COURSE CODE *FSM 205*
COURSE TITLE: *Guest Welfare and Security*
NUMBER OF UNITS: *2 Units*
COURSE DURATION: *Two hours per week*

COURSE DETAILS:

Course Coordinator: Dr. H. Adegoke **Bakare**
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Office Location: Room ……., COLFHEC
Other Lecturers:

COURSE CONTENT:
This course is designed to provide the students with an in-depth knowledge of planning interior decorations and provision of adequate security and health facilities in the hotel. The dynamics for laundry. Cleaning agents, laundry accessories and equipment and stain removal. Care of guest welfare procedures and techniques.

COURSE REQUIREMENTS:
Students are expected to participate in all the course activities and have minimum of 75% attendance to be able to write the final examination.

READING LIST:

Anyakaoha, E. U. and Eluwa, M. A. (1994) Home management for schools and colleges. Onitsha Nigeria, African – FEP Publishers Ltd.

Experyong, A. J. O. ( ) Useful information for foreign visite.onlineNigeria portal E:\ Nigeria-useful information for the foreign visitor.mht

Kathleen Thompson Hill (2010). Career Opportunities in the Food and Beverage industry. New York: Infobase Publishing, Hill K&T.

Prideaux, B., Moscardo, G, and Laws, E. (2006). Managing Tourism and Hospitality Services. USA: CAB International pp 1-355.

Walker, J.R. (2007) Introduction to Hospitality Management New jersey: Person Educational, inc. 2nd Edition. Pp 1-120.

LECTURE NOTES:

HOSPITALITY INDUSTRY
Hotels and hospitality are often used erroneously or interchangeably as if they meant the same thing. According to the Oxford English dictionary, Hospitality means the reception and entertainment of guests, visitors or strangers with liberality and good will. The word hospitality is derived from hospice, the term of medieval house of rest for travellers and

pilgrims. Hotels on the other hand are establishment offering food and accommodation to customers who appear able and is willing to pay for the services provided. Historically, modern version of hotels may have emanated from different types of traditional lodging services provided to people who are away from their usual place of domicile. These includes;

Hospice - A place of refuge for travellers, often operated by a religious order.

Hostel - A lodging supervised by adults, planned for the use of young hikers or bicyclists; also youth hostel. A student residence or dormitory.

Hotel - A building or establishment which provides living accommodations for transient visitors and sometimes long-term residents, and which often offers other facilities such as meeting rooms, restaurants, entertainment, and shops, available to its guests and to the general public.

Motel- often confused with hotels , it is also a place where people can lodge and be serve food and other services but Motel is different from Hotel. A Motel or Motor Hotel is a Hotel for short stay especially for motorists on long travel.

Backpacker's - An establishment, commonly, a house that offers lodging for backpackers, travellers or youth hikers in cheap price. It is like a dormitory where there is a room with many beds where opposite gender may stay even without knowing each other and only one bathroom is shared.

Transient House - A place where people having a vacation can rent for short-term. This is where they can use all the house's facilities.

Others: Hospitality services are also provided to travellers during transportation, patients on admission in health institution, and to workers as part of industrial welfare services. Others are; Social services in old people's home, juvenile and remand home, prison services etc.

The Hotel Industry

The world is a global village, people now move with ease from one part of the globe to another. Improved transportation, increased disposable income, liberalization of entry and exit regulations into various countries, increased respect and appreciation for human life are some of the factors that have encouraged people to travel out of their places of domicile to other places for either business or pleasure purposes. The trend has imparted positively on the hospitality industry generally and Hotel business in particular. It has therefore become necessary to adequately equipped professionals with necessary skills, intellectual ability to study and analyzed trends of development in the industry for the purpose of meeting up with the changing demands of the industry. They will be expected to either work in the industry

at middle or top management level or serve as entrepreneurs that can provide quality effective and efficient services. Hotels as defined by the British Hotel proprietor Act of 1956 is an establishment offering food and drink and sleeping accommodation if so required to any traveler who appear able and is willing to pay for services and facilities provided: hotels are therefore obliged to:

- Provide food and accommodation to guest.
- Accept liability for the property of guest and hence, provide adequate security for their guest and properties kept in their custody.
- Conforms with public health and safety regulations by maintaining high standard of cleanliness and sanitation.
- Observe and abide with either relevant laws and regulations that affects the industry
- Identify from various field of study emerging knowledge and technology that are relevant and adoptable to improve the effectiveness and efficiency of their service delivery.

The word hotel is derived from the French word hotel; meaning host, successful hosting must therefore be the major consideration.

Classification of Hotels

Hotel are classified and rated on the basis of many criteria, size of facilities, number of employees, number of rooms available for sales, special characteristics basis on service rendered, duration or guest's stay etc.

Diamond award classification.

This was invented by the America Auto-mobile Association (AAN). Hotels are rated annually in the United State, Canada, Mexico & the Caribbean on the basis of their features, facilities and services provided.

- One diamond: Simple roadside appeal and basic lodging needs. The facilities would consist of adequate amenities (front desk) rooms may be adequate without basic industry standard whole the exterior may have limited or no landscaping.
- Two diamond: Average roadside appeal with some landscaping, medium size registration, Office facilities that is moderately furnished. Rooms are design to reflects currents industrial trends and service quality is more attentive.
- Three diamond: Have very good side appeal, attractive land scrapping. The lobby should be spacious, carpeted, with front desk. Good quality framed art, live plant,

language charts and bell station. Guest room should reflect current industry standard and standard of services.

- Four diamond: Excellent roadside appeal, professionalism planned landscaping. The hotel lobby should be spacious and reflects historical architectural attributes. Registration and front desk should be above average, made of solid wood or marble. Front office should have ample seating area with impressive furniture and fixtures (lighting, upscale framed arts and art objects, abundant life plants, separate check in and out, bell station and back ground music.
- Five diamond: Outstanding roadside appeal professional landscaping with a variety of foliage and sundry architecture. The lobby should be comfortably spacious, have historical attributes. Registration and front desk should be comfortably spacious, should have historical attributes. Registration and front desk should be above average, must have ample seating area wish conversations groupings unit upscale appointments. There must be impressive lighting fixtures, varieties of art objectives, plants and floral arrangement separate check in and out, bell station, back ground music.

Nature of ownership, location of premises etc.

Many organization such as Automobile Association (AA), Royal Automobile Club (RAC) and other also classifies hotel and award distinction (starter seal ex merit). Their award indicates the type of hotel, serve as mark of quality and as guide to guest and tourist

A Star Award Classification

- One star: Small size hotel with acceptable facilities and furniture. Adequate bath and lavatory arrangements, all bathroom fitted with facilities for hot and cold water, availability meal services for residents.
- Two Star: Similar to one star but with higher standard of accommodation, private both rooms facilities, better and wider meal services options.
- Three Star: Well appointed hotel having large number and spacious bedroom fitted with private bathroom. Better meal service.
- Four Star: Exceptionally well appointed hotel offering high standard of comfort in bedroom facilities and better meal services
- Five Star: Hotels offering the highest international standard of facilities and services.

Meaning and History of Hotel Industry

Hotels are establishments offering food, drink and accommodation to guests who appear able and who is willing to pay for services provided. It is therefore an establishment that provide safe food and accommodation to customers. Various types of hotel exists; commercial, airport, economy, suite or all Suit, residential, casino and resort hotels, as well as conference centers. Hotels like any other hospitality business provides both tangible and intangible service to customers. The services provided generates revenues that contributes to the earnings of hotels. Revenues are therefore obtains from sales of rooms, provision of banquet halls, restaurant activities, laundry, telephone, internet and travel services.

Departments and Units in the hotel Establishments

1. Kitchen: provides services relating to food.
2. Engineering Rectifies technical problems within the hotel
3. Front desk: Responsible for making reservation, money exchange service, business centre and it usually the first point of contact for visitors.
4. Housekeeping: Provides services with respect accommodation (Preparation of rooms and other accommodation services
5. Travel desk: provides travel services such as arranging transportation, coordinating it, and also provide information on tourism activities.
6. Food and Beverage service: Usually the umbrella department for the provision and coordination of food and beverages services to guests.
7. Gym/Health club fitness centre sport: Provide services relating to Gyms, swimming pool, health club, beauty parlor, saloon, games facilities sometimes, some of these facilities are provided as complimentary service for staying–in guests
8. Parking shops: Car park services, rental services.
9. Conference departments/units.
10. Out door catering services

INTERIOR DECORATION IN FOODSERVICES EESTABILISHMENT

Decoration is the science and art beautifying premise and the surrounding environment in manners that will make the premise attractive, comfortable and useful. Such beautification efforts usually involves of both the interior and the exterior. It is therefore perceived/conceived in holistic terms. The principles of art and the design are often

embedded into the architectural plan of the entire premises to achieve the desired results. This is not surprising considering the fact that intangible services offered by the hospitality industry include aesthetically attractive environment that enhances service delivery.

Exterior appeal of hotel often includes;

- The geographical location of the premises to reflect the desired theme
- The desired mood of the environment when the premises is located
- Landscaping activities
- Road network leading to and from the premises
- Location of services equipment and waste disposal facilities
- Overall sustainability of the ecosystem of the environment
- Designed features of the building; the walls, roofs, terrace etc.
- Advertisement consideration

The interior decoration/appeal involves beautifying the interior areas (floors, walls, ceiling to make it comfortable, functional and aesthetically appealing.

Interior and exterior decoration of foodservice premises often include the synergy use basic element of architecture item art principles.

The basic consideration in applying these elements and principles are;

- The overall theme of the design i.e. the desired type and features of the foodservice establishment.
- The nature of service to be provided
- The mood to be created
- The architectural plan
- Taste and class required
- The desired combination of all the elements taking into consideration the overall theme of the design

It is often desirable to engage the service of qualified and seasoned architectural experts when designing medium and large scale foodservice structures because of the cost of constructing such structure and need to avoid mistakes. The foodservice manager or entrepreneur would still need to provide basic information about size, location, impressions, amount to be expended etc. The experts, architect and quantity surveyors would be expected to produce suitable design options within the range of information provided.

Art principles that are applied in decorations usually includes, colour, texture, style form patterns etc.

Colour

Colour play vital role in interior decoration, depending on how it is applied. It can be used to create cheerful welcoming or depressing and dull mood. It also gives the impression of the size of room. Therefore, colour has to be carefully chosen and combined to create the desired mood and effects. The knowledge of colour wheel, triangle and harmony is necessary.

1. Colour Wheel

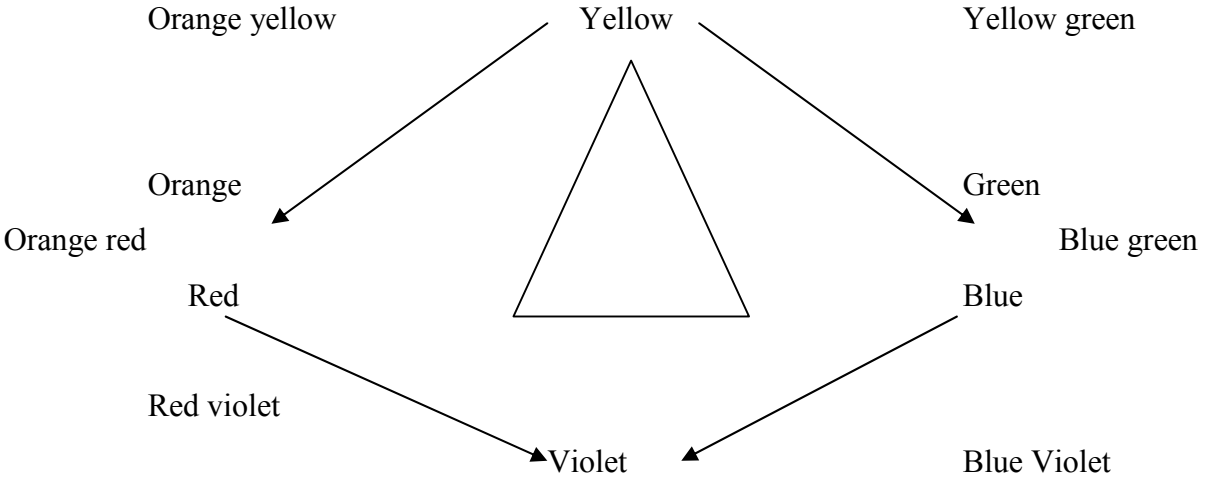
This is a circular arrangement of colour to show their relationship with each other. Colour wheel consist of primary, secondary and intermediate colours.

- Primary colours are red, yellow and blue. Other colour are derived by mixing primary colour together or with secondary colours.
- Secondary colour are obtained by mixing equal quantities of various combinations of primary colours together i.e.

  Red + Yellow = Orange

  Yellow + Blue = Green

  Blue + Red = Purple/Violet
- Intermediate (Tertiary) colours are blends of various combinations of primary and secondary colours. Example are red-violet, blue-violet, blue-green, yellow-green, yellow-orange and red-orange.



2. Colour Triangle

   This is used to explain the various colour options that are available when white and black colour combines either with each other or with another colour from the colour wheel e.g.

   Red + White = Pink (Tint)

   Red + black = Maroon (Shades)

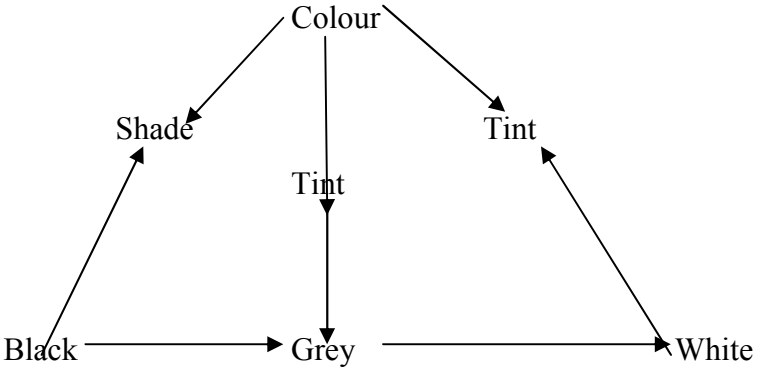
   Red + black + white = Rose (tone)

   Black + white = Grey

   THEORY OF COLOUR COMBINATION

   Combination of colours can be used to create desired impressions that may evoke either related or contrasting harmonies.

   Related harmonies: implies combination of colours that blends harmoniously (in agreement) wish each other. Examples are



Monochronomatic colour harmony: uses variations or values of the same colour

Adjacent (Analogous) Harmony: Combines adjacent colour on the colour wheel e.g. yellows and oranges, blues and greens.

Accented neutral harmony consists of colour on a straight line of the colour triangle to form pleasant combination e.g. Red blends well with;

- its tint and white
- Shade and white

- Its tone and grey
- A tint and a tone blends with black
- A Shade and a tone blends well with white

Contrasting Harmony: This involves agreement/harmonious blends of colours with contrasting features, example includes complimentary, split complementary and Triad harmonies

1. Complimentary harmonies consist of other colours that are directly opposite to one another on the colour wheel e.g. yellow and violet. This may be carefully achieved by higher-lower quantity blends of each colour. If equal quantities of complimentary colour is used, the resulting jeering or dashing must be relived by quantities of neutral tones e.g. bright yellow and red violet may be attractive on a shade or grey back ground.
2. Split complimentary harmony : Combination of a colour (Primary) with colours that lie on each site of its complements on the colour wheel e.g. red colour combined with yellow or blue green.
3. Triad harmony : Combination of colours that lies at equal distance from each other e.g. yellow, red and blue orange, green and violet (i.e. either all the primary or secondary colours).

   Tips on the use of Colours

   1. Bright colours should be used in small areas
   2. Bright colours may be used as a relieve a monochromatic colour harmony background
   3. Choice of colour should be consideration in relation to the lightening system of a premises
   4. Colour distribution may be used to enter emphasize/accentuate or de-emphasize the design, furniture, fixtures and other features of the interior

   Style

   As an element of art or design, it implies the mood created by the combination of all items in a premises. It also refers to the types/version of buildings, designs and furnishing used e.g. contemporary, traditional Victorian types architectural design and furnishing

   Form.

The shape and structural materials of a premises and the furnishing desired within the interior forms should harmonise well with one another unit with the premisis/environment and style.

Texture

Sensual perception about the surface appearance or feel of an item using the sence of touch and sight.

CLOTHING MANAGEMENT IN HOUSEKEEPING

Classification of Fibre

Textile fibers are grouped into two main classes:

A. Natural fibers; are obtained from natural sources, either from plants or animals.
B. Synthetic or man-made fibres; which are produced form the chemical treatment of certain raw materials such as petroleum.

Laundry Operation

The laundering of clothes/fabrics involves washing them so that they look new again. Stain have to be removed and articles may be stiffened, if necessary. Finishing by ironing or pressing gives the articles a smooth appearance and helps them stay clean longer. Laundering is important for the following reasons:

1. Dirt is unhygienic and can be dangerous. Dirty clothes and household linen can harbor germs such as scabies and disease-carrying pests, lice, bedbugs, and fleas. These can be transferred to the skin when we wear dirty clothes. In fact our skin cannot be neater than the clothes we are wearing.
2. Dirty and stained articles are unpleasant to look at, and smell bad. A person wearing dirty clothes would be avoided by others.
3. Dirt can damage fabrics. It can form a chemical combination with the fabric. This can weaken the fabric if neglected. Laundering of clothes helps them to last longer. Clothes are expensive to buy so they ought to be taken good care of through proper regular laundering.

Cleansing agents

Cleansing agents are substances which aid the removal of dirt. They include water, detergents, bleaches, etc.

Water : Water is a very important cleansing agent.

Uses of water in laundry

1. Water is used for soaking clothes and household articles before washing. During soaking or steeping, water penetrates the fibres of the fabrics and causes wetting.
2. Water alone can be used to cleanse articles with non-greasy dirt to a certain extent. For instance, sugars on a table linen will dissolve in water but grease bound dirt will not.
3. Hot water will melt and soften grease. It, however, requires other cleaning agents, such as soap, to emulsify and remove the grease.
4. Water is used for rinsing. Rinsing is important to remove all the soapy water and dirt and to give the clothes a good colour.
5. Water is used for ironing. In order to remove creases or wrinkles from almost all fabrics or wrinkles from almost all fabrics, water must be present. The water is turned into steam as the iron moves across a dampened article, and fabric gradually becomes smooth as it dries out.

Suitable water for laundry

Hard water forms a scum with soap. The scum is seen as a sticky deposit on the surface of the water and around the edges of the laundry basin on washing machine. As clothes are taken out from the wash water, much of the scum sticks to them. Thus, hard water is not suitable for laundry.

Synthetic detergents such as *Omo* and *Elephant* are, however, not affected by water hardness to the same extent as soap. Thus, they can be used with hard water without forming a scum but the cleansing power of the detergent may be affected. Therefore, more detergent is needed with hard water. Hard water needs to be softened before it is used for laundry. Soft water is the best water for laundry because soaps and synthetic detergents form good lather with no scum in it. Rain water is soft and, therefore, suitable for washing. With rain water, a little soap is needed for washing and the dirt comes out with very little rubbing.

Removal of Hardness in Water

Water can be softened for the laundry process by:

i. Boiling: Temporary hardness can be removed simply by boiling. Boiling converts bicarbonate, causing hardness to carbonates. These carbonates are insoluble in water and remain as a deposit in the boiler.

ii. Addition of soda: Washing soda can be added to hard water to soften it. It combines with the calcium bicarbonate in the hard water and converts it to insoluble calcium carbonate.

iii. Use of calgon: This is a sodium salt of metaphosphoric acid which can be added to hard water to soften it. It can be added either with, or immediately before, the soap. It puts the lime salts causing hardness out of action before they can attack the soap to form scum.

DETERGENTS

A detergent is any substance that cleanses or aids the removal of dirt. Soaps and synthetic detergents are all detergents.

Soap

Soap is made by the reaction between fats/ oils of animal / vegetable origin, and alkalis, chiefly caustic soda or caustic potash. Caustic soda is used because it is cheap. The process is called saponification. The products are soap and glycerine.

$$\text{Fats} + \text{Alkali} \xrightarrow{\text{Heat}} \text{Soap} + \text{Glycerine}$$

Glycerine is an important by-product, which is used in many industries as a base raw material. Soap can be made into long or short bars, or soap flakes. Good bar soap should not be too soft as they become easily used up when it is rubbed on articles.

Synthetic Detergents

Synthetic detergents are made from mineral oil or petroleum products rather than vegetable oils or animals fats. They are not affected by the hardness of water. They contain certain ingredients which are absent in soaps. These ingredients enable synthetic detergents to produce lather quickly. The lather or foam formed does not collapse readily. Many synthetic detergents also contain bleaching agents.

Types of Detergents

i. Heavy Duty Detergents: These produce much lather readily. They can give mild leaching action. Examples are Omo, Elephant, Tide, Appolo, etc. They are suitable for washing heavy soiled articles.

ii. Light Duty Detergents: These dissolve readily in water. They do not contain bleaching agents. They are suitable for washing delicate materials, woolens and baby's clothes.

General Cleansing Action of Soap and Synthetic Detergents

Soaps and synthetic detergents have several properties in common. For instance, their molecules are alike and behave similarly. The detergent molecule is made up of two parts, the "head", which is the water-loving part (hydrophilic part) and the tail", which is the water-hating part (hydrophobic part).

Factors that Influence the Cleansing Effect of a Detergent

1. It must be a good wetting agent.
2. It must be able to remove the dirt from the article.
3. It should be able to prevent the dirt from being deposited back on the fabric.
4. There must be a sufficient quantity of the detergent for the articles being laundered.
5. Enough time must be given for the detergent to work. Therefore, heavily soiled articles need to be soaked for some time except where colours are not fast.
6. There must be sufficient mechanical action, that is, the fabric needs to be rubbed, squeezed or agitated so that the detergent can penetrate the fibres of the fabric and remove the dirt.
7. Increased temperature causes increased movement of the water and detergent molecules. Thus, increased temperature helps the detergent to work more efficiently. Hot water also helps to break up fats into small droplets.

Differences Between Soaps and Synthetic Detergents

	Soaps	Synthetic Detergents
1	These are made from animal fats and vegetable oils.	These are made from minearal oils.
2	They form scum with hard water.	They do not form scum with hard water.
3	They make a foam which dies away quickly by itself.	They form a foam which only dies down very slowly.
4	Soaps remove dirt but cannot take out stains.	They can remove some stains and make many look much paler.
5	Soap does not, by itself, harm fabrics, although the rubbing of its on the fabric may do so.	They are strong and any tiny bits left to dry on the fabric may bore a hole on a delicate fabric.
6	Soaps have a weaker effect on grease.	They have a stronger effect on grease.
7	Soaps are less expensive	They are more expensive.

BLEACHES

Bleaches are used for the following purposes:

1. To make white cotton and linen articles whiter.
2. To remove certain stains.
3. They are also used as sterilizers for sinks, drains, etc.

Types of Bleaches

There are two classes of bleaches:

i. Oxidizing Bleaches: These decompose and give out oxygen which attacks stains and fabric. Examples are hydrogen peroxide, chlorine bleaches, or sodium hypoclorite such as Jik and Parazone. Oxidizing bleaches are the commonly sued household bleaches. Sunlight is also a bleaching agent, especially in the presence of moisture. This is why coloured materials, such as veritable wax prints, should be dried under a shade.

ii. Reducing Bleaches: These remove stains by removing oxygen from them, e.g sodium hydrosulphite.

FABRIC RINSES

Fabric rinses are special laundry aids which are designed to be used in the last rinsing water. They aid in the improvement of the appearance and texture of laundered articles. Fabric rinses include laundry blue, vinegar, fabric softeners, and disinfectants.

A. Laundry Blues

White cottons can lose their whiteness through use, water, and the yellowing action of soap and alkali in cleansing processes. Laundry blue can be added in the last rinsing water for such fabrics to produce some degree of whiteness.

Today, however, there are modern washing detergents powders which contain ingredients capable of keeping fabrics really white. These detergents such as Omo, Elephant, etc, not only give a blue tint to the white fabric, they also add some brigthness. These have reduced the use of blue for white cotton and linen fabrics. Laundry blue is, however, suitable for some veritable wax wrappers with white and blue or black backgrounds or designs. To use laundry blue:

1. Wash the article normally and rinse thoroughly. Extract as much water as possible.
2. Dissolve the blue thoroughly in water to the desired concentration or shade or depth of colour. Avoid overblueing.

Place the article into the blue solution. Squeeze it in the solution to ensure even blueing. Wring out as much water as possible and dry in a shade.

B. Vinegar

This can be added to the last rinsing water because it helps to brighten the colour of some fabrics slightly.

C. Fabric Softeners

These are special products designed to be used in the last rinse of a washing process to soften the fabrics and to give them a better handle. Fabric softeners are used as antistatic agents to prevent static electricity, which occurs with man-made fibre fabrics during wear. For instance, nylon underwears normally cling to the skin during the harmattan. Such fabrics also give out sparks and crackle (small repeated sounds) of static electricity. These occur commonly when two man-made fibre garments are worn together. This static electricity also attracts dust and dirt on to the fabric. Once there, static held dirt is extremely difficult to remove.

Fabric softeners are also used to restore the original softness to babies' nappies, towels, wools, and wool mixture garments. To use fabric softeners:

1. Wash the article normally and rinse thoroughly, ensuring that the detergent is completely removed. Otherwise, chemcal reaction will occur between the softener and the detergent. This will prevent the softener from being effective.
2. Mix the softener with water according to the manufacturer's instructions as to the quantities to be used.
3. Place the article into the solutions and squeeze throughly to ensure an even distribution of the softener over the article.
4. Then drip dry.

In a solution, the softener is attracted to the surface of the fibres. It coats them with a very thin layer. This coating acts as a lubricant to the fibres. So the fabric becomes supple and soft.

D. Disinfectants

Disinfectants are used in laundering:

1. To kill bacteria on bed and table linen, particularly where there is illness in the house.

2. To kill bacteria on a sick person's clothing.
3. To give a pleasant fresh smell to the laundered article.

Examples of disinfectants which can be used with safety on almost all types of textiles are Dettol, Savlon, Izal, Camel, etc.

How to use:

1. Make up the disinfectant solution to the correct strength with cold or warm water (1 tablespoonful to 1 litre of water or according to manufacturer's instructions).
2. Soak the clothes in the solution for at least fifteen minutes.
3. Wash and rinse in as hot water as possible.

For pleasant smell:

i. Wash and rinse the article normally.
ii. Add one teaspoonful of disinfectant to the last rinsing water and rinse the clean article in it. This will not give any disinfection. It will, however, give a pleasant smell to the wash.

STIFFENING AGENTS

i. Starch

Starch is used in laundry work to stiffen cotton and linen fabrics. It gives the fabrics a smooth surface and fresh look a starched article keeps clean longer than an unstarched article because dirt cannot adhere easily to the smooth surface.

In Nigeria laundry starch is commonly obtained from cassava. It can, however, be equally otained from potatoes, rice, yams, cocoyams, maize, etc. Starch from these other food-stuffs is not as strong as the one obtained from cassava. The starch from these other sources is useful when only light stiffening is needed.

How Starch Works

In boiling water, starch gelatinzes or jellifies. When it is applied to a fabric, it coats the fibres. When the fabric is finished with hot iron, the coated fibres stick together, making a compact stiffened fabric.

Process of Making Cassava Starch

1. Peel off the cassava skin.
2. Wash the peeled cassava thoroughly.
3. Grate the cassava into a clean bowl.
4. Add cold water to the grated cassava and mix well.
5. Strain the content carefully through a clean piece of cloth or muslin.
6. Add more water to the chaff, and extract more strach. Repeat the process untill all starch is extracted.
7. Allow the starch to settle, and place the starch into a clean muslin. Press to get rid of as much moisture as possible.
8. Place starch in shallow trays and leave in the sun to dry thoroughly before storage.

This is boiling or hot water starch.

Different Types of Starch and their Applications

A. Hot or Boiling Water Starch

1. Mix 2 tablespoonfuls of starch with a small quantity of cold water. Mix thoroughly into a smooth mixture.
2. Add boiling water, stirring rapidly until the mixture thickens or gelatinizes into a semi-transparent grey jelly.

3. This is full strength starch. In order to use, add cold water until the required strength or consistency. Remove any lumps by straining through a clean muslin.
4. Place the washed article into the solution. Squeeze and knead it to make sure that the starch gets evenly into the fabric.
5. Remove excess water and put out to dry.
6. Iron with a hot iron while the article is still damp.

B. Cold Water Starch

This does not require hot water. It is used for stiffening light articles, collars, and cuffs of shirts and blouses, etc.

1. Mix 1 tablespoonful of starch into a smooth cream with a small quantity of cold water. Where many articles are to be stifgfened, the quantity of starch can be increased.
2. Add more water and mix well to obtain the desired strength.
3. Place the articles in the solution. Squeeze thoroughly. Extract water and dry.
4. Iron with a hot iron.

Plastic Starch

This is in liquid form and contains a special compound called resin. An example is "Dip". It stays longer in garments and is not washed out of garment as quicly as the ordinary starch. It is not prepared like common starch. Follow the directions for use given on the container.

Spray or Aerosed Starches

These are stiffeners made from starch or resins. They are sprayed on to the fabric after it has been washed and dried. After spraying, the part is ironed immediately. Care should be taken in their use, as the iron may tend to stick to them, especially if the sole of the iron is dirty. Spray starches can be used to stiffen cuffs and collars of shirts, or any special small part of a garment.

Gum Arabic

This is a discharge or exudation from tropical acacia trees. It is used in making a stiffening agent called gum water. Gum water is used for silk, rayon taffets, lace, and other delicate articles.

To make gum water:

1. Wash two tablespoonfuls of clean gum crystals in cold water.
2. Place them in a jar or small container and add one quarter litre of hot water. Leave for about 10 hours.
3. Stand the container in a pan of water and heat over low heat until the gum is dissolved. Keep stirring .
4. Strain through a clean fine cloth when the gum is completely melted. Store in a bottle. To use, dilute with cold water according to the required stiffness.

Borax

This is a very mild alkali. It is added to starch to increase stiffness and to prevent starched articles from becoming limp in damp weather. It also increases the gloss when starched fabrics are ironed.

Borax is sold as a white powder. It is not readily soluble in cold water. To use, dissolve it with hot water. It can be blended with starch.

Glue

All-purpose glue can be diluted to about 1 part of glue to 2 part of water and used as a stiffening agent for women's head ties. The concentration can be increased or decreased, depending on the type and texture of materials being stiffened.

STAINS AND STAIN REMOVAL

A stain is a spot or a mark made on a fabric which gives a colour that is different from the rest of the surface of the fabric. There are different types of stains. Stains differ in their characteristics and methods of removal. Different stain removing agents are availabel for removing specific types of stains.

Types of Stains

There are many ways of classifying stains. They can be classified in the following two ways:

1. Classification According to the Materials of the Stains:

a. Vegetable stains: These are from foods such as fruit, tea, coffee, cocoa, and grass.
b. Animal Stains: These often contain animal protein which is "set" or hardened by heat, e.g. blood, egg, gravy, milk, etc.
c. Grease Stains: These can be of animal or vegetable or mineral origin, e.g engine oil, palm oil, animal fat, etc.
d. Mineral Stains: e.g. paint, ink, medicines, rust, coal-tar, shoe polish, etc.

2. Classification According to the Form of the Stain

There are three forms, namely:

a. Absorbed Stains: These are caused by liquids which penetrate the fabric easily and become absorbed by it, e.g. tea, coffee, beer, and medicine.
b. Built-up stains: These tend to stay on the surface and do not flow into the fibres of the fabric, e.g lip stick, crayon, ball-point pen ink.
c. Compound Stains: These are absorbed into the fabric and also leave a residue on the surface as do the built-up stains, e.g. blood stains. Some part of blood is absorbed while others stay on top of the fabric.

Stain Removing Agents

1. Methylated spirit is usually used neat. It is inflammable and should not be used near a naked flame.
2. Turpentine is good for fresh paint.
3. Nail vanish remover is good for nail vanish, ball point pen ink.
4. Carbon tetrachloride is good for removal of grease, oil, and stains with a greasy base.
5. Enzyme washing powder will remove protein stains.
6. Laundry ammonia can be used on acid stains such as milk.
7. Bleaches can remove stains on specific fabrics, e.g cotton.
8. Hydrogen peroxide is a mild oxidizing bleach that can be used on wool and silk.
9. Glycerine can be used to remove chocolate and fruit juice stains.
10. Vinegar is a mild acid which can be used to remove excess blue from over-blued articles and for brightening colours.
11. Lemon juice is also acid. It can be used with commn salt to remove ink, iron rust, and medicine stains.
12. Sour milk can be used to remove ink and iron rust stains. Sour milk contains lactic acid.
13. Fresh tomatoes can be used to remove ink stains.
14. Common salt can be used for dissolving blood stains and absorbing ink stains.

Most of these materials are poisonous. They should, therefore, be labelled and locked in a cupboard out of the reach of children.

Stain Removal
Any special stains on the articles should be removed before washing. Hot water used in washing can set some stains such as blood and make them very difficult to remove.

Soaking or Steeping
Heavily soiled or very dirty articles that are colour-fast should be soaked according to the type of the fabric being washed. White cotton and linen articles can be soaked for forty-five minutes in a solution of bleach before washing. Always follow the instructions on the bleach container. Hand-kerchiefs, especially those used by cough patients, should be soaked in salt water. Do not soak articles that are not colour-fast.

Washing
If an article is placed in a wash-basin full of soapy water, it will take quite a long time for the soil to be removed properly, so you need to agitate the fibres by washing. Washing can be done by squeezing, kneading, and rubbing with hand. It can also be done with a washing machine. In a washing machine, the articles are tumbled and rubbed together in the detergent solution. During the washing process, the fibres are flexed and the soil or dirt is gradually renmoved and held in suspension by the detergent solution, so that it cannot resettle on the article.

Guidelines for Washing
1. Use a soap or synthetic detergent suitable for the type of fabric you are washing. For instance, use heavy duty detergents such as Omo, Elephant, Drum, etc, for white and colour-fast cotton, mild soap such as lux flakes for fine or delicate fabrics and some baby's wears.
2. Wash the cleanest articles before the dirtiest.
3. Change the washing water when it becomes dirty, the lather disappears and the soapy water is unable to hold any more dirt in suspension, so dirt is redeposited on the garments.
4. Grease or oil dissolves more readily in hot water than in cold water; hence hot water is better for washing certain types of fabrics.
5. Use the correct method of washing for the type of fibre as follows:
    a. Rubbing or friction: For this, hard soap or heavy duty detergent is used and the soap is rubbed on the fabric, which is then rubbed vigorously with hands. This is used for cotton and linen articles.
    b. Kneading and squeezing: These methods use as soap solution or sud. The fingers gently knead the soapy water into the article. As this is done, the soap cleanses the article and the washing water becomes dirty. These methods are used for polyester blend, nylon, coloured and printed cotton and, linen articles with colours that are likely going to run.
    c. Squeezing alone: Here the article is cleaned by gently squeezing in the soapy water without kneading.
    d. Kneading: This is used for delicate materials such as wool, silk, and washable pleated garments containing acrylics, nylon, etc.

Rinsing

This is the process by which dirty lather is washed off the articles, thus leaving the laundered articles clean and soap less. This is important to give the articles a clean colour. The first

rinse is better done with hot or warm water, depending on the type of fabric. Rinsing must be continued until the rinsing water becomes clean and soapless.

Boiling

Sometimes it is necessary to boil white cotton and linen articles or colour-fast fabrics. Boiling helps to whiten articles and kill any germs or bacteria in the launderred articles. Boiling is particularly necessary for articles used by the sick. Some fabrics, such as wool, silk, and many synthetic fibre fabrics, such as nylon, should not be boiled.

Procedure for boiling

1. Fill the boiler or a special pot reserved for boiling with cold water.
2. Add a little synthetic detergent if article is still dirty.
3. Add the washed articles or clothes in the boiler or pot.
4. Place the pot on fire to boil. Allow articles to boilo for at least ten minutes.
5. Turn the articles with boiler stick or tongs.
6. After boiling, rinse clothes in the normal way.

Optional Treatments (Blueing, Starching, Fabric Softening)

After rinsing, the artcle can be blued or stiffened or softened as desired. In each case, the normal procedure for each treatment shuld be followed.

Water Extraction

After rinsing, as much water as possible shuld be removed or extracted from the article before drying, except for drip-dry garments. Water can be extracted by hand wringing, manglng, gentle squeezing, rolling the garment in a clean absorbent towel or by spinning where a spinner is available. The procedure to adopt depends on the type of fabric being treated.

Water extraction shortens the drying time and reduces the risk of garments being pulled out of shape by the weight of the water they contain.

Drying

Drying can be carried out indoors or outdoors. Each method has its own guidelines, advantages, and disadvantages.

Outdor drying involves drying the laundered articles in sunlight.

Advantages of Outdoor Drying

1. Clothes dry faster in the sun.
2. Sunshine helps to whiten clothes and gives them some freshiness.
3. Strong sunshine can help destroy some disease germs on the clothes, which may have escaped the other laundry processes.

Disadvantages

Sunshine has a fading effect on coloured fabrics, such as veritable wax materials. Such fabrics should be dried under a shade.

Guidelines for Outdoor Drying

a. Wipe the line clean before hanging out clothes. Avoid rusty metal lines.
b. Hang garments the way they are worn. Let them be suspended by their strongest parts.
c. Use clean peg to hold articles.

d. Dry heavy knitted articles, such as sweaters, on clean flat surfaces.

Indoor Drying

Indoor drying is common during the rainy season and in some urban areas where people do not have space for outdoor drying. Under these situations people resort to drying their laundered articles in bathrooms, bedrooms, kitchens, porches or verandas, railings or staircases, etc.

Advantages of Indoor Drying

a. Some coloured articles are best dried indoors.
b. It may be safer to dry articles indoors in some towns.

Disadvantages of Indoor Drying

1. Articles require a longer time to dry indoors than outdoors.
2. While cotton materials may be attacked by mildew while drying slowly indoors.
3. It is unhygienic and uncomfortable to have wet clothes hanging about in the house, especially during the rainy season.

Guidelines for Indoor Drying

1. Use a clothes horse for indoor drying. It can be put in any part of the house.
2. Keep the windows open when you have wet articles hanging in the room.
3. Extract as much water as possible before hanging the articles indoors.

FINISHING

When articles are washed and dried, they become clean. But they have a rough appearance with creases and wrinkles. They, therefore, need to be finished so that they can regain their original smooth feel and appearance.

Finishing can be done by beating, mangling, pressing or ironing. The method to use depends on the type of fabric. Finishing methods include:

a. Beating: The articles is neatly folded and put on a clean smooth flat board. It is then lightly sprinkled with water and beaten with another clean flat board. Bearing is usually applied to heavy woven local fabrics.
b. Mangling unstarched materials, such as bedsheets, curtains, etc. can be smoothened by folding them neatly and passing them between the rollers of a mangle. This is, however, not a common finishing method today in Nigeria.
c. Pressing: This is the process of finishing laundered fabrics by pressing the iron down where needed, lifting it and then pressing it again without moving the iron about on the fabric. Steam iron can be used for pressing. All wollen articles, knitted garments, and crepes require pressing.

IRONING

This involves finishing a fabric by moving the iron to and from on the material. The iron is moved over the entire surface of the material. Effective ironing requires moisture, heat, and pressure for effective finishing.

Equipment for Ironing

Equipment for ironing includes irons and ironing boards.

Irons: There are different types of irons, such as:

i. The flat iron, which is heated by placing it on a source of heat. Every part of the iron gets hot, including the handle. Therefore, the worker need a thick pad for the handle when working.

ii. The charcoal or coal-pot iron, which is heated by placing bits of coal or charcoal in the pot and heating the coal. The sole or base of the iron becomes hot as the coal heats up.

Guidelines for the Use of Flat and Charcoal Irons

1. Wipe the base of the iron clean before using it. For the flat iron, rub it on very fine sand first. Wipe the surface, including base and sides with a rag. Wipe with another rag containing some pieces of candle wax. Wipe vigorously again with another clean pad.
2. Test the temperature of the iron on a piece of cloth before using it on your article.
3. Iron clothes requiring slightly hot iron or high temperature, such as cotton, first while the iron is still hot. When the iron gets cooler, fabrics, like rayon, can then be ironed.

Electric Irons

These are modern irons which use electricity. They are cleaner and easier to use than the older types of iron.

An electric iron has a thermostat which controls the electricity supply to the iron. When the iron becomes too hot, the thermostat cuts off the electricity at a pre-set temperature. Gradually, the iron cools down. At a certain temperature, the thermostat resets, allowing the electricity to heat up the iron again. This process repeats itself over and over again. This heating and cooling of the electric iron is called the "thermostat cycle".

An electric iron normally has different settings for different kinds of fabrics, e.g

- Cool setting for acrylics, nylon, acetate, etc.
- Warm setting for polyester mixtures and wool.
- Hot setting for cotton and linen articles.

There are two main types of electric irons:

1. The dry irons used for dry ironing.
2. The steam irons used for steam ironing.

Some Features to look for in an Electric Iron

1. Thermostatic control should have easy-to- read fabric markings.
2. It should have suitable weight (aluminium soleplate is the lightest; steel or cast iron are heavier). Light-weight iron is far less tiring.
3. The cord should be well placed to allow for right and left handed ironing.
4. It should have a comfortable handle, shaped to the hand and insulated from soleplate heat.
5. It should have a sharp point and a slanting soleplate edge.
6. It should have an indicator light which shows when it is on.

Guidelines for the Use of Electric Irons

1. Clean the soleplate before ironing.
2. Set the iron according to the fabric being ironed. A slower ironer should set the iron to the bottom and of the sector selected for the fabric.
3. Always begin by ironing the fabrics requiring a cool setting, then those fabrics which require a warm setting and end up with those that require a hot setting.
4. If starched fabrics are being ironed, the soleplate will gradually pick up cooked starch and a brown deposit may develop. Never try to scratch this off with a sharp object, such as knife. It will damage the soleplate. To remove the deposit, rub the soleplate vigorously while it is still hot on an old piece of wet cloth. If this is not successful,

then rub the soleplate with a wet cloth on which some scouring powder, such as Vim, has been sprinkled. If this fails, as a last resort use sandpaper.

5. Use a holder to keep the iron cord up and away from your ironing. This makes ironing easier, and lengthens the life of the cord.
6. Ensure that the cord is not damaged thereby exposing the naked electric wire. This can lead to electric shock.
7. Switch off the electricity as soon as you finish ironing.

IRONING BOARDS

Ironing boards provide surfaces for ironing. They can be improvised or purchased. Ironing boards can be improvised with a plain board, supported on bricks or stones. Ironing can also be done on padded tables or even the floor, though these might be uncomfortable for the worker.

Modern ironing boards are adjustable. So the worker can always adjust the board to a comfortable working height.

Points to Consider in Choosing an Ironing Board

1. Adjustment of the board from lower to higher positions, or vice versa, should be quick and smooth.
2. Pads for the board should be thick and fluffy but still offer a firm surface for ironing.
3. Ironing board covers should be made of cotton muslin or cotton twill. They should be washable.
4. The cover should fit the board and remain without slipping. It should, however, be easy to remove and change when it is dirty or damaged.

Sleeve Board: This is a small board, used only for ironing sleeves. It must also have a cover which can be taken off and washed.

Iron Stand: This is not necessary with electric irons because each has a heel on which it can stand. An iron stand is also an integral part of an ironing board. When we use the other types of iron on a table or floor, we need an iron stand. This may be made of asbestos or metal. It can also be improvised.

Guidelines for Ironing

1. The iron must be clean.
2. Study the instruction on the care label of the garment, if available to ascertain the temperature which the article can withstand. If there is no care label, test the iron on an inconspicuous part of the garment first before ironing.
3. Damp the article.
4. Regulate the temperature of the iron to suit the article and its dampness.
5. Place the article carefully on the ironing board or surface before starting to iron.
6. Iron all double and thick parts such as pockets, hems, and seams on the wrong side.
7. Iron all small parts and trimmings, such as belts, shoulder pads, and frills.
8. Move ironed part of the article away from you to avoid further creasing or wrinkling.
9. Use the left hand ahead of the ironing to smooth the work, and to hold where necessary.
10. Do not stretch the material as this may result in loss of shape.
11. Iron along the grain of the fabric where possible.
12. Iron embroidery and lace on the wrong side over a clean piece of cloth such as calico.
13. Turn garments and articles as little as possible during ironing.
14. Iron articles to dryness before airing.
15. Iron around fastenings and zippers, not over them.

Airing

After ironing a cloth, there is always a little steam left between the fibres or threads. The steam is so little that it cannot be felt with the hand. However, if it is left in the cloth, it could result in creasing and spoiling of the ironing. The dampness can encourage mildew attack and in some cases, especially with children's wear, chill the wearer.

Ironed articles should, therefore, be aired by:

a. Putting them out in the sun where possible for a little while so that the dampness can dry out completely.
b. Placing them on a clothe-horse, a line, or the back of a chair near a window for some time.

Folding and Storage

After airing, clothes can be stored away by either hanging them in a wardrobe where available or folding and putting them away in a box or a drawer.

Folding procedure

Clothes are folded so that they can be stored in a little space and in such a way that the finishing, (ironing or pressing) which has been given to them, is not spilt before they are used.

1. Air the ironed article thoroughly.
2. Fasten any buttons or other fastenings (except the belt).
3. Fold in such a way that the article will not wrinkle or crease before use.
4. Arrange fullness in pleats and folds.
5. Fold along the grain of the fabric firs. Then make a number of folds across the grain depending on the length of the article. Bedsheets will have more folds than a shirt or blouse.
6. Iron folds into bed linen and most table linen.
7. Press folds lightly by hand into undergarments. Folded articles should be carefully placed in a box or a drawer.

Sponging and Pressing

Thick articles, such as wool and wool mixture which may shrink or lose their shape if washed, can be freshened up by sponging and pressing.

Sponging solutions include:

1. Warm water, which can remove many food spots and is suitable for sponging all fabrics.
2. Warm laundry blue water is useful for dark blue fabrics.
3. Vinegar (1 teaspoonful) in half litre of water is suitable for dark-coloured materials.
4. One tablespoonful of common salt or ammonia in half litre of water can be used on light-coloured fabrics.
5. Solution of soapless detergent with warm water is suitable for heavily soiled articles.

Sponging Procedure

1. Shake the garment in the open air.
2. Brush the garment all over, giving special attention to the inside of the pockets, pleats collars, cuff, etc.

3. Make a suitable sponging solution, considering the fabric type, colour, and state of dirtiness of the garment to be treated.
4. Place the article on a clean flat surface.
5. Apply the solution evenly to the right side of the article, rubbing lightly with either a piece of material similar to that being sponged, or with a muslin or a small soft sponge.
6. Inspect closely for any stain and treat according to type.
7. Hang out to dry.
8. Finish by pressing on the wrong side using an iron temperature suitable for the fabric being treated.

Dry-Cleaning

Some fabrics such as wool, kente, etc. can be damaged by washing them ordinarily in water. Such fabrics need to be dry-cleaned. Dry-cleaning is a method of cleaning fabrics without water, but with special dry-cleaning solvents.

Advantages of Dry-cleaning

1. Articles, especially those made of wool or cotton, do not shrink when dry-cleaned.
2. Dry-cleaning does not change the size, shape, appearance, and other details (e.g pleats) of a garment.
3. Dyes do not run with dry-cleaning, because dry-cleaning solvents do not react with the fibres of the fabric or with dye stuffs in the same way as water does.
4. Dry-cleaned articles requires little or no ironing or pressing.
5. Some finishes, such as stiffenings, are not removed by dry-cleaning as is the case with washing.

Dry-cleaning solvents can catch fire easily. They should be stored in well-labelled containers away from the kitchen and fire. Home dry-cleaning is hazardous and must be carried out very carefully on a very small scale. It is better to employ the services of professional dry-cleaners.