

1(a) Explain the following terms:

(i) **Filament fibres** Filament fibres are long continuous fibres obtained mainly from man-made fibres. Silk is the only natural filament fibre.

(ii) **Staple fibres** are short fibres obtained from most natural fibres e.g. cotton, wool. Man made fibres can be cut into staple fibres depending on their final use [2]

(b) Explain how to make yarn from sheep's wool. [4]

Shearing – removing of fleece from sheep

Sorting & grading- according to fibre length, fineness and colour

Scouring- to remove perspiration, dirt and impurities

Combing- to straighten fibres

Roving

Spinning

(c) Explain the following performance characteristics of wool:

(i) **Washability-** is a weak fibre when wet hence much care is needed during washing. Can easily shrink and become matted if improperly handled. Dries slowly.

(ii) **Moth resistance-** wool is a protein fibre and is susceptible to attack by moths which can make holes in fabric causing it to weaken/ladder. It can be treated with a chemical finish to make it moth proof.

(iii) **Elasticity.** Wool is very elastic owing to the crimps in fibres. Hence, wool has good stretch and resilience so suitable for knitted garments. Moreover due to the crimps wool fibres do not crease easily

(d) Discuss the differences between **three** construction methods used to make fabrics from wool. Give examples of garments or fashion accessories that could be made from the different wool fabrics.[8]

Weaving – interlacing of warp and weft yarns. Depending on the end purpose woolen fabrics can be tightly or loosely woven. It can be hand woven or machine woven and it has a bias stretch. Garments made from woven woolen fibres are: skirts, suits, shirt

Knitting- it is the interlocking of loops and can be done by hand or machine. For wool weft knitting is done (warp knitting uses filament) and the loops run horizontally and interlock with rows above and below. Hand knitting is time consuming. Garment may ladder if one yarn is pulled. E.g of garment made from knitting: sweater, cardigans, pullovers, gloves.

Felting- it is treating wool fibres with chemicals, heat and moisture causing the fibres to shrink and the scales in fibres become matted. hence, felt does not fray. It is a weak fabric and has no stretch. It can be moulded into shapes e.g. hats, slippers. However, it is a good insulator.

2 Fig. 2 is a drawing of the front and back views of an unlined skirt.

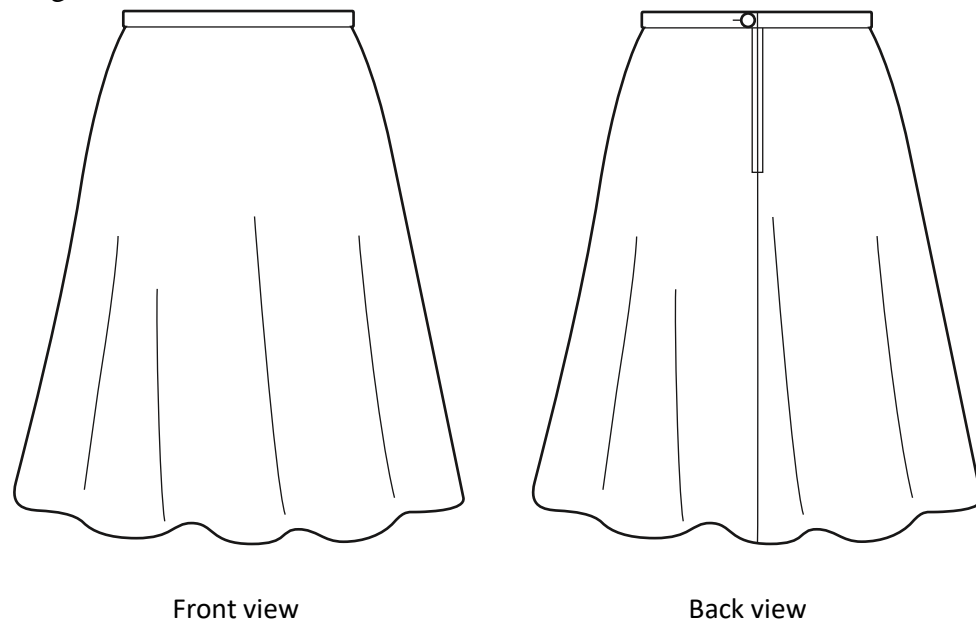


Fig. 2

(a) (i) The skirt in Fig. 2 has a stiffened waistband. Identify **one** different method of finishing a skirt waist. State **one** advantage of using this method.

Elasticated waistband or drawstring- easy to put on or take off. No zip opening is needed. Easy fit.
Or

Faced waistband – an invisible waist band.

[2]

(ii) Identify **two** different pockets suitable for the skirt in Fig. 2. [2]

In-seam pocket

Faced hip pocket

Patch pocket

(b) Explain, using notes and labelled diagrams, write down the correct order of work to insert a zip into the centre back seam of the skirt shown in Fig. 2. [6]

- (i) Neaten the raw edges of the open seam with zig zag stitches or edge stitching
- (ii) With right sides together, stitch the centre back seam from the base of the zip till the hem
- (iii) Press seam open
- (iv) Pin and tack zip in position depending on method chosen (concealed or semi concealed)
- (v) Attach the zipper foot to the sewing machine
- (vi) stitch the zip in place and remove tacking

(c) (i) Draw and label an original design for an embroidered pattern to go on the skirt in Fig. 2. You must label any colour used in your design. [3]

(ii) Indicate an appropriate position of the design on the skirt in Fig. 3. [1]

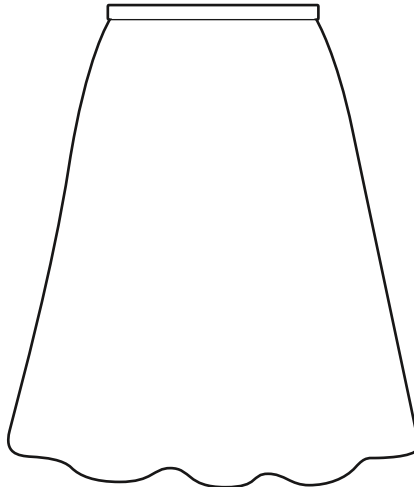


Fig. 3

(d) Explain the advantages of using CAD to create and develop an embroidery design instead of using traditional design methods.[6]

Images can be scanned to use for designs • Designs can be changed quickly/saves time • Images can be easily enlarged for accurate details • Can try out different layouts of the design on garment • Virtual pictures of the embroidery can be tried on the skirt • Can easily try different colourways • Wide range of colours • Design can be transferred directly to an embroidery machine. • Good for

environment as paper not wasted • Designs can be stored and easily recalled. • Designs can easily be sent to customers/manufacture by email • Accurate to make repeat designs/develop

Hand drawn designs are unique. No need to know IT

3 (a) (i) Sketch and label the **front** and **back** views of a summer top. The top should have short raglan sleeves.[3]

(ii) Identify **one** suitable knitted fabric for the top in **4(a)(i)**. [1] lycra, tricot

(iii) Give **three** reasons why the fabric named in **4(a)(ii)** is suitable for the summer top.[3] **Stretchy** or elastic fabric making it comfortable **Thin/lightweight** so cool to wear **Warp knits** keep their shape **Single jerseys** inexpensive to make

(b) Explain how to lengthen the front pattern for the summer top in **4(a)(i)** to make a dress. You may use labelled diagrams to support your answer.

1. Use the adjustment line (lengthen or shorten lines). 2. draw a line at right angles to grain line 3. Cut the pattern along the lengthen line 4. Measure and mark the length to be added (on separate paper) 5. Attach the inserted paper to the original pattern 6. Draw lines down the side cutting lines to make an appropriate shape

(c) Compare the different hem finishes that could be used when making garments. Give examples of fabrics and styles to support your answer. [8]

Single hems- on thick fabrics

double hems,

bound hem and faced hem on unlined jackets

narrow machine stitched hem, rolled hem- on lightweight and sheer fabrics or on bias skirt

blind/invisible hem- in tailored garments,

top stitched hem-in shorts

Hand or machine stitched hems/crossway facing.

4(a) (i) State **one** use for each of the following machine stitches:

Zig-zag stitch – to neaten raw edges in seams and hems, to work around applique, work buttonhole stitches

Overlocking - to neaten raw edges in seams, to join fabric pieces

Free machining – to work embroidery or quilting [3]

(ii) Explain how to do zig-zag stitch using a sewing machine.[4]

1. Change machine settings to zig-zag
2. Set appropriate stitch length and stitch width e.g. 2,2
3. Check correct foot so needle can move from side to side
4. Put presser foot down and sew.

(b) (i) Identify the production method used to make a unique dress for a special occasion.[1]

One off production/ individual production

(ii) State **four** ways the production method named in 4(b)(i) is different from other production methods.[4]

One off production is time consuming and labour intensive- only one garment at a time

Highly skilled worker- works all the processes.

Use expensive and exclusive fabrics

Made to measure

Not made in factory

(c) Discuss the factors to consider when selecting a pattern, fabrics and components for a dress to be worn at a special occasion. Give reasons and examples to support your answer.[8]

Age of the wearer

Occasion- formal, casual

Dress code

Fashion trends

Season –winter / summer

Time of the day- afternoon/ evening

5 (a) Outline the factors to consider when choosing a sewing machine to use at home. [5]

Budget available

Purpose of sewing machine- simple sewing or working of embroidery stitches also

Types of fabric to be sewn e.g jersey fabric

What are the attachment available and their frequency of use.

After sale service

Availability of spare parts

Electric sewing machine or hand machine?

Ease of storage?

(b) Fig. 4 is a drawing of a calico shopping bag.



Fig. 4

(i) Identify a suitable fastening that could be added to the finished bag in Fig. 4.[1]

Magnetic fastener/ press studs/ eyelets and drawstrings

(ii) Give **two** reasons for your choice of fastening in 5(b)(i). [2]

To make the bag more secure and prevent things from falling

To improve its aesthetic value

(iii) Explain why cotton is an environmentally friendly fibre. [2]

Cotton is a natural fibre and can be grown over and over again (renewable/sustainable)

It is biodegradable as it rots in ground and does not contribute to land fill

(iv) State **two** reasons why calico is a suitable fabric for a shopping bag. [2]

It is a strong woven material and can bear the weight of shopping items

It is cheap to produce

It can be decorated by different methods of printing and dyeing

It is hardwearing and can withstand several washings

(v) Compare **four** different ways to apply a coloured design or pattern to the calico fabric for the bag in Fig. 4. Give reasons and examples to support your answer.

Dyeing – the whole fabric can be dyed before cutting out or bag can be dyed after making

Tie and dye- easier to tie and dye fabric than bag itself

Batik- fabric is stretched onto frame and hot wax is applied on areas that are to be white. Start with lighter colour first....

Stenciling- A design is cut from card or special plastic and paint is applied with a (stiff) brush through the hole in the stencil. Very stylized images. Can be used as motif or to make repeat pattern. Could be used for lettering.

Roller printing- A series of metal rollers have the design photographically engraved. Separate roller for each colour. Very fast but expensive for small runs. Only suitable for printing the fabric, not bag.

Fabric painting- Images painted on with special inks/paints with a brush. Ironed to fix the paint. Can appear crude if not carried out skilfully.

6. Contemporary fashion wear is popular with consumers.

(a) Describe what is meant by the following and give one example of each:

(i) fashion fads [3] it is a short lived style. It gains popularity very easily and fade out easily

A fashion fad is a popular style being worn at the current time. This may be according to high street stores or the prevailing trends by celebrities/media/style icons/well known stars. It can be short-lived, e.g. one season so will not continue for a long time. It could be an update of a classic fashion trend from the past. Examples could include jeans (fashion trend), which have rips in the knee area; jumpsuits for ladies; off the shoulder tops which have flounces and gathered necklines, etc.

(ii) fashion revivals [3]

It may be a style which has been used before but has been updated to make it more contemporary. It may have modifications to the original so will not necessarily be exactly the same, e.g. long sleeves which have elastic at the wrist; smock tops which have uneven hemlines

(b) Discuss how the choice of seams and edge finishes in garment manufacture is affected by the type of fabric used. [9]

seams could include: plain seam with various ways of finishing edges, e.g. overlocking, zig-zag, bound edges, decorative on right side (top stitching in matching or contrasting colour); special seams, e.g. French seam used on fine thin fabrics such as silk surah; Double machined seam used on fabrics such as denim for jeans, may have contrast stitching, e.g. orange. Flat felled seam; Overlaid seam which may be used where one side of the seam is flat and the other is gathered; top stitched seams; any other relevant seam/join. Edge finishes could include: hems (cover stitch, bound, top stitched, etc.), necklines (shaped, faced, decorative, including fastenings, collar edges including types of collars and their method of attaching/finish, etc. bound edge, top stitching along the edge, blanket stitched/zig zagged along the edge, etc. methods could include machine finished, hand finished, decorative, etc

(c) Compare the advantages and disadvantages of three different types of retail outlets that sell fashionable sportswear. [10] [Total: 25]

Retail outlets could include: designer shops, department stores, personal shopper in stores; high street stores, franchises, discount stores, mail order, markets, electronic developments (e.g. internet shopping).

Points which can be included when comparing retail outlets:

- Types of sportswear in each, e.g. cost of items, whether high fashion colours, styles to be worn every day as outerwear; Types of sports clothes for men/women and examples, e.g. joggers, sweatshirt tops, running tops with cut out shoulders, tight-fitting below the knee leggings for aerobic gym work.
- Types of fabrics used, e.g. more expensive fabric may have newer technology incorporated, e.g. polyester which wicks away body moisture compared with cotton fabrics which are naturally absorbent.
- Advantages and disadvantages of each: Internet shopping, can't try items on, can't feel the fabric for weight/quality; have to wait for delivery; have to send back items if not suitable;

cost of postage; other points: costs (travel), which shops – depends on your budget; travel time to get to shops; shops don't always have your size in stock; less choice but more experience