

L27- CARE AND MAINTENANCE

Keywords

Perspiration	Mending	Discoloration	Felting
Absorbents	Muslin	Syndets	Economical
Auxiliaries	Oxidizing	Javelle	Blueing

In-text Questions

In-text Questions 27.1

1. Write short notes on
 - i. Sorting
 - ii. Washing and Rinsing
 - iii. Ironing and Pressing

Answer:

Sl No.	Method	Description
i.	Sorting	<ul style="list-style-type: none"> • Clothes with deep colors are more likely to bleed dye when washed. • To avoid damaging other clothing, sort laundry according to color; grouping dark, medium and light colors separately. • Wash deep colored clothing like indigo jeans or red sweatshirts by themselves for the first few washings.
ii.	Washing	After sorting the clothes we are going wash by using appropriate detergent/soap and also the right method of washing

SI No.	Method	Description
	Rinsing	<ul style="list-style-type: none"> All soap/detergent and/or chemicals used must be removed from the fabric. Hence clothes are rinsed 2-3 or 4 times using fresh water every time. In fact, rinsing should continue till all soap/detergent is removed
iii.	Ironing and Pressing	<ul style="list-style-type: none"> Clothes are ironed according to the nature of the fabric. Cottons are sprinkled with water and ironed using hot iron Silks are brought in while damp, and ironed with hot iron. Synthetics and rayons are ironed with moderately hot iron. Woolens are pressed with hot iron but over damp muslin.

In-text Questions 27.2

- State whether the following statements are true or false and write the correct response for false statements.
 - Soaps and syndets are detergents.-----(**True**)
 - Raw material for all cleansers are available in nature.(**False**, syndets are obtained chemically).
 - Syndets have deeper penetrating action than soaps.(**True**)
 - Use of syndets makes the fabric appear grey and dull.(**False**, syndets do not leave any deposits on the fabric. Thus, they do not appear dull and grey.)

In-text Questions 27.3

- State whether the following are true or false and write the correct response for the false statement.
 - The fabric should not be rinsed with water after bleaching and the

bleach should be allowed to remain in it.

(False) Bleach should never be allowed to remain in the fabric, it can cause serious damage.

- b. Bleaches whiten or lighten the fabric by chemical action. (True)
- c. Sunlight and moisture have bleaching effect on the fabric. (True)
- d. Hydrogen peroxide can be safely applied on animal fibers. (True)

2. Give one word for the following statements.

- a. A chemical compound which is capable of removing coloring matter from fabric making them whiter and brighter.----- (Bleach)
- b. The oldest and cheapest method of stain removal. ----- (Sunlight)
- c. A bleaching agent which is used to remove brown stains from the fabric. (oxalic acid)
- d. A bleaching agent which can be safely applied on animal as well as vegetable fiber. (Hydrogen peroxide)
- e. Pure white wool and silk turn yellow in color in due course of time due to application of this bleach. (Reducing bleach)

In-text Questions 27.4

1. For removing each of the following stains, choose the most appropriate method out of the four given:

i) Old tea stain on a white cotton fabric–

a) Use salt water

b) Soak in glycerin

c) Soak in lime juice

d) Pour boiling water

ii) Old blood stain on a coloured cotton fabric

a) Use salt water

- c) Soak in hot water
- b) Soak in glycerine
- d) Wash with hot water and soap

iii) Lipstick stain–

- a) use salt water
- b) Soak in glycerine
- c) Soak in methylated spirit**
- d) Wash with hot water and soap

v) Rust stain–

- a) Use salt water
- b) Use lime juice and salt**
- c) Soak in methylated spirit
- d) Wash with soap and cold water

v) Fresh butter stain on silk–

- a) Wash with cold water
- b) Wash with cold water and soap
- c) Apply salt and leave in the sun
- d) Wash with warm water and soap**

vi) Nail polish stain on a polyester fabric–

- a) Soak in methylated spirit**
- b) Soak in warm water
- c) Soak in cold water
- d) Soak in warm water and soap

vii) Fresh ink stain on a woolen fabric–

- a) Wash with cold water and soap
- b) Wash with boiling water and soap
- c) Use salt and lime juice
- d) Soak in methylated spirit

In-text Questions 27.5

1. Fill in the blanks using the most appropriate words from those given in brackets:
 - i. Clothes must be _____ before washing. (dried, mended, ironed, starched)
 - ii. _____ articles should not be soaked before washing. (coloured, white, dirty, small)
 - iii. Soaking of clothes helps to _____ dirt. (increase, decrease, loosen, prevent)
 - iv. Starching is done to give cotton clothes a _____ look. (dull, shining, rough, yellow)
 - v. _____ should not be starched. (table linen, sarees, kameez, undergarments)
 - vi. Coloured cotton articles should be dried in the _____. (sun, shade, daylight, night)
 - vii. Overexposure to sunlight makes fabric _____. (bright, dull, blue, yellow)
 - viii. Ironing should not be done directly on the _____. (collars, cuffs, sleeves, buttons).
 - ix. When cotton articles are stored wet, they develop _____. (dullness, brightness, mildew, smoothness)



2. What do understand by the following symbols?



(i)



(ii)



(iii)



(iv)

Answer:

- i. Do not use bleach
- ii. Do not wash.
- iii. Drip dry
- iv. Hand wash (Do not machine wash)

Terminal Questions

1. What does the word “laundering” mean?

Ans: Laundering: means Washing, drying and finishing of clothes.

2. Why is it important to launder clothes?

Ans: Regular washing of clothes and bedding, helps to remove any bacteria, dirt, fleas, mites and other irritants or infection.

3. List the two main methods of laundering and their suitability to fabrics?

Ans:

Laundering is generally done by:

- i. Friction washing
- ii. Suction
- iii. Kneading and squeezing
- iv. Washing by machines

(i) Friction washing:	This method is suitable for washing strong fabrics like cotton.
a) By hand:	This means rubbing vigorously with the hand. It is suitable for cleaning very soiled small articles like small garments, handkerchief, etc. It is economical in the use of soap.
b) With a plastic scrubbing brush:	with a scrubbing brush friction is applied by placing the dirty article flat on a hard surface. It is suitable for very soiled household articles made of strong fabric, for example, dusters.
c) Beating with a stick:	Large articles like bedsheets, etc., are washed by this method.
(ii) Suction:	This method is used for articles like towels, etc., which are heavy and have a pile weave, on which a brush cannot be used. The article is placed in soap solution in a tub and the suction washer is pressed down on it and lifted repeatedly. The vacuum created by pressing loosens the dirt particles.



4. What is a stain? How would you identify a stain?

Ans: Mark or discolor with something that is not easily removed.

Identifying a stain:

- a. **Color:** Every stain has a specific color, for example, curry and pickle are yellow while coffee and tea stains are brown, grass stain is green.
- b. **Smell:** Some stains have a peculiar smell eg., stains of eggs or paints. These stains can be recognized by the smell.
- c. **Feel:** Some stains also change the feel of the fabric and can be recognized on that basis. For example, paint or sugar syrup makes the fabric stiff to touch, whereas lipstick or shoe polish make the fabric feel slippery.

5. What are the general precautions to be taken for removing stains?

Ans: The general precautions to be taken for removing stains as follows:

- a. As far as possible, remove the stain when it is fresh.
- b. Find out whether the stained fabric is cotton, wool, silk, or synthetic.
- c. Try to identify the stain.
- d. For unknown stains, start the stain removal with a simple process and then move on to a complex one. Always wash the stain with cold water first. This is because; protein stains like blood and egg coagulate with hot water and become difficult to remove.
- e. Chemicals used should not damage the fabric.
- f. For delicate and/or colored fabrics try out the chemical on a small portion of the fabric first. In case the fabric is damaged do not use it.
- g. Repeated use of a milder reagent is better than a one-time use of a strong reagent.
- h. Wash all fabrics with soapy solution at the end to remove all traces of chemical from it.

- i. Dry fabrics in the sun as sunlight acts as a natural bleach

6. How will you remove the following stains from a silk fabric?

- i. Coffee
- ii. Nail Polish
- iii. Blue ink
- iv. Grass
- v. Paan (Betel leaf)

Ans:

Stain	Stain Removal Method
i. Coffee	<ul style="list-style-type: none"> Fresh: Soak in warm water and borax Old: Pour Hydrogen peroxide solution and rub gently to remove the stain
ii. Nail Polish and Blue ink	<ul style="list-style-type: none"> Fresh: Scrape out all the excess stain rub gently with spirit or kerosene Old: Repeat the above step 2 or 3 times
iii. Grass	<ul style="list-style-type: none"> Fresh: Wash with soap and water Old: Dip the stained portion in methylated spirit
iv. Paan (Betel leaf)	<ul style="list-style-type: none"> Fresh: Apply a paste of onions and leave in sunlight Old: Repeat the above step 2 or 3 times

7. List the three basic steps to be followed for laundering any kind of fabric.

SI No.	Method	Description
1	Sorting	<ul style="list-style-type: none"> Clothes with deep colors are more likely to bleed dye when washed. To avoid damaging other clothing, sort laundry according

SI No.	Method	Description
		<p>to color; grouping dark, medium and light colors separately.</p> <ul style="list-style-type: none"> Wash deep colored clothing like indigo jeans or red sweatshirts by themselves for the first few washings.
2	Washing	After sorting the clothes we are going wash by using appropriate detergent/soap and also the right method of washing
	Rinsing	<ul style="list-style-type: none"> All soap/detergent and/or chemicals used must be removed from the fabric. Hence clothes are rinsed 2-3 or 4 times using fresh water every time. In fact, rinsing should continue till all soap/detergent is removed
3	Ironing and Pressing	<ul style="list-style-type: none"> Clothes are ironed according to the nature of the fabric. Cottons are sprinkled with water and ironed using hot iron Silks are brought in while damp, and ironed with hot iron. Synthetics and rayons are ironed with moderately hot iron. Woolens are pressed with hot iron but over damp muslin.

8. How will you wash a cotton garment? What precautions will you take and why?

Ans: The steps to wash cotton garments are:

Sorting	<ul style="list-style-type: none"> Separate the cottons based on colored /white Separate cottons based on dirty /more dirty
Stain Removal	Remove the stains on white cottons/colored cottons using appropriate stain removal method
Soaking	Soaking is recommended for white cottons

Washing	Cottons becomes stronger when wet ,Hence we can wash cottons by rubbing Friction method is suitable for washing strong fabric like cotton
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9. Point out the differences in washing the following:

- Silk and wool
- Wool and cashmilon
- White and coloured cottons.

Ans:

- Silk and wool

Silk	Wool
Silks are soaked for some time	Woolens are not soaked because soaking leads to felting.
Use luke warm water as it helps to remove dirty easily. Do not use hot water.	Use mild liquid soap or reetha-nut-solution in a tub of water and make lot of lather
Rinse out all soap in cold running water. Do not squeeze hard	Rinse out soap in cold running water.
Small articles can be rolled in a hand towel to remove excess water and ironed at once	Place article back on the paper on flat surface and pull it into the shape of the original outline drawn.

- Wool and cashmilon

Wool	CashMilon
Use cold water and a mild liquid detergent like Woolite.	Use lukewarm or cold water

.	
Rinse out soap in cold running water.	Rinse well in cold running water to remove soap completely. To avoid wrinkles do not squeeze.
Leave on flat surface, in shade, to dry.	Dry preferably on a hanger to maintain the original shape

iii. White and coloured cottons.

White Cotton	Color Cotton
White cottons are sorted from colored clothes and washed together.	<ul style="list-style-type: none"> Each colored cotton garment is sorted based on color. Each garment is washed separately such that color of one garment does not bleed onto other.
Stains are removed using appropriate stain removal method For example, tea stain on white cotton is removed : When fresh: Pour boiling water on the stain. When old: Dip the stain in glycerin	Stains are removed using appropriate stain removal method For example, tea stain on colored cotton is removed: Soak in warm water and borax
These can be washed by rubbing hard (friction method)	Should not be rubbed hard to preserve colors.
Can be sun-dried	Colors may fade when sun-dried

10. Answer the following questions:

i) Why should very dirty cotton fabrics be soaked?

Soaking helps to loosen the dirt from the fabrics.

ii) Why is light pressure used for washing silk?

Because silk is a very delicate fabric if we give more pressure, it may damage the fabric.

iii) Why is vinegar added in the final rinse for silks?

You can add a few tablespoons of distilled white vinegar to the rinse water to neutralize alkali traces and to dissolve soap residue.

iv) Why should woolens be dried on a flat surface?

Line drying or drying on hangers can cause knitted garments to stretch due to the weight of the moisture contained by the garment, with the result that the garment grows in length and loses its shape.

v) Why should you not use a hot iron for ironing nylon?

Do not iron because the nylon fabric can melt.

Previous Year Questions

1. Suggest a suitable method of washing a silk sari. Tell reasons for your suggestion. **1**

Ans: Washing by Kneading and Squeezing

This method is used for delicate fabrics silk. This method does not damage the fabric or change its shape as only gentle rubbing with hands is applied.

2. What precautions will you observe when applying blue to a garment? **2**

Ans: The precautions to apply blue are as below:

- it should be applied just before the last rinse
- the blue water should be mixed thoroughly before putting fabric into it.

3. When water is not available, how will you remove an oil stain? **2**

Ans: When stain is fresh, apply talcum powder on it and leave it for a few hours. Brush off powder. This helps to remove the stain and can be used for all fabrics.

- Name one chemical each used to remove stains of lipstick and betel, 2
4. from a cotton shirt.

Ans:

Sl No	Stain	Chemical Used
1	Lipstick	Rub gently with spirit or kerosene.
2	Betel	Apply paste of onion and leave in sunlight

5. How will you remove an old grass stain from your child's white, cotton uniform ? 2

Ans:

Stain	Fresh/old	Method
Grass	Fresh	Wash with soap and water
	Old	Dip the stained portion in methylated spirit

What four precautions will you adopt while storing woollens for a long time?

6. [2]

Ans: The precautions for storing the woollens as follows,

- Empty out pockets and brush the garments thoroughly in order to free them from dust.
- Always sun and air the garments which have been worn before storing.
- Do not let garments become too dirty before laundering or dry cleaning.

- d. Do not store any damp clothes as moisture causes mildew. You must have seen that clothes have changed colour when taken out from closets and this is the reason for it.
- e. Woolens can be packed in newspapers as the moth dislikes printer's ink. Boxes may be lined and covered with paper. Even dried neem leaves, sandal-wood dust, dry eucalyptus leaves are good as long as the odor lasts.

7. Why are cotton clothes easy to wash? 2

Ans: The cotton clothes are easy to wash because they become strong when wet and we can rub, squeeze and apply pressure to wash them.

8. Write the steps of starching cotton garments. 2

Ans: The steps of starching cotton garments:

- i. Add some of the starch paste in a basin of water and mix well.
- ii. Open the article, wet in water and then dip in the starch solution.
- iii. Squeeze the article well and hang it in sun to dry.
- iv. For heavily starched articles do not squeeze them hard.

9. How will you remove a suspected tea stain from a coloured cotton shirt? 2

Stains	White Cottons	Coloured Cottons
Tea/ Coffee	<p><i>Fresh</i> Pour boiling water on the stain.</p> <p>(2 cups of water + ½ teaspoon of borax)</p> <p><i>Old</i> Dip the stain in glycerine</p>	<p>Soak in warm water and borax</p> <p>Same as for white cottons</p>

Ans:

10. What is spot cleaning of woollen fabrics ? Name any two grease absorbents used for spot cleaning. 2

Ans:

- Spot Cleaning: Dirty spots get fixed to the fabric with grease. If you remove grease, the spot is gone. Use grease absorbents or solvents.
- Grease Absorbents: French Chalk, Fuller's earth, moong powder, besan, talcum powder, magnesium carbonate, etc. are used for removing spots from all kind of materials.
- Grease solvents: White petrol, benzene, carbon tetrachloride, methylated spirit

11. How can lipstick stain be removed from a white cotton shirt ? 2

Ans:

- Fresh Stain: Scrape out all the excess stain, and then rub gently with spirit or kerosene
- Old Stain: Repeat the above step 2 or 3 times.

12. Name one chemical each used to remove stains of lipstick and betel, from a cotton shirt. 2

Ans:

Sl No	Stain	Chemical Used
1	Lipstick	Rub gently with spirit or kerosene.
2	Betel	Apply paste of onion and leave in sunlight

What *two* precautions would you take to prevent woollens from losing their shape and size?

2

13. _____

Ans: The precautions to prevent woollens from losing their shape and size:
Use Mild Detergent for Washing Woollens and Don't Dry Sweater or Cardigans on Hanger.

14. How would you choose a good detergent?

4

Ans:

Qualities of the best laundry detergents:

- They will keep white clothes white or whiter.
- They shield the colored clothes from fading.
- They also have builders and surfactants that enable them to work in any temperature.
- They clean your clothes, and leave them fresh and fragrant.
- They are prepared such that they remove tough stains very efficiently too.
- They have hydrogen peroxide and bleach which make them even more efficient.

15. Mention any four differences between a soap and a syndet. 4

Ans:

Soap	Syndet
A soap is a cleanser obtained from mixing of natural oil/fat and waxes.	syndet is a cleanser produced synthetically from chemicals.
The soaps wet the fabric more readily than water.	syndets act even more readily than soaps.
The dissolving of soaps in cold water is more difficult than dissolving it in	syndets are soluble in both cold and hot water.

hot water.	
Soaps do not have a distinct smell.	syndets are sweet smelling

16.Describe the *four* types of oxidizing bleaches. 4

Ans:

Oxidising bleaches These bleaches leave an almost permanent effect. These are used widely for application on vegetable fibres like cotton and linen.

Examples of oxidizing bleaches are:

SL No	oxidizing bleaches	Description
1	Sun light	It is the oldest and most simplest method of stain removal. Wet the stain and put on grass. Chlorophyll, moisture and oxygen from air bring about bleaching of the stain
2	Javelle Water (Sodium hypochlorite $\text{Na}_2 \text{CO}_3$)	They should always be diluted before use. The fabric should be in bleach till the stain is removed. Further, the fabric should be rinsed to remove any remaining bleach in the fabric as it may harm the fabric by weakening it.
3	Potassium permanganate (KMnO_4) and Oxalic acid	Used for stains caused by dyes, mildew, perspiration and ink.
4	Hydrogen Peroxide ($\text{H}_2 \text{O}_2$)	It is a universal bleach applied on both vegetable and animal fibres. Therefore it is a safe bleach for the silks,

SL No	oxidizing bleaches	Description
		woolens and rayons as it has no harmful effect on animal fibres.

17. Outline the steps of laundering cotton saris at home. What precautions would you adopt while storing them? [6]

Ans: The steps to wash the cotton saree are:

- I. Before washing a cotton saree soak the saree in warm water for 20 mins with rock salt.
- II. Use shampoo or mild detergent to wash the saree.
- III. It is advisable to starch cotton sarees to ensure that they retain their stiffness and stay stain-free.
- IV. Hang the saree to dry in a shaded area.

The precautions while sorting clothes are as below:

- Whites should be washed separately from coloured ones.
- Very dirty sarees should be washed separately from cleaner sarees.

18. How will you differentiate between soap and syndet? 6

Soap	Syndet
A soap is a cleanser obtained from mixing of natural oil/fat and waxes.	syndet is a cleanser produced synthetically from chemicals.
The soaps wet the fabric more readily than water.	syndets acts even more readily than soaps.
The dissolving of soaps in cold water is more difficult than dissolving it in hot water.	syndets are soluble in both cold and hot water.
Soaps do not have a distinct smell.	syndets are sweet smelling
Blueing has to be done after washing with soaps	syndets have blues and optical brightness already added to them
Soaps are cheaper than the Syndets	syndets are more economical in the long run.