precision. Subramaniam (1987) suggest that to fit well, taking up measurements is absolutely essential before stitching the garment.



- |     |                                   |       |                                  |
|-----|-----------------------------------|-------|----------------------------------|
| 1   | Bust Cicumference                 | 9-10  | Distance Between the Bust Points |
| 2   | Waist Circumference               | 11-12 | Front Neck Depth                 |
| 3   | Shoulder Seam                     | 13-14 | Back Waist Length                |
| 4   | Lower Arm Circumference           | 15    | Back Armhole to Armhole          |
| 5   | Elbow Circumference               | 16-17 | Sleeve Length : Half             |
| 6   | Three Fourth Sleeve Circumference | 16-18 | Sleeve Length : Three Fourth     |
| 7-8 | Front Waist Length                | 13-19 | Back Neck Depth                  |
| 7-9 | Shoulder to Bust                  |       |                                  |

**FIGURE - I**

TAKING THE BODY MEASUREMENTS

As suggested by Colton (1988), the adult women were requested to wear proper foundation garments and to stand erect. Bane (1973) feels that measurements should be taken using metal end of the tape for vertical measurements and the other end for the horizontal measurements. Mathews (1985) suggest that the tape should be parallel to the floor for horizontal measurements and perpendicular to the floor for vertical measurements. Considering the above, the measurements required for the blouse were taken as suggested by Mary Mathews (1985), Anwani (1985) and Zarapkar(-), in proper order following certain sequence and recorded carefully (Figure I). The body measurements of early adult women are given in Appendix I.

#### **4. Grouping the Body Measurements**

Bust measurement is the key to determine pattern size of dresses, view Erwin and Kinchen (1970). Mary Bell (1980) points out that the pattern should be selected with the aid of bust measurements. Bust measurement is the most significant measurement for pattern making and hence a critical re-evaluation of bust size must be made for before dividing on the pattern. Dick (1975) says that similar measurements must be grouped together.

Considering the above, the investigator grouped the body measurements into five groups on the basis of their bust

measurements having 5 cms difference in each group. The bust measurements in each group were ranged as 67.5 cms - 72.5 cms (Group A), 72.5 cms - 77.5 cms (Group B), 77.5 cms - 82.5 cms (Group C), 82.5 cms - 87.5 cms (Group D) and 87.5 cms - 92.5 cms (Group E). Thus the bust measurements of adult women were grouped and is presented under the chapter Results and Discussion.

#### **5. Standardising the Body Measurements**

Mammoria (1981) feels that a standard is a criterion of measures which is used as a basis of comparison and grouping over a period. Standardisation is a process of discovering and making it possible to the consumers, views Golden (1963). Standardisation is matching after selection, say Moser and Kalton (1980). Mode is the value of variable which occurs most frequently, views Pillai (1971). Hence other body measurements were standardised based on the bust groups using mode in statistics. Thus the body measurements of adult women were standardised and is presented under the chapter Results and Discussion.

#### **C. PREPARING THE BASIC PATTERN FOR BLOUSE**

The procedure adopted to draft the blouse basic pattern comprised of the following steps.

1. Selection of Dress
2. Preparation of Instructions for the Blouse
3. Drafting the Basic Pattern

#### **1. Selection of Dress**

Dorris Flynn (1971) remarks that the Sari is a length of material like a long scarf is worn with a tight bodice called a blouse. The Choli, a complement to the Sari, apparently came by how to be regarded as an essential garment all over India, views Kamala ( - ). Blouses are no longer considered only an unimportant accessory and they have acquired a status all of their own. Adding a charm and appeal to a saree in a fashion that can only be imagined, points out the publications International (1994). Therefore the investigator selected the blouse for the study.

#### **2. Preparation of Instructions for the Blouse**

Kumar (1963) suggests that the study of instructions given by different authors, companies and designers is very important before starting any garment construction. Keeping this in mind, the investigator studied the instructions for the blouse pattern given by Thangam Subramaniam (1987), Mary Mathews (1985), Anwani (1985) and Doongagi and Deshpande (1986) were compared and developed new instructions for the blouse.

### **3. Drafting the Basic Pattern**

Farmer (1982) feels that the development of a basic pattern using the standard measurements is the first step in pattern drafting. Drafting is a system of drawing pattern with mechanical precision based on body measurements, say Erwin and Kinchen (1970). Mathews (1985) remarks that a block pattern is prepared by direct drafting and adopted to style required. Hedge (1983) states that in order to have economy in cutting out the material the garment draft is made on thick brown paper. Following this, the investigator drafted the blouse basic pattern by using the developed instructions and the standardised body measurements.

Mee and Purdy (1987) suggest that one of the greatest advantages of the muslin copy is that it gives an opportunity to check the fit of the pattern. Therefore, muslin pattern was prepared for the blouse and the fitness of the blouse was checked. Based on this, slight modifications were done and new instructions were developed by the investigator. The developed instructions for drafting the blouse is given in Appendix II.

#### **D. CREATING BLOUSE PATTERNS**

The procedure adopted to create and introduce patterns in blouses comprised of the following steps.

1. Creating Blouse Patterns
2. Selecting the Patterns Created for the Blouse
3. Drafting Paper Patterns for the Selected Blouse Patterns

### **1. Creating Blouse Patterns**

Style in the fashion world refers to the particular silhouette, fabric, trim or accessories used at a particular time, views Mc Jimsey (1973). To create patterns in blouse, the investigator referred many design magazines and created fifty patterns suitable for blouses. The created blouse patterns were numbered from  $P_1$  to  $P_{50}$ .

### **2. Selecting the Patterns Created for the Blouse**

In order to select 15 patterns for the blouse out of 50 blouse patterns, the investigator prepared a proforma as shown in Appendix III. The fifty blouse patterns were arranged in sequential order. Fifty adult women were selected from Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. The prepared proforma was given to the selected judges and they were requested to select fifteen patterns suitable for their blouse. The data was collected, consolidated and analysed systematically. Thus, selected the most preferred fifteen blouse patterns. The details of the selected blouse patterns along with its respective blouse number are given in Table I. The selected blouse patterns are illustrated in Appendix IV.

**TABLE I**  
**DETAILS OF THE BLOUSE PATTERNS**

S.No.	Order of Preference	Blouse Patterns	No. of Women Stated	Blouse No.
1	1	P <sub>4</sub>	42	B <sub>1</sub>
2	2	P <sub>18</sub>	41	B <sub>2</sub>
3	3	P <sub>20</sub>	40	B <sub>3</sub>
4	4	P <sub>21</sub>	35	B <sub>4</sub>
5	5	P <sub>6</sub>	34	B <sub>5</sub>
6	6	P <sub>44</sub>	28	B <sub>6</sub>
7	7	P <sub>24</sub>	27	B <sub>7</sub>
8	8	P <sub>38</sub>	25	B <sub>8</sub>
9	9	P <sub>47</sub>	25	B <sub>9</sub>
10	10	P <sub>2</sub>	24	B <sub>10</sub>
11	11	P <sub>8</sub>	24	B <sub>11</sub>
12	12	P <sub>15</sub>	23	B <sub>12</sub>
13	13	P <sub>23</sub>	21	B <sub>13</sub>
14	14	P <sub>28</sub>	20	B <sub>14</sub>
15	15	P <sub>33</sub>	20	B <sub>15</sub>

### 3. Drafting Paper Patterns for the Selected Blouse Patterns

Hepworth (1970) points out that drafting is a system or merely a plan for drawing patterns. Mathews (1985) defines that

drafting is a system of drawing <sup>patterns</sup> /on the paper with mechanical precision on the basis of body measurements. Lucy (1957) views that paper patterns play an important role in the creation of garments. Considering the above, paper patterns were prepared for the selected blouse patterns B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> by using the blouse basic pattern.

#### **E. CONSTRUCTING THE BLOUSES WITH THE SELECTED BLOUSE PATTERNS**

The procedure adopted to construct the blouses with the selected blouse patterns comprised of the following steps.

1. Selection of the Material
2. Preparation of the Fabric for Cutting
3. Cutting the Material
4. Constructing the Blouses Introducing the Selected Blouse Patterns.

##### **1. Selection of the Material**

Gupta (1991) states that a good quality fabric with a firm, close weave made of firmly twisted yarns that will not wrinkle or soil easily is preferably for most outer garments and clothes

worn next to the body. Joseph (1980) points out that an important aspect of cotton and cotton blended fabric is their ability to absorb moisture. Hence, cotton blend material was selected for the blouse. Sample of cotton blend materials of different colours were collected. The samples were shown to fifty adult women and they were requested to choose the colour of the cotton blend material. Thus the investigator selected and purchased the material for the blouses. The selected blouse materials are given in Appendix V.

## **2. Preparation of the Fabric for Cutting**

Bane (1973) suggests that preparing the fabric is important in constructing a well fitting garment. Campbell (1986) says that most of the material need some preparation before they are ready for placing the pattern on it and cutting. Doongaji and Deshpande (1986) says that the fabric must be grain perfect. As explained by Warburton (1974), the fabric was straightened by pulling a crosswise thread and cutting along the line. The material was preshrunk and all the creases were removed by pressing. Thus the materials were prepared before cutting.

## **3. Cutting the Material**

A well-cut garment is half the struggle, feels Wingo (1953). Mathews (1985), views that the manner in which a garment is

cut in relation to the grainline of the fabric affects the durability, fit and hang of the garment. Following the rules laid by Hegde (1983) and Shoban (1988), the material was placed flat on the cutting table. The pattern ( $B_1$ ) was placed on the material, keeping an eye on the straight grain. Pins were placed within seam allowances at right angles to the cut edges. The tracing wheel and the carbon method were used to mark the patternlines on the material. Marking was done by inserting a dress makers carbon between the material and the paper pattern by just removing a few pins. The pins were pinned back to position and the tracing wheel was moved firmly on the paper pattern. Care was taken to mark all the details on the wrong side of the material. Cutting was done by taking long even strokes. Neckline and placket pieces were also cut and kept aside. Following the same procedure, the patterns for the blouses  $B_2$ ,  $B_3$ ,  $B_4$ ,  $B_5$ ,  $B_6$ ,  $B_7$ ,  $B_8$ ,  $B_9$ ,  $B_{10}$ ,  $B_{11}$ ,  $B_{12}$ ,  $B_{13}$ ,  $B_{14}$  and  $B_{15}$  were cut.

#### **4. Constructing the Blouses Introducing the Selected Blouse Patterns**

Making up any garment is a simple and straight forward process if properly organised, states Good House Keeping (1979). The garment construction is zig-zag puzzle. There are many garment pieces. Each piece fits into another. If this is done perfectly a lovely garment will be produced, say Furner and Wellchar (1976).

Blouses acquire a life of their own with bead work, mirror work, applique work, cross tuck, shirring and embroidery, points out the Publications International (1994). Considering the above the investigator constructed the blouses with the selected ~~patterns~~ by following the instructions given by Thangam Subramaniam (1987), Mary Mathews (1985), Campbell (1986) and Doongaji and Deshpande (1986). The steps involved in the construction of blouses are given below.

- Stay stitching was done on all the curved lines.
- Basic darts at the bodice back was shifted into the seamline of the yoke. The finished yoke was attached with the rest of the bodice back. The hemline of the bottom of the bodice back was finished.
- Four bust fitting darts were finished in the bodice front.
- Waist band was joined with the right and left side of the bodice front.
- Joined the bodice back and front pieces at the shoulder line and then the side seams were stitched.
- The bottom of the sleeve was finished by hemming. And the side seams of the sleeves were also stitched. The sleeve cap region of the sleeve and the armscye of the bodice were matched, tacked together and stitched around the armhole.
- Front opening was finished with two piece placket.
- The neckline was finished with bias strip.

- 5 hooks were attached on the wrap and the loop was stitched on the extension of the placket.

### **PATTERN VARIATION**

#### **Blouse - B<sub>1</sub>**

- Two darts were made on the bodice back and the hemline was finished.
- Applique work was done in red colour material with fancy buttons on the right side of the bodice back, and the bottom of the sleeve. Puff at the top was introduced in the three fourth sleeve.

#### **Blouse - B<sub>2</sub>**

- Two darts were made on the bodice back and the hemline was finished.
- 8 cm red colour material was attached to the upper part of the bodice back and the bottom of the sleeve. Golden colour thread was stitched on the red colour material and golden colour beads were attached at regular intervals. Puff at the top was introduced in the three fourth sleeve.

#### **Blouse - B<sub>3</sub>**

- Two dars were made on the bodice back and the hemline was finished.



PLATE - I : BLOUSE - B<sub>1</sub>



PLATE - II : BLOUSE - B<sub>2</sub>



PLATE - III : BLOUSE - B<sub>3</sub>



PLATE - IV : BLOUSE - B<sub>4</sub>

- Mirrors with golden colour beads were done in the bodice back and the bottom of the sleeve.

#### **Blouse - B<sub>4</sub>**

- Triangular pieces of material was attached in a bow shape along the two edges of the yoke and fancy buttons were attached in the centre of the bow shape. The bias tubes were attached in a crosswise manner along the centre of the yoke. The neck line was finished by piping.
- Puff at the top was introduced in the three fourth sleeve.

#### **Blouse - B<sub>5</sub>**

- Cross tucks were done at the sides of the bodice back from shoulder to the bottom of the blouse and in the centre of the sleeve. 3 fancy buttons were attached in the bodice centre back.
- Puff at the top was introduced in the three fourth sleeve.

#### **Blouse - B<sub>6</sub>**

- Shirring was made at the bodice back yoke and at the bottom of the sleeve.
- Puff at the top was introduced in the three fourth sleeve and the neckline was finished by fitted facing.



PLATE - VI : BLOUSE - B<sub>6</sub>



PLATE - V : BLOUSE - B<sub>5</sub>

**Blouse - B<sub>7</sub>**

- Quilting was made at the bodice back yoke.
- Puff at the top was introduced in the three fourth sleeve and the neck line was finished by fitted facing.

**Blouse - B<sub>8</sub>**

- Cross tuck was made in the bodice back yoke and golden colour beads were fixed at the intersecting points.
- Puff at the top and bottom were introduced in the sleeves and the neck line was finished by fitted facing.

**Blouse - B<sub>9</sub>**

- Cross tucks were made and introduced the scalloped effect at the bodice back yoke.
- Puff at the top and bottom were introduced in the sleeve and the neck line was finished by fitted facing.

**Blouse - B<sub>10</sub>**

- Scalloped pleats were introduced at the bodice back yoke and the neck line was finished by fitted facing.
- Puff at the top was introduced in the three fourth sleeve.

**Blouse - B<sub>11</sub>**

- Triangular pieces of material was attached in a bow shape at the bodice back yoke and golden colour beads were fixed at the centre of the bow shape.



PLATE - VII : BLOUSE - B<sub>7</sub>



PLATE - VIII : BLOUSE - B<sub>8</sub>



PLATE - IX : BLOUSE - B<sub>9</sub>

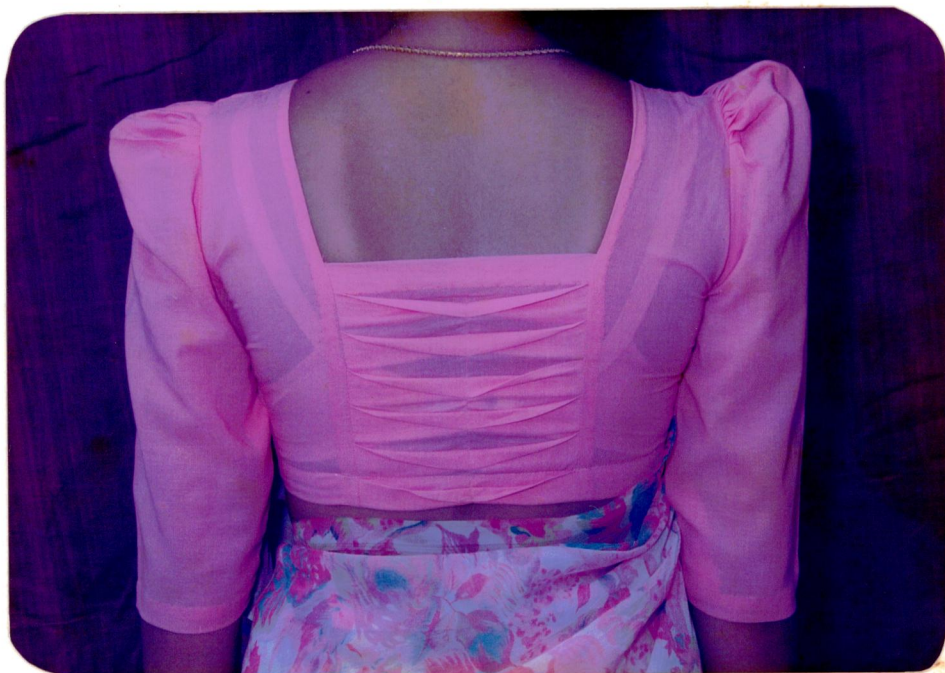


PLATE - X : BLOUSE - B<sub>10</sub>



PLATE - XI : BLOUSE - B<sub>11</sub>



PLATE - XII : BLOUSE - B<sub>12</sub>



PLATE - XIII : BLOUSE - B<sub>13</sub>



PLATE - XIV : BLOUSE - B<sub>14</sub>



PLATE - XV : BLOUSE - B<sub>15</sub>

## F. EVALUATION OF THE CONSTRUCTED BLOUSES

The rating scale is used to judge a set of qualities with the same type of scale for indicating the degree to which each attribute is present, views Grouland and Linn (1990). So, a rating scale was prepared to evaluate the fitness of the constructed blouses. The prepared rating scale is given in Appendix VI. In order to evaluate the constructed blouses 25 judges comprising post graduate students of the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore were selected. One adult women was selected whose body measurements were similar to the standardised measurements of the early adult women. She was requested to wear the blouses one after the other on smooth fitting under garment for evaluation as shown in the Plate I, Plate II, Plate III, Plate IV, Plate V, Plate VI, Plate VII, Plate VIII, Plate IX, Plate X, Plate XI, Plate XII, Plate XIII, Plate XIV and Plate XV.

The data was collected, consolidated and analysed systematically. The results of the evaluation of the constructed blouses are presented and discussed under the Chapter Results and Discussions.

## G. EVALUATION OF THE PATTERNS CREATED IN THE BLOUSES

In order to evaluate the constructed blouses with the selected blouse patterns, 25 judges comprising post graduate students of Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore were selected.

The constructed blouses B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> were displayed in sequential order for evaluation. A rating scale was prepared to evaluate the blouses with the selected patterns. The prepared rating scale is given in Appendix VII. The prepared rating scale was given to the selected judges and they were requested to evaluate the blouses.

The data was collected, consolidated and analysed systematically. The results of the evaluation of the patterns created for the blouses are discussed under the Chapter Results and Discussions.

## **RESULTS AND DISCUSSION**

#### IV. RESULTS AND DISCUSSIONS

The results of the investigation conducted to create patterns in the blouses are presented and discussed under the following headings

- A. Grouping the Body Measurements of Early Adult Women.
- B. Standardising the Body Measurements of Early Adult Women.
- C. Finding out the Preference of the Early Adult Women Regarding the Blouse Patterns.
- D. Evaluation of the Construted Blouses.

##### A. **GROUPING THE BODY MEASUREMENTS OF EARLY ADULT WOMEN**

The body measurements of the selected 100 early adult women were grouped on the basis of their bust measurements having 5 cms difference in each group. The bust measurements in each group were ranged as 67.5 cms - 72.5 cms (Group A), 72.5 cms- 77.5 cms (Group B), 77.5 cms - 82.5 cms (Group C), 82.5 cms- 87.5 cms (Group D) and 87.5 cms - 92.5 cms (Group E).

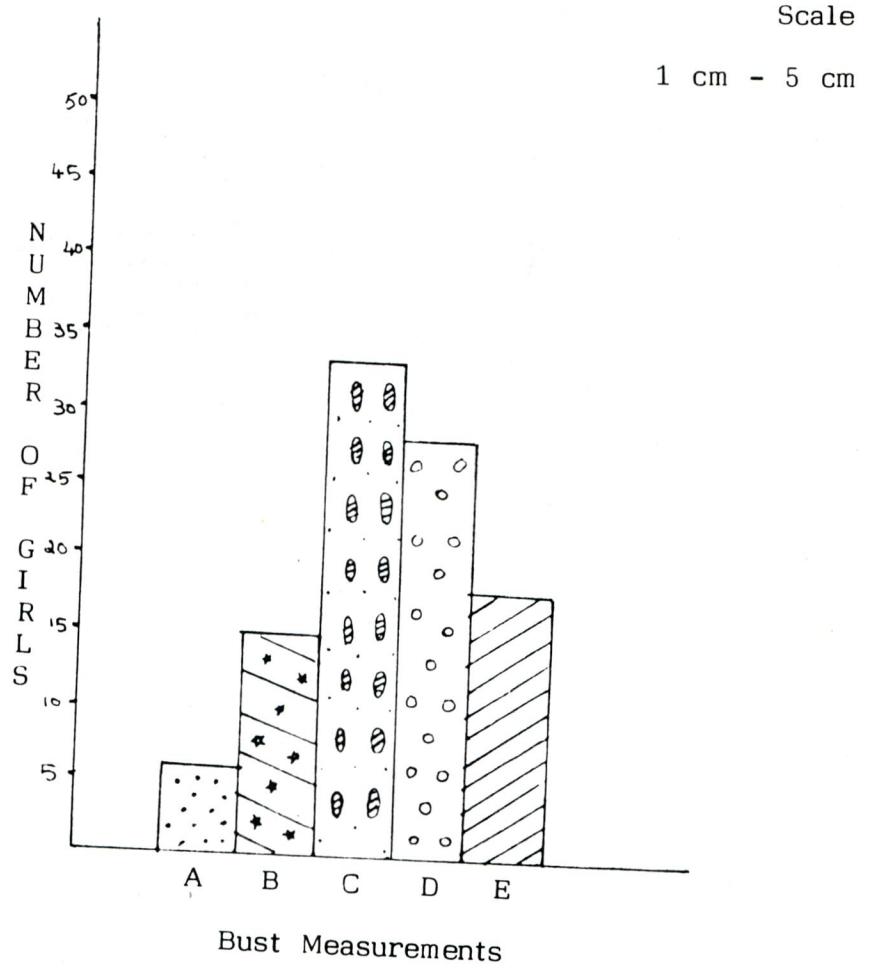
The number of adult women under these groups are given in Table II.

**TABLE II**  
GROUPING OF BUST MEASUREMENTS OF EARLY ADULT WOMEN

S.No.	Group	Range in Bust Circumference (in cms)	Number of Women
1	A	67.5 - 72.5	6
2	B	72.5 - 77.5	15
3	C	77.5 - 82.5	34
4	D	82.5 - 87.5	28
5	E	87.5 - 92.5	17

From Table II, it is clear that the bust measurements of 34 adult women were found in the range of 77.5 cms - 82.5 cms (Group C). The bust measurements of 28 women were found in the range of 82.5 cms - 87.5 cms. The bust measurements of 17 and 15 women were found in the range of 87.5 cms - 92.5 cms and 72.5 cms - 77.5 cms respectively. The bust measurements of 6 women were found in the range of 67.5 cms - 72.5 cms.

Hence it could be concluded that the bust measurements of the majority of women are in the range of 77.5 cms - 82.5 cms (Group C).



KEY :






- Group - A 
- Group - B 
- Group - C 
- Group - D 
- Group - E 

FIGURE - II

GROUPING THE BODY MEASUREMENTS OF EARLY ADULT WOMEN

**B. STANDARDISING THE BODY MEASUREMENTS OF EARLY ADULT  
WOMEN**

The various body measurements taken by the investigator for constructing the blouse were standardised based on the grouping of the bust measurements. The standardised body measurements of early adult womn are given in Table III.

**TABLE III**  
STANDARDISED BODY MEASUREMENTS OF EARLY ADULT WOMEN

S.No.	Name of the Measurement	Range (in Cms)	Grouping of Bust Measurement (in cms)				
			Group A 67.5-72.5	Group B 72.5-77.5	Group C 77.5-82.5	Group D 82.5-87.5	Group E 87.5-92.5
1	Bust Circumference	67.5 - 92.5	70	75	80*	85	90
2	Waist Circumference	58 - 75	58.5	62.5	64.5*	66.5	74.5
3	Lower Arm Circumference	19 - 28	19.5	21.5	21.5*	21.5	25.5
4	Three Fourth Sleeve Circumference	20 - 27	22.5	22.5	22.5*	22.5	26.5
5	Elbow Circumference	22 - 29	22.5	22.5	24.5*	24.5	28.5
6	Front Waist Length	28 - 37	30.5	30.5	32.5*	34.5	34.5
7	Back Waist Length	29 - 36	29.5	29.5	29.5*	31.5	31.5
8	Shoulder to Bust	20 - 27	20.5	20.5	22.5*	22.5	24.5
9	Half Sleeve Length	23 - 30	23.5	23.5	25.5*	27.5	27.5
10	Three Fourth Sleeve Length	35 - 40	35.5	35.5	39.5*	39.5	39.5
11	Back armhole to armhole	30 - 45	34.5	34.5	34.5*	36.5	38.5
12	Distance between the bust points	15 - 22	17.5	17.5	17.5*	17.5	19.5
13	Shoulder seam	6 - 9	6.5	6.5	6.5*	6.5	8.5
14	Front neck depth	14 - 21	14.5	16.5	16.5*	18.5	20.5
15	Back neck depth	14 - 21	14.5	14.5	14.5*	16.5	18.5
16	Armscye depth	15 - 22	19.5	19.5	19.5*	21.5	21.5

\* - Model value.

Table III shows that the bust measurements of Groups A, B, C, D and E is 70 cms, 75 cms, 80 cms, 85 cms and 90 cms respectively. The waist circumference of Groups A and B is 58.5 cms and 62.5 cms respectively. For Groups C, D and E 64.5 cms, 66.5 cms and 74.5 cms respectively. The lower arm circumference of Group A is 19.5 cms and 21.5 cms is for Groups B, C and D. For Group E it is 22.5 cms. For Groups A, B, C and D the three fourth sleeve circumference is 22.5 cms and for Group E, 26.5 cms. For Groups A and B, the elbow circumference is 22.5 cms and for Groups C and D, 24.5 cms. For Group E it is 28.5 cms.

The front waist length of Groups A and B is 30.5 cms and for Group B it is 32.5 cms. For Groups D and E, it is 34.5 cms. For Groups A, B and C the back waist length is 29.5 cms and for Groups D and E 31.5 cms. For Groups A and B the shoulder to bust measurement is 20.5 cms and for Groups C and D, 22.5 cms. For Group E, it is 24.5 cms. The half sleeve length for Groups A and B is 23.5 cms. The half sleeve length for Group C is 25.5 cms for Groups D and E, it is 27.5 cms. The three fourth sleeve length for Groups A and B is 35.5 cms and for Groups C, D and E, it is 39.5 cms.

The back armhole to armhole measurements for Groups A, B and C is 34.5 cms and for Groups D and E, it is 36.5 cms and 38.5 cms respectively. For Groups A, B, C and D the distance between the bust points measurement is 17.5 cms and for Group E, 19.5 cms. The shoulder seam for Groups A, B, C and D is 6.5 cms and for Group E, it is 8.5 cms. Front neck depth for Group A is 14.5 cms and for Groups B and C, 16.5 cms. For Groups D and E, it is 18.5 cms and 20.5 cms respectively. The back neck depth for Groups A, B and C is 14.5 cms, for Group D, 16.5 cms and for Group E it is 18.5 cms. The armscye depth for Groups A, B and C is 19.5 cms and for Groups D and E, it is 21.5 cms.

Since, the bust measurements of the majority of the women were in the range of 77.5 cms - 82.5 cms (Group C), the model values of the body measurements of this group were considered as the standardised body measurements. The model values of the body measurements of other groups such as Group A, Group B, Group D and Group E were not considered as the standardised body measurements because the bust measurements of the minimum number of adult women belonged to these groups.

Hence, it could be concluded that the standardised body measurements of early adult women are as follows. Bust circumference 80 cms, waist circumference 64.5 cms, lower arm circumference 21.5 cms, three fourth sleeve circumference 22.5 cms, elbow

circumference 24.5 cms, front waist length 32.5 cms, back waist length 29.5 cms, three fourth sleeve length 39.5 cms, shoulder to bust 22.5 cms, half sleeve length 25.5 cms, back armhole to armhole 34.5 cms, distance between the bust points 17.5 cms, shoulder seam 6.5 cms, front neck depth 16.5 cms, back neck depth 14.5 cms and armscye depth 19.5 cms.

**C. FINDING OUT THE PREFERENCE OF THE EARLY ADULT WOMEN REGARDING THE BLOUSE PATTERNS**

The list of blouse patterns preferred by the adult women are given in the Table IV.

**TABLE IV**  
**PERCENTAGE OF WOMEN PREFERING BLOUSE PATTERNS**

Number of the blouse patterns	Percentage of the judges	Number of choice	Number of the blouse patterns	Percentage of the judges	Number of choice
P <sub>1</sub>	20	26	P <sub>26</sub>	6	49
P <sub>2</sub>	48	10	P <sub>27</sub>	12	38
P <sub>3</sub>	18	27	P <sub>28</sub>	40	14
P <sub>4</sub>	84	1	P <sub>29</sub>	12	41
P <sub>5</sub>	14	36	P <sub>30</sub>	18	31
P <sub>6</sub>	68	5	P <sub>31</sub>	38	16
P <sub>7</sub>	26	23	P <sub>32</sub>	9	46
P <sub>8</sub>	48	11	P <sub>33</sub>	40	15
P <sub>9</sub>	16	35	P <sub>34</sub>	6	50
P <sub>10</sub>	8	47	P <sub>35</sub>	36	19
P <sub>11</sub>	16	34	P <sub>36</sub>	24	25
P <sub>12</sub>	18	28	P <sub>37</sub>	16	33
P <sub>13</sub>	18	29	P <sub>38</sub>	50	8
P <sub>14</sub>	38	18	P <sub>39</sub>	12	39
P <sub>15</sub>	46	12	P <sub>40</sub>	10	45
P <sub>16</sub>	18	36	P <sub>41</sub>	12	40
P <sub>17</sub>	26	32	P <sub>42</sub>	38	17
P <sub>18</sub>	82	2	P <sub>43</sub>	10	42
P <sub>19</sub>	12	37	P <sub>44</sub>	56	6
P <sub>20</sub>	80	3	P <sub>45</sub>	24	24
P <sub>21</sub>	70	4	P <sub>46</sub>	10	43
P <sub>22</sub>	36	20	P <sub>47</sub>	50	9
P <sub>23</sub>	42	13	P <sub>48</sub>	32	21
P <sub>24</sub>	54	7	P <sub>49</sub>	10	44
P <sub>25</sub>	6	48	P <sub>50</sub>	18	32

Table IV clearly shows that the blouse patterns  $P_4$ ,  $P_{18}$ ,  $P_{20}$ ,  $P_{21}$ ,  $P_6$ ,  $P_{44}$ ,  $P_{24}$ ,  $P_{38}$ ,  $P_{47}$ ,  $P_2$ ,  $P_8$ ,  $P_{15}$ ,  $P_{23}$ ,  $P_{28}$  and  $P_{33}$  were preferred by 84, 82, 80, 70, 68, 56, 54, 50, 50, 48, 48, 46, 42, 40 and 40 per cent of the judges respectively. The other patterns were preferred by less than 40 per cent of the judges.

Hence it could be concluded that the majority of the judges preferred the blouse patterns  $P_4$ ,  $P_{18}$ ,  $P_{20}$ ,  $P_{21}$ ,  $P_6$ ,  $P_{44}$ ,  $P_{24}$ ,  $P_{38}$ ,  $P_{47}$ ,  $P_2$ ,  $P_8$ ,  $P_{15}$ ,  $P_{23}$ ,  $P_{28}$  and  $P_{33}$  for blouses.

#### D. EVALUATION OF THE CONSTRUCTED BLOUSES

The details of the evaluation of the constructed blouses are as follows

1. Fitness of the Constructed Blouses.
2. Effectiveness of the Constructed Blouse Patterns.

##### 1. Fitness of the Constructed Blouses

The evaluation of the fitness of the constructed blouses are given in the Table V.

TABLE - V

FITNESS OF THE CONSTRUCTED BLOUSES

FITTING ASPECTS :

I. EASE

S.No.	Blouses	Bust Ease			Armscye Ease			Upperarm Ease			Lower Arm Ease			Waist Ease		
		Profit Fit	Loose	Tight	Profit Fit	Loose	Tight	Profit Fit	Loose	Tight	Profit Fit	Loose	Tight	Profit Fit	Loose	Tight
a.	B <sub>1</sub>	100	-	-	92	8	-	96	4	-	100	-	-	100	-	-
b.	B <sub>2</sub>	96	4	-	100	-	-	100	-	-	92	4	4	100	-	-
c.	B <sub>3</sub>	100	-	-	92	4	4	100	-	-	100	-	-	96	4	-
d.	B <sub>4</sub>	96	-	4	100	-	-	92	8	-	100	-	-	100	-	-
e.	B <sub>5</sub>	100	-	-	100	-	-	92	4	4	100	-	-	100	-	-
f.	B <sub>6</sub>	96	4	-	100	-	-	100	-	-	100	-	-	100	-	-
g.	B <sub>7</sub>	96	4	-	100	-	-	100	-	-	92	8	-	100	-	-
h.	B <sub>8</sub>	96	4	-	100	-	-	100	-	-	100	-	-	100	-	-
i.	B <sub>9</sub>	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-
j.	B <sub>10</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
k.	B <sub>11</sub>	96	4	-	100	-	-	100	-	-	100	-	-	100	-	-
l.	B <sub>12</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
m.	B <sub>13</sub>	100	-	-	100	-	-	96	4	-	100	-	-	100	-	-
n.	B <sub>14</sub>	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-
o.	B <sub>15</sub>	100	-	-	100	-	-	96	4	-	100	-	-	100	-	-

## II. LINE

S.No.	Blouses	Shoulder Line			Placket Line			Side seam of the Blouse			Side seam of the Sleeve			Neck Line		
		Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth
a.	B <sub>1</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
b.	B <sub>2</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
c.	B <sub>3</sub>	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-
d.	B <sub>4</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
e.	B <sub>5</sub>	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-
f.	B <sub>6</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
g.	B <sub>7</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
h.	B <sub>8</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
i.	B <sub>9</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
j.	B <sub>10</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
k.	B <sub>11</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
l.	B <sub>12</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
m.	B <sub>13</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
n.	B <sub>14</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
o.	B <sub>15</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-

From the Table V, it is clearly understood that the bust, armscye, upper arm, lower arm and waist ease of the blouses B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> showed proper fit as stated by more than 90 per cent of the judges. Due to the individual difference in body measurements, the ease was a little bit more or less, as stated by less than 8 per cent of the judges.

The shoulder line, placket line, side seams of the blouse, side seam of the sleeves and the neckline of the blouses B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> showed smooth in line as stated by more than 96 per cent of the judges.

The grain, set and balance of the bodice and sleeve for the blouses B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> showed correct fitting as stated by 100 per cent of the judges. Except the blouses B<sub>2</sub>, B<sub>5</sub>, B<sub>8</sub> and B<sub>12</sub>, all the other blouses were very good in comfort as stated by 96 per cent of the judges.

Hence, it could be concluded that all the constructed blouses are fitting properly because of the proper ease, balance and comfort and correct line, grain and set.

## 2. Effectiveness of the Constructed Blouse Patterns

The results of the evaluation of the effectiveness of the constructed blouse patterns are given in the Table VI.

From the table, it is clear that the judges rated the blouses B<sub>3</sub>, B<sub>6</sub>, B<sub>9</sub>, B<sub>11</sub>, B<sub>12</sub> and B<sub>14</sub> as good and 99 per cent of the judges rated the blouses B<sub>2</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>7</sub>, B<sub>8</sub> and B<sub>10</sub> and B<sub>15</sub> as good and 98 per cent of the judges rated the blouses B<sub>1</sub> and B<sub>15</sub> as good.

Hence it could be concluded that all the constructed blouses are rated as good regarding the aspects related to the effectiveness of the blouse patterns.

## **SUMMARY AND CONCLUSION**

## V. SUMMARY AND CONCLUSION

Dress making is one phase of sewing. Dressing up well is an essential part of the pleasant personality. There are evidences that women today are sewing more than before. Ladies matching sense have reached its peak with the use of blouses and tops with multicoloured threads and pieces of mirrors for a number of saris and dresses. Fashion changes day by day and now , blouses are given much emphasis due to the increased interest created by them. Almost all women prefer to wear sari with a good blouse. Every successful garment must have smart styling as well as lines suitable for the figure.

Considering the above the investigator felt the need for standardising the body measurements and create blouse patterns for the early adult women. The research work is planned with the following objectives.

- Taking, grouping and standardising the body measurements of adult women.
- Finding out the preference of the adult women regarding the blouse patterns.
- Developing the basic pattern for blouse using standardised body measurements.
- Constructing the blouses for adult women using the basic pattern.

- Constructing the blouses using the selected blouse patterns.
- Evaluating the fitness of the constructed blouses and the patterns created to suit the blouses.

## METHODOLOGY

The investigator studied various fashion books and journals namely Femina, Womens era, Clothes line, Chirag, Jasmine, Dressage, the Bombay Catalog and also visited boutique shops to get an idea about the prevailing blouse patterns suitable for early adult women.

The investigator selected the early adulthood period (18-25 years) for the study. One hundred early adultwomen were selected at random from Avinashilingam Institute for Home Sciece and Higher Education for Women, Coimbatore for the study because it was convenient for the investigator to take body measurements required for the blouse at their leisure time.

The adult women were requested to wear proper foundation garments and to stand errect. Measuremnts were taken using metal end of the tape for vertical measurements and the other end for the horizontal measurements. The tape was kept parallel to the floor for vertical measurements. Thus the measurements required for the blouse were taken in proper order following certain

sequence and recorded carefully. The investigator grouped the body measurements into five groups on the basis of their bust measurements having 5 cms difference in each group. The bust measurements in each group were ranged as 67.5 cms - 72.5 cms (Group A), 72.5 cms - 77.5 cms (Group B), 77.5 cms - 82.5 cms (Group C), 82.5 cms - 87.5 cms (Group D) and 87.5 cms - 92.5 cms (Group E). Other body measurements were standardised based on the bust groups using mode in statistics.

The investigator selected the blouse for the study. The investigator studied the instructions for the blouse pattern given by Thangam Subramaniam (1987), Mary Mathews (1985), Anwani (1985) and Doongagi and Deshpande (1986) were compared and developed new instructions for the blouse. The investigator drafted the blouse basic pattern by using the developed instructions and the standardised body measurements. Muslin pattern was prepared for the blouse and the fitness of the blouse was checked. Slight modifications were done and new instructions were developed.

To create patterns in blouse the investigator referred many design magazines and created fifty patterns suitable for blouses. The created blouse patterns were numbered from  $P_1$  to  $P_{50}$ . In order to select the 15 patterns for the blouse out of 50 blouse patterns the investigator prepared a proforma. The fifty blouse patterns were arranged in sequential order. Fifty adult women

were selected from Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. The prepared proforma was given to the selected judges and they were requested to select fifteen patterns suitable for the blouse. The data was collected, consolidated and analysed systematically. Thus selected the most preferred fifteen blouse patterns. Paper patterns were prepared for the selected blouse patterns B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> by using the blouse basic pattern.

Cotton blend material was selected for the blouse. Sample of cotton blend materials of different colours were collected. The samples were shown to fifty adult women and they were requested to choose the colour of the cotton blend material. Thus the investigator selected and purchased the material for the blouses. The fabric was straightened by pulling a crosswise thread and cutting along the line. The material was pre-shrunk and all the creases were removed by pressing. Thus the materials were prepared before cutting.

The material was placed flat on the cutting table. The pattern (B<sub>1</sub>) was placed on the material keeping an eye on the straight grain. Pins were placed within seam allowances at right angles to the cut edges. The tracing wheel and the carbon method were used to mark pattern lines on the material. Marking was done

by inserting dress makers carbon between the material and the paper pattern by just removing few pins. The pins were pinned back to position and the tracing wheel was moved firmly on the paper pattern. Care was taken to make all the details on the wrong side of the material. Cutting was done by taking long even strokes. Neckline and placket pieces were also cut and kept aside. Following the same procedure, the patterns for the blouses B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> were cut. And the investigator constructed the blouses with the selected patterns.

Twenty five judges comprising the post graduate students and staff of the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore were selected. One adult women was selected whose body measurements were similar to the standardised body measurements of the early adult women. She was requested to wear the blouses one after the other on a smooth fitting under garment for evaluation. The prepared rating scale was given to the selected 25 judges and they were requested to evaluate the fitness of the constructed blouses. The data was collected, consolidated and analysed systematically.

Twenty five judges comprising the post graduate students of Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore were selected. The constructed blouses

B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>7</sub>, B<sub>8</sub>, B<sub>9</sub>, B<sub>10</sub>, B<sub>11</sub>, B<sub>12</sub>, B<sub>13</sub>, B<sub>14</sub> and B<sub>15</sub> were displayed in sequential order for evaluation. A rating scale was prepared to evaluate the blouses with the selected patterns. The prepared rating scale was given to the selected judges and they were requested to evaluate the blouses. The data was collected, consolidated and analysed systematically.

## **FINDINGS OF THE STUDY**

### **A. GROUPING THE BODY MEASUREMENTS OF EARLY ADULT WOMEN**

The bust measurements of the majority of women are in the range of 77.5 cms - 82.5 cms.

### **B. STANDARDISING THE BODY MEASUREMENTS OF EARLY ADULT WOMEN**

The body measurements of early adult women are, waist circumference 64.5 cms, lower arm circumference 21.5 cms, three fourth sleeve circumference 22.5 cms, back waist length 29.5 cms, three fourth sleeve length 39.5 cms, shoulder to bust 22.5 cms, the half sleeve length 25.5 cms, back armhole to armhole 34.5 cms, distance between the bust points 17.5 cms, shoulder seam 6.5 cms, front neck depth 16.5 cms, back neck depth 14.5 cms and armscye depth 19.4 cms.

### **C. FINDING OUT THE PREFERENCE OF THE EARLY ADULT WOMEN REGARDING THE BLOUSE PATTERNS**

The majority of the judges preferred the blouse patterns, P<sub>4</sub>, P<sub>18</sub>, P<sub>20</sub>, P<sub>21</sub>, P<sub>6</sub>, P<sub>44</sub>, P<sub>24</sub>, P<sub>34</sub>, P<sub>47</sub>, P<sub>2</sub>, P<sub>8</sub>, P<sub>15</sub>, P<sub>23</sub>, P<sub>28</sub> and P<sub>33</sub> for blouses.

### **D. EVALUATION OF THE CONSTRUCTED BLOUSES**

#### **1. Fitness of the Constructed Blouses**

All the constructed blouses are fitting properly because of the proper ease, balance and comfort and correct line, grain and set.

#### **2. Effectiveness of the Constructed Blouses**

All the constructed blouses are rated as good regarding the aspects related to the effectiveness of the blouse patterns.

In the science oriented world of today, rapid progress is being made in every field. A field like clothing construction can also be made an enjoyable experience by adopting a simplified method of pattern making for garment construction, which saves time, money and provide good fitting. It is hoped that the patterns created in the blouses, may find a new phase among the wardrobe contents of adult women.

## RECOMMENDATIONS

The investigator suggests that some more studies can be done in the same area. She suggests that pattern can be created for Salwar Kameez, Middy, Night Dress and also for childrens garment.

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## **APPENDICES**

APPENDIX - I

BODY MEASUREMENTS OF EARLY ADULT WOMEN (IN CMS)

S.No.	Bust Circumference	Waist Circumference	Lower Arm Circumference	Three Fourth Sleeve Circumference	Elbow Circumference	Front Waist Length	Back Waist Length	Shoulder to Bust	Half Sleeve Length	Three Fourth Sleeve Length	Back Armhole to Armhole	Distance Between the Bust Points	Shoulder Seam	Front Neck Depth	Back Neck Depth	Armscye Depth
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	90	73	25	22	24	34	30	24	28	39	44	22	8	17	15	20
2	90	69	26	25	25	35	31	26	27	40	40	20	8	17	16	19
3	80	60	20	22	26	34	30	24	25	37	37	19	7	18	16	20
x 4	80	68	24	23	28	33	30	23	26	40	35	20	7	17	15	19
5	80	65	23	23	26	33	29	22	26	36	35	18	8	16	14	19
6	75	59	19	22	24	31	29	21	26	36	35	16	8	16	15	20
7	70	60	21	22	24	28	29	20	24	36	35	15	7	17	14	19
8	80	68	24	24	26	31	29	20	23	37	35	17	8	18	15	20
9	80	64	21	22	24	33	29	21	25	38	33	18	9	16	14	19
10	80	64	20	24	27	31	30	20	26	39	34	16	7	19	17	19
11	85	66	24	23	25	33	31	23	25	40	36	18	7	16	15	20
12	90	73	27	26	28	37	34	24	27	38	44	20	9	21	17	18
13	75	63	23	23	26	30	29	21	23	36	34	18	8	16	14	20
14	70	58	20	22	23	30	30	20	23	40	35	17	6	15	14	19
15	75	63	21	24	25	30	31	21	27	39	34	17	7	15	18	22
16	70	60	19	22	24	31	31	21	24	38	33	17	8	15	14	20
17	80	66	23	23	25	32	29	24	25	36	35	18	8	16	15	16
18	80	64	22	26	27	30	30	22	26	38	35	17	7	16	14	20
19	70	64	23	24	26	31	32	21	25	36	36	17	7	16	14	19
20	80	64	24	26	29	30	30	21	25	36	35	18	7	16	16	19

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
46	90	74	27	22	24	36	34	25	25	36	37	20	7	19	17	19
47	90	75	25	26	28	35	36	23	27	38	44	20	8	19	18	22
48	80	70	22	23	25	32	32	21	27	37	35	18	7	16	15	15
49	75	63	21	21	23	29	30	20	28	40	33	17	7	17	14	20
50	85	69	26	26	28	34	32	24	28	40	36	17	8	21	18	21
51	75	60	21	20	22	28	29	20	25	36	30	17	7	16	14	15
52	85	64	23	23	25	35	31	20	27	38	36	19	8	18	16	22
53	85	66	22	23	25	34	31	25	26	37	34	20	8	19	18	21
54	80	66	21	21	23	32	30	24	28	35	36	17	9	17	16	19
55	70	59	19	21	23	29	29	21	26	36	30	18	8	14	14	19
56	85	67	22	21	23	35	33	25	27	38	36	21	8	16	15	22
57	70	58	22	22	25	31	30	21	28	40	31	17	7	15	14	15
58	85	69	24	23	25	32	29	22	25	36	36	18	7	19	17	21
59	80	65	19	20	22	32	31	20	27	38	34	19	8	17	15	20
60	90	73	27	26	28	34	31	26	25	36	39	19	9	21	19	19
61	85	67	22	23	25	34	34	25	29	39	36	18	7	19	17	22
62	90	74	24	26	29	36	32	27	29	40	36	19	8	18	16	21
63	80	65	23	23	25	34	30	23	29	39	34	18	7	16	15	16
64	80	66	22	22	24	33	30	22	28	40	34	18	7	17	16	19
65	85	63	23	22	24	34	33	23	26	39	34	18	7	19	17	20
66	80	62	21	22	24	31	30	23	25	40	34	17	7	16	14	20
67	75	62	21	21	23	30	29	23	24	36	34	18	8	15	14	19
68	85	66	23	21	23	32	36	22	27	37	34	17	7	21	19	21

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
21	90	75	21	22	23	33	30	25	27	38	40	21	7	21	18	19
22	85	65	23	23	27	30	31	22	26	37	36	20	8	18	16	21
23	85	66	24	23	27	33	30	23	28	40	35	20	8	19	17	22
24	90	75	25	22	24	37	31	25	26	37	37	20	7	20	18	21
25	90	75	25	23	24	34	31	25	26	38	38	18	9	21	17	20
26	80	67	23	24	27	34	32	24	28	40	37	20	7	16	14	15
27	85	67	27	26	28	32	31	22	28	40	37	19	8	19	16	21
28	80	66	25	24	27	34	32	23	29	38	34	19	7	17	16	19
29	85	66	25	23	25	33	31	23	26	37	34	18	7	20	17	20
30	75	62	20	23	25	32	31	23	27	38	38	17	8	15	14	19
31	85	71	24	22	24	33	31	20	25	35	37	18	7	16	14	22
32	80	62	20	23	25	34	31	21	25	36	32	17	8	17	15	20
33	85	69	24	22	24	34	32	22	28	40	35	18	7	20	17	21
34	80	61	20	23	25	33	32	22	29	40	35	19	9	17	16	20
35	80	64	20	22	23	34	30	25	25	36	32	19	7	18	15	19
36	85	68	23	23	23	36	33	26	28	40	41	20	9	18	16	19
37	85	72	25	26	28	35	34	23	27	38	33	18	7	19	17	21
38	90	75	24	23	25	36	32	27	28	40	38	21	8	21	19	19
39	75	65	21	20	22	32	31	20	24	36	36	18	7	14	14	19
40	75	64	19	20	22	30	30	21	24	36	33	18	7	16	14	21
41	80	65	22	23	25	33	33	22	26	38	34	19	7	17	15	19
42	85	75	25	24	27	34	33	22	29	40	35	19	7	18	16	22
43	90	74	26	26	29	35	32	26	29	40	39	20	8	20	18	17
44	80	67	23	24	26	35	33	22	27	38	34	20	7	17	14	20
45	90	75	25	26	28	35	34	27	26	37	37	20	8	21	20	21

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
69	80	68	21	22	24	33	32	23	28	40	34	19	7	16	14	19
70	85	66	23	22	24	33	31	22	27	37	36	18	8	20	19	22
71	90	74	26	24	27	36	33	24	28	40	44	22	9	21	18	22
72	70	59	19	22	24	31	29	21	23	36	34	17	6	17	14	16
73	80	67	22	22	23	33	30	22	25	36	35	18	8	18	17	19
74	80	67	22	23	25	33	30	23	26	40	35	19	7	16	14	20
75	85	67	24	23	25	34	32	24	25	36	37	18	7	19	16	19
76	90	73	27	26	29	37	34	25	28	40	44	18	8	20	18	21
77	85	68	23	22	24	35	32	25	27	38	36	18	8	18	15	22
78	80	65	24	24	26	31	30	24	29	40	34	18	7	17	15	20
79	75	62	21	22	23	31	31	23	25	36	34	17	8	16	14	16
80	85	69	22	23	25	34	32	23	28	40	36	20	7	19	19	21
81	80	66	21	22	23	32	30	24	27	38	34	18	7	19	15	19
82	80	65	19	20	22	34	32	23	28	40	36	18	8	18	15	19
83	85	70	24	22	24	33	31	21	24	36	36	18	7	19	17	22
84	75	62	21	20	23	31	32	22	23	36	33	17	8	15	14	21
85	85	66	24	23	25	34	30	23	27	39	35	20	8	21	18	20
86	80	64	20	20	23	34	30	25	26	36	37	18	7	16	15	19
87	90	75	25	23	25	34	31	25	26	36	38	20	8	20	17	21
88	80	69	20	22	23	33	32	23	27	40	35	18	7	17	15	20
89	85	73	25	23	25	33	30	22	28	40	34	20	7	19	18	19
90	85	68	21	24	26	35	32	23	27	38	36	18	7	18	15	19

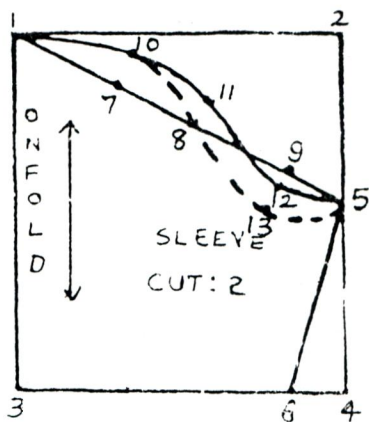
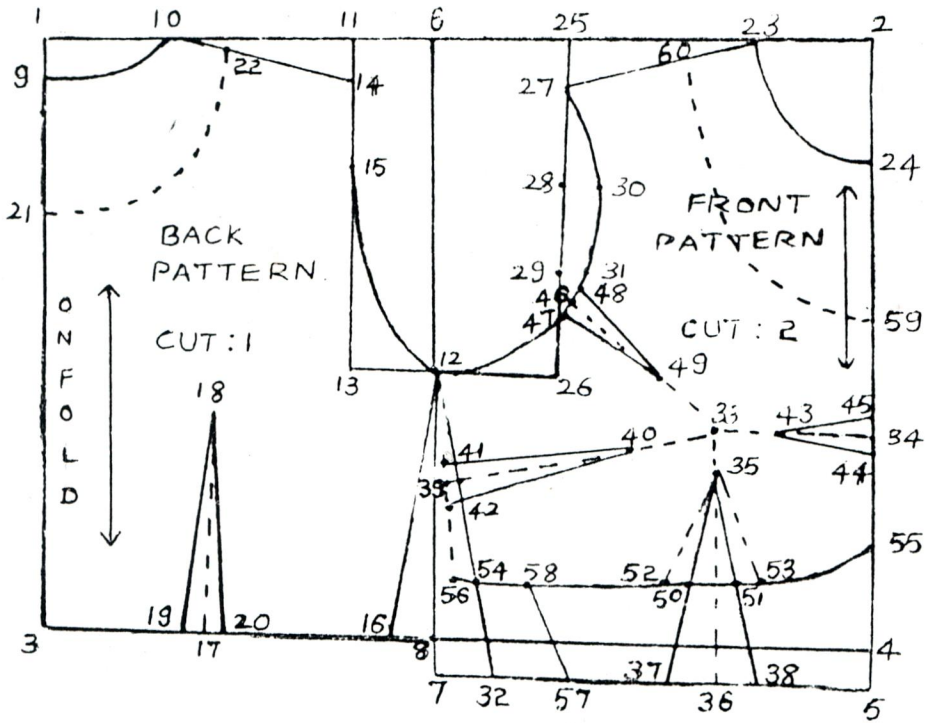
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
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92	75	62	22	23	25	30	29	23	27	33	38	17	7	16	14	22
93	80	66	24	24	26	34	32	22	29	40	34	18	7	17	15	19
94	80	64	20	21	23	33	30	21	27	40	38	18	8	16	14	15
95	90	75	24	25	27	34	31	25	26	35	37	20	8	21	18	22
96	85	69	22	22	24	35	33	23	28	40	36	20	8	19	17	20
97	75	62	24	24	26	32	32	21	24	36	36	17	7	13	14	19
98	85	70	23	23	26	33	30	22	27	39	35	18	8	16	14	20
99	80	65	24	25	27	34	32	23	26	39	37	18	8	17	15	20
100	75	62	20	23	25	33	34	20	28	40	38	17	7	15	14	20

## APPENDIX - II

### THE DEVELOPED INSTRUCTIONS FOR DRAFTING THE BLOUSE PATTERN

#### MEASUREMENTS FOR BLOUSES

Bust circumference	:	80 cms
Waist circumference	:	64.5 cms
Lower arm circumference	:	21.5 cms
Three fourth sleeve circumference	:	22.5 cms
Elbow circumference	:	24.5 cms
Front waist length	:	32.5 cms
Back waist length	:	29.5 cms
Shoulder to bust	:	22.5 cms
Half sleeve length	:	25.5 cms
Three fourth sleeve length	:	39.5 cms
Back armhole to armhole	:	34.5 cms
Distance between the bust points	:	17.5 cms
Shoulder seam	:	6.5 cms
Front neck depth	:	16.5 cms
Back neck depth	:	14.5 cms
Armscye depth	:	19.5 cms



## INSTRUCTIONS FOR DRAFTING THE BODICE PATTERN

Draw a rectangle 1, 2, 3 and 4

$$0-2 = \frac{1}{2} \text{ bust} + 3 \text{ cms}$$

$$2-4 = \text{Back waist length} + 1.25 \text{ cms}$$

$$2-6 = \frac{1}{2} \text{ of } 1-2 + 0.625 \text{ cms}$$

Extend the line 2-4

$$2-5 = \text{Front waist length} + 1.25 \text{ cms}$$

$$6-7 = \text{Equal to } 2-5$$

$$7-8 = \text{Equal to } 4-5$$

Connect points 1, 6, 8, 3 and 1 for back pattern

Connect points 6, 2, 5, 7 and 6 for front pattern

### BACK PATTERN

$$1-9 = 2.5 \text{ cms}$$

$$1-10 = \frac{1}{12} \text{ bust}$$

Connect 9 and 10 with a curved line

$$1-11 = \frac{1}{2} \text{ back width}$$

$$6-12 = \frac{1}{4} \text{ bust} - 1.25 \text{ cms}$$

Draw lines from 11 and 12 and mark the intersecting point as 13

$$11-14 = 1.25 \text{ cms}$$

$$14-15 = \frac{1}{3} \text{ of } 14-13$$

Connect 14, 15 and 12 with a curved line

$$3-16 = \frac{1}{2} \text{ back waist} + 2.5 \text{ cms}$$

3-17 =  $\frac{1}{2}$  of 3-16

17-18 = 8-12 minus 2.5 cms

19-17 and 17-20 = 1.25 cms

Connect 19-18 and 18-20

Connect 12 and 16 with a straight line

### FRONT PATTERN

2-23 =  $\frac{1}{2}$  front neck depth

2-24 =  $\frac{1}{2}$  bust + 0.625 cms

Connect 23 and 24 with a curved line

2-25 =  $\frac{1}{2}$  back width - 0.625 cms

Draw lines from 25 and 12, Mark the intersecting point as 26

25-27 = 1.25 cms

Divide 27 and 26 into three equal parts and mark the points as 28 and 29.

28-30 = 1.25 cms

29-31 = 0.625 cms

Connect 27, 30, 31 and 12 with a curved line.

5-32 =  $\frac{1}{2}$  front waist + 3.125 cms + 0.3125 cms for ease

Connect 12-32 with a straight line to form the front side seam line

## LOCATION OF BUST POINT

Mark point 34 on line 2-5

2-34 = shoulder to bust + 0.625 cms for ease

34-33 =  $\frac{1}{2}$  Distance between bust points

### (i) FRONT WAISTLINE DART

33-35 = 1.25 cms

36-35 = Straight line

37-36 = 38-36 = 1.875 cms

Connect points 37-35 and 38-35 with straight lines.

### (ii) SIDE SEAM DART

12-39 = 2-34 plus 3.75 cms

Mark dotted lines from 39 to 33

40-33 = 3.75 cms

Mark points 41 and 42 on either side of point 39 which is equal to,

12-32 minus 12-16

Connect 41-40 and 42-40 with straight lines.

**(iii) CENTRE FRONT DART**

33-43 = 2.5 cms on the dotted line 33-34

34-44 and 34-45 = 0.9 cms

Connect 44-43 and 45-43 with straight lines

**(iv) ARMHOLE DART**

46-31 = 1.875 cms

Connect 46 and 33 with a dotted line

33-49 = 5 cms

46-47 and 46-48 = 0.625 cms

Connect 48-49 and 47-49 with straight lines.

**WAIST YOKE**

35-50 and 33-51 =  $\frac{1}{12}$  bust - 2.5 cms

50-52 and 51-53 = 1.25 cms

Connect 35-52 and 35-53 with straight lines

32-54 = 37-50

5-55 = 37-50 + 1.25 cms

Connect 54, 52, 53 and 55 as shown in the Diagram

54-56 = 1.25 cms

Connect 12 and 56 with a dotted line. This is the part of the side seam line of the blouse front. Extend the side seam dart to meet line 12-56,

32-57 = 37-38

54-58 = 50-51

Connect 57-58. This is the side seam of the waist yoke.

### MODIFICATION FOR LOW NECK LINE

For low neck line,

1-21 = the desired back neck depth of blouse

14-22 = the desired shoulder seam length

For low front neckline,

2-59 = the desired front neck depth of blouse

27-60 = 14-22 the shoulder seam length of the back pattern.

### SLEEVE PATTERN

Draw rectangle 1, 2, 3 and 4

1-2 = Armscye depth - 1.875 cms

1-3 = Sleeve length

2-5 =  $\frac{1}{2}$  of 1-2

3-6 =  $\frac{1}{2}$  lower arm circumference + 0.3125 cms

Connect 1-5 and 5-6 with straight lines, Divide

1-5 into four equal parts and mark the points as 7, 8 and 9 as shown in the diagram.

7-10 = 1.25 cms

8-11 = 0.625 cms

9-12 = 0.625 cms

9-13 = 1.25 cms

Connect points 1, 10, 11, 12 and 5 for back sleeve cap seam line.

Connect points 1, 7, 8, 13 and 5 for front sleeve cap seamline.

#### NOTE

Seam Allowances are not included in this pattern.

**APPENDIX - III**

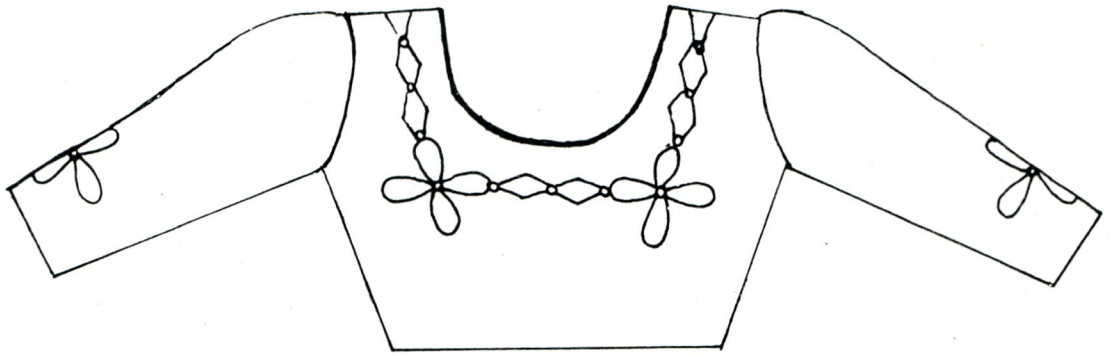
**PROFORMA USED FOR SELECTING THE BLOUSE PATTERNS**

Name of the Judge :

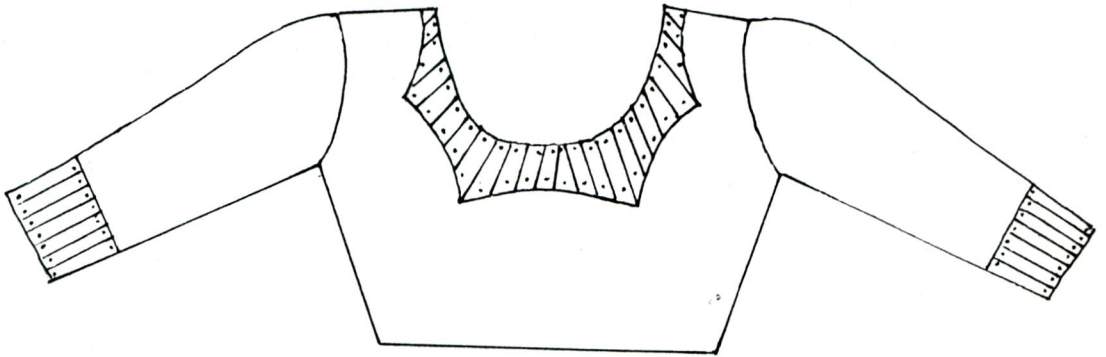
1. Choose any fifteen designs most preferred by you.

Number of Blouse pattern	Patterns preferred	Number of Blouse pattern	Patterns preferred
P <sub>1</sub>		P <sub>26</sub>	
P <sub>2</sub>		P <sub>27</sub>	
P <sub>3</sub>		P <sub>28</sub>	
P <sub>4</sub>		P <sub>29</sub>	
P <sub>5</sub>		P <sub>30</sub>	
P <sub>6</sub>		P <sub>31</sub>	
P <sub>7</sub>		P <sub>32</sub>	
P <sub>8</sub>		P <sub>33</sub>	
P <sub>9</sub>		P <sub>34</sub>	
P <sub>10</sub>		P <sub>35</sub>	
P <sub>11</sub>		P <sub>36</sub>	
P <sub>12</sub>		P <sub>37</sub>	
P <sub>13</sub>		P <sub>38</sub>	
P <sub>14</sub>		P <sub>39</sub>	
P <sub>15</sub>		P <sub>40</sub>	
P <sub>16</sub>		P <sub>41</sub>	
P <sub>17</sub>		P <sub>42</sub>	
P <sub>18</sub>		P <sub>43</sub>	
P <sub>19</sub>		P <sub>44</sub>	
P <sub>20</sub>		P <sub>45</sub>	
P <sub>21</sub>		P <sub>46</sub>	
P <sub>22</sub>		P <sub>47</sub>	
P <sub>23</sub>		P <sub>48</sub>	
P <sub>24</sub>		P <sub>49</sub>	
P <sub>25</sub>		P <sub>50</sub>	

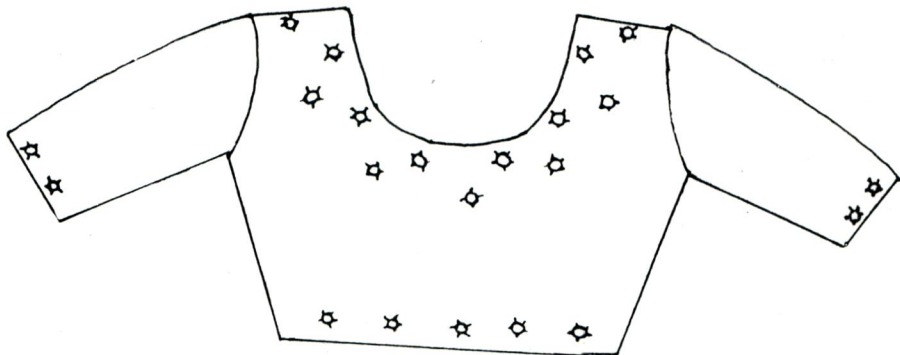
APPENDIX - IV  
THE SELECTED BLOUSE PATTERNS



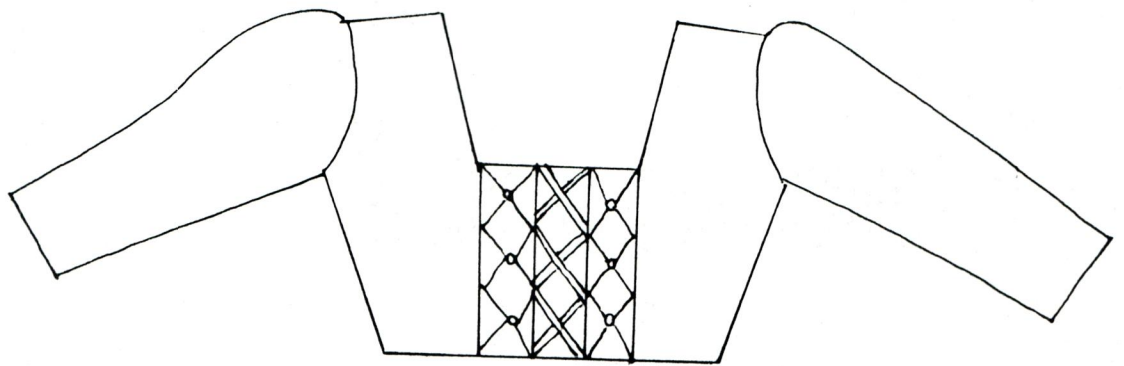
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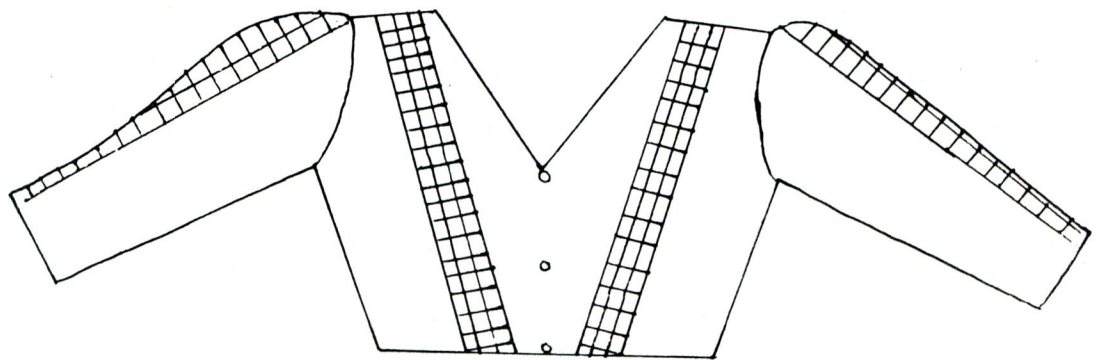
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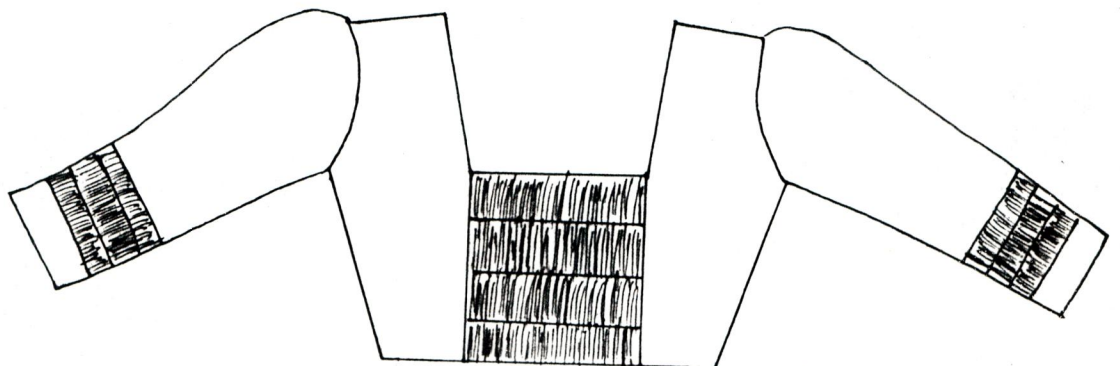
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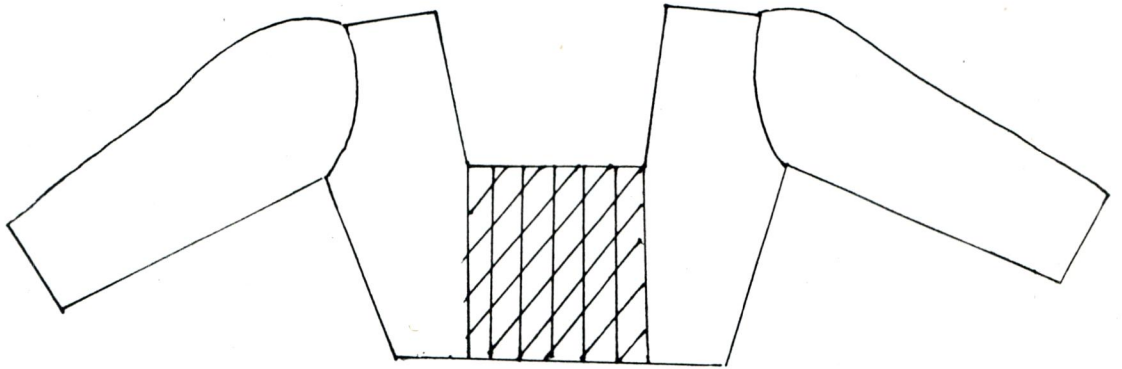
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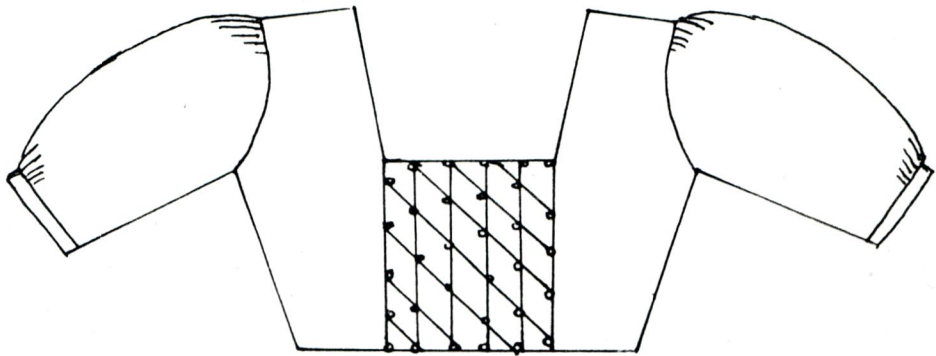
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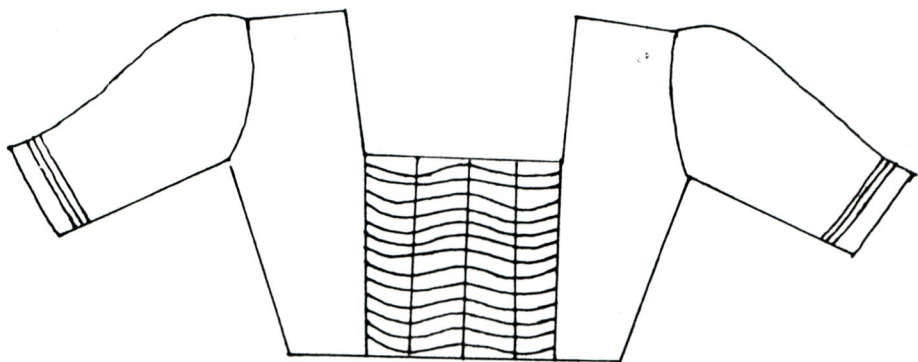
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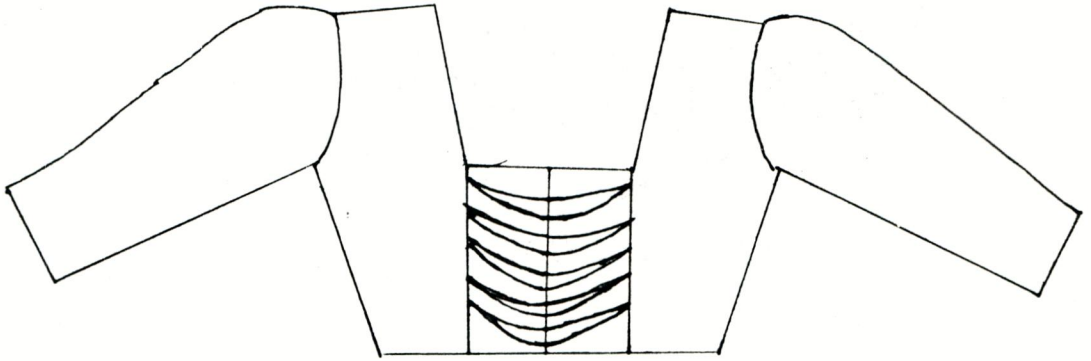
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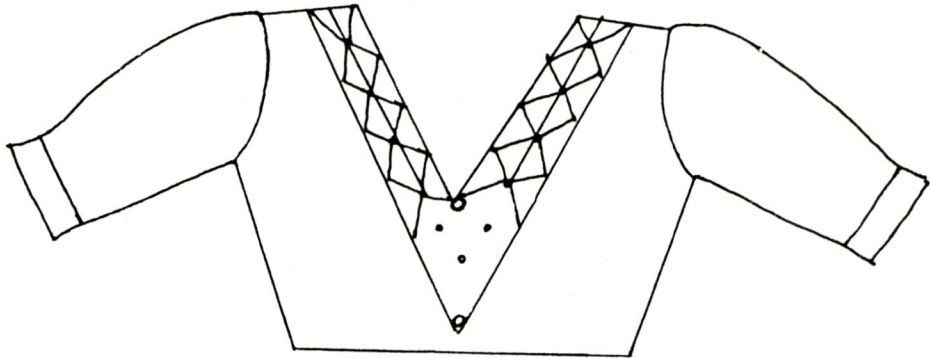
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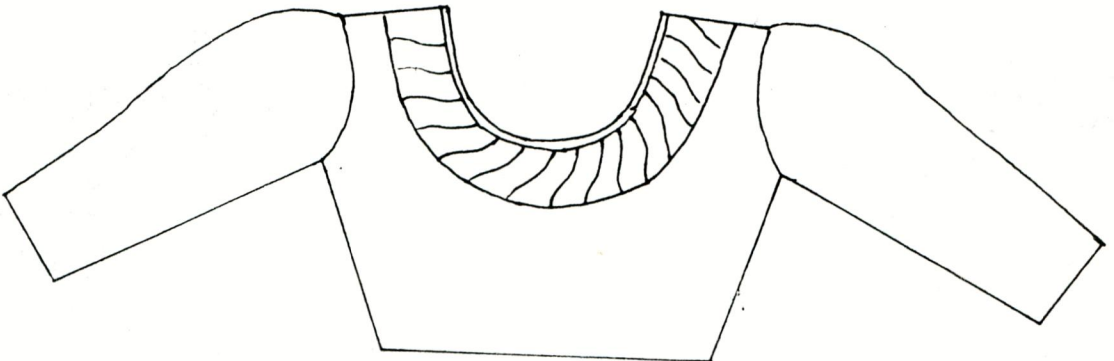
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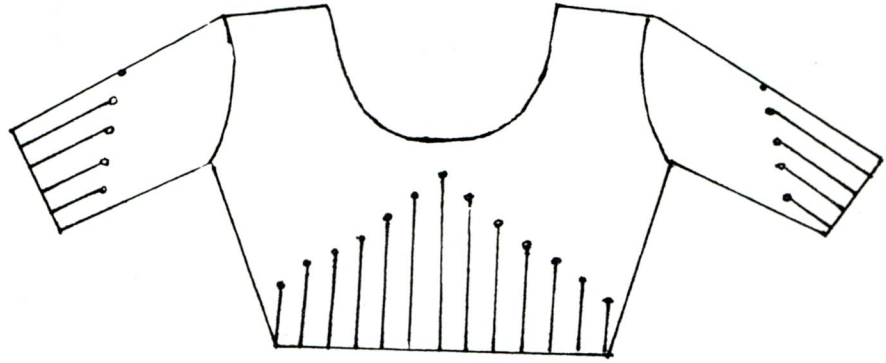
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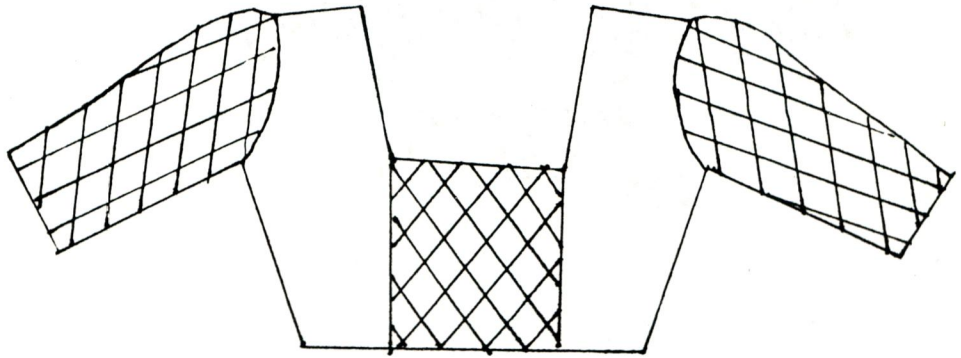
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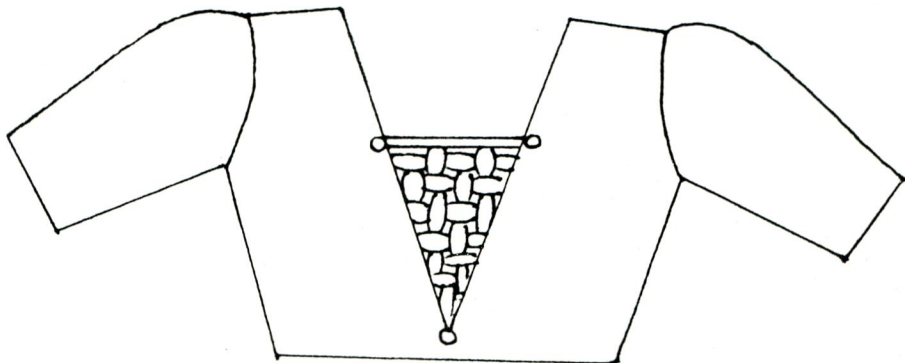
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P<sub>38</sub>



P<sub>44</sub>



P<sub>47</sub>

APPENDIX - V

THE SELECTED MATERIALS FOR THE BLOUSES



**APPENDIX - VI**

RATING SCALE USED TO EVALUATE THE FITNESS OF THE CONSTRUCTED BLOUSES

NAME OF THE JUDGE :

FITTING ASPECTS :

**A. Ease**

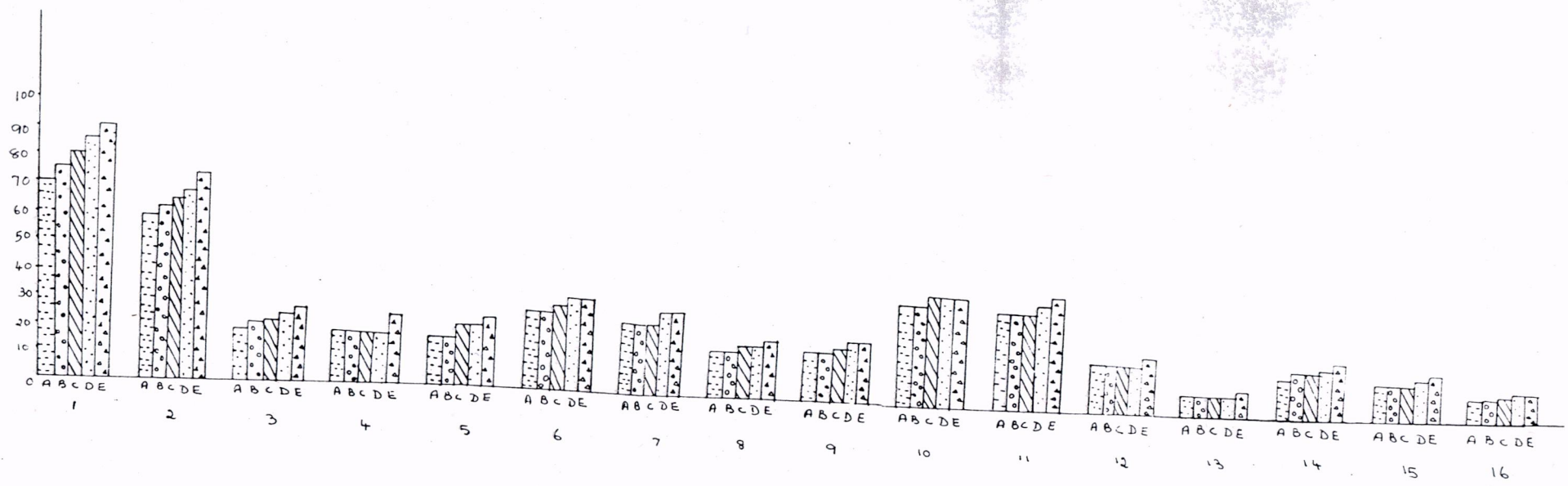
S.No.	Blouses	Bust Ease			Armscyce Ease			Upperarm Ease			Lowerarm Ease			Waist Ease		
		Profit Fit	Loose	Tight	Profit Fit	Loose	Tight	Profit Fit	Loose	Tight	Profit Fit	Loose	Tight	Profit Fit	Loose	Tight
a.	B <sub>1</sub>															
b.	B <sub>2</sub>															
c.	B <sub>3</sub>															
d.	B <sub>4</sub>															
e.	B <sub>5</sub>															
f.	B <sub>6</sub>															
g.	B <sub>7</sub>															
h.	B <sub>8</sub>															
i.	B <sub>9</sub>															
j.	B <sub>10</sub>															
k.	B <sub>11</sub>															
l.	B <sub>12</sub>															
m.	B <sub>13</sub>															
n.	B <sub>14</sub>															
o.	B <sub>15</sub>															

XXX

**B. LINE**

S.No.	Blouses	Shoulder Line			Placket Line			Side Seam of the Blouse			Side Seam of the Sleeve			Neck Line		
		Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth	Smooth	Fairly Smooth	Not Smooth
a.	B <sub>1</sub>															
b.	B <sub>2</sub>															
c.	B <sub>3</sub>															
d.	B <sub>4</sub>															
e.	B <sub>5</sub>															
f.	B <sub>6</sub>															
g.	B <sub>7</sub>															
h.	B <sub>8</sub>															
i.	B <sub>9</sub>															
j.	B <sub>10</sub>															
k.	B <sub>11</sub>															
l.	B <sub>12</sub>															
m.	B <sub>13</sub>															
n.	B <sub>14</sub>															
o.	B <sub>15</sub>															

XXXX



KEY :

- Group - A
- Group - B
- Group - C
- Group - D
- Group - E

MEASUREMENTS :

1. Bust Circumference
2. Waist Circumference
3. Lower Arm Circumference
4. Three Fourth Sleeve Circumference
5. Elbow Circumference
6. Front Waist Length
7. Back Waist Length
8. Shoulder to Bust
9. Half Sleeve Length
10. Three Fourth Sleeve Length
11. Back Armhole to Armhole
12. Distance Between the Bust Points
13. Shoulder Seam
14. Front Neck Depth
15. Back Neck Depth
16. Armscye Depth

FIGURE - III  
STANDARDISED BODY MEASUREMENTS OF EARLY ADULT WOMEN

III. GRAIN

IV. SET

V. BALANCE

VI. COMFORT

S.No.	Blouses	GRAIN						SET						BALANCE						COMFORT					
		Bodice			Sleeve			Bodice			Sleeve			Bodice			Sleeve			Bodice			Sleeve		
		Correct Grain	Incorrect Grain	Off Grain	Correct Grain	Incorrect Grain	Off Grain	Very Good	Good	Fair	Very Good	Good	Fair	Balanced	Moderately Balanced	Imbalanced	Balanced	Moderately Balanced	Imbalanced	Very Good	Good	Fair	Very Good	Good	Fair
a.	B <sub>1</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
b.	B <sub>2</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
c.	B <sub>3</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-
d.	B <sub>4</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
e.	B <sub>5</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
f.	B <sub>6</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-
g.	B <sub>7</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
h.	B <sub>8</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
i.	B <sub>9</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-
j.	B <sub>10</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
k.	B <sub>11</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
l.	B <sub>12</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
m.	B <sub>13</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-
n.	B <sub>14</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-
o.	B <sub>15</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-

TABLE - VI

EVALUATION OF THE PATTERNS CREATED IN THE BLOUSES

S.No.	Blouses	Selection of the material			Styles created			Originality of the design			Suitability of the design			Suitability of the design to current fashion			Simplicity of design			Placement of design			Type of Trimmings used			Balance of the design			Emphasis of the design			Colour combination used if any			General Appearance			Total			Year		
		Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Poor						
a.	B <sub>1</sub>	100	-	-	96	4	-	100	-	-	92	8	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	96	4	-	1180	20	-	98	2	-			
b.	B <sub>2</sub>	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-	100	4	-	1192	12	-	99	1	-			
c.	B <sub>3</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	-	-	-	100	-	-	1100	-	-	100	-	-			
d.	B <sub>4</sub>	100	-	-	96	4	-	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	92	8	-	100	-	-	100	-	-	100	-	-	1084	16	-	99	1	-			
e.	B <sub>5</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	96	4	-	-	-	100	-	-	1092	8	-	99	1	-	
f.	B <sub>6</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	-	-	-	100	-	-	1100	-	-	100	-	-			
g.	B <sub>7</sub>	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	-	-	-	100	-	-	1100	-	-	100	-	-			
h.	B <sub>8</sub>	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	-	-	-	100	-	-	1088	12	-	99	1	-			
i.	B <sub>9</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	96	4	-	-	-	100	-	-	1092	8	-	99	1	-	
j.	B <sub>10</sub>	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	92	8	-	100	-	-	96	4	-	-	-	100	-	-	1084	16	-	99	1	-	
k.	B <sub>11</sub>	100	-	-	100	-	-	100	-	-	96	4	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	-	-	-	100	-	-	1096	4	-	100	-	-			
l.	B <sub>12</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	-	-	-	100	-	-	1100	-	-	100	-	-			
m.	B <sub>13</sub>	100	-	-	100	-	-	96	4	-	92	8	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	96	4	-	-	-	96	4	-	1076	24	-	98	2	-	
n.	B <sub>14</sub>	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	100	-	-	-	-	-	100	-	-	1100	-	-	100	-	-			
o.	B <sub>15</sub>	100	-	-	96	4	-	100	-	-	100	-	-	96	4	-	100	-	-	92	8	-	100	-	-	100	-	-	100	-	-	-	-	100	-	-	1084	16	-	99	1	-	



III. GRAIN

IV. SET

V. BALANCE

VI. COMFORT

S.No.	Blouses	GRAIN						SET						BALANCE						COMFORT					
		Bodice			Sleeve			Bodice			Sleeve			Bodice			Sleeve			Bodice			Sleeve		
		Correct Grain	Incorrect Grain	Off Grain	Correct Grain	Incorrect Grain	Off Grain	Very Good	Good	Fair	Very Good	Good	Fair	Balanced	Moderately Balanced	Imbalanced	Balanced	Moderately Balanced	Imbalanced	Very Good	Good	Fair	Very Good	Good	Fair
a.	B <sub>1</sub>																								
b.	B <sub>2</sub>																								
c.	B <sub>3</sub>																								
d.	B <sub>4</sub>																								
e.	B <sub>5</sub>																								
f.	B <sub>6</sub>																								
g.	B <sub>7</sub>																								
h.	B <sub>8</sub>																								
i.	B <sub>9</sub>																								
j.	B <sub>10</sub>																								
k.	B <sub>11</sub>																								
l.	B <sub>12</sub>																								
m.	B <sub>13</sub>																								
n.	B <sub>14</sub>																								
o.	B <sub>15</sub>																								