BP702T · B.Pharm Semester VII · Theory Notes

Cosmetics and Cosmeceuticals

Unit IV — Oral, Nail, Eye, Lip and Intimate Hygiene Cosmetics (6 hours)

Unit IV (6 hours)

Pills & Python Notes

From-zero teaching standard: every technical term is defined before use.

Syllabus coverage: Unit IV (6 hours).

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CHAPTER 9: Oral Cavity Problems, Mouth Wash and Toothpaste

1. Learning Objectives

After studying this chapter, the student will be able to:

- Describe common problems of the oral cavity in simple terms: bad breath, dental cavities, gum problems, plaque and tartar, and tooth sensitivity.
- Explain what oral cosmetics and cosmeceuticals are.
- Describe the general composition (illustrative), method of preparation, packing, and evaluation of mouth wash.
- Describe the general composition (illustrative), method of preparation, packing, and evaluation of toothpaste.
- List herbal ingredients traditionally used in oral care products.

2. Definitions

- **Oral cavity:** The mouth — including teeth, gums, tongue, and inner cheeks.
- **Bad breath (halitosis):** An unpleasant smell from the mouth.
- **Dental cavity (dental caries):** A hole or damaged spot in a tooth caused by decay.
- **Plaque:** A soft, sticky film that forms on teeth; if not removed, it hardens into tartar.
- **Tartar (calculus):** Hardened plaque that sticks firmly to teeth.
- **Gum problems:** Conditions where gums become red, swollen, or bleed easily.
- **Tooth sensitivity:** A short, sharp discomfort in teeth when eating or drinking hot, cold, or sweet things.
- **Mouth wash:** A liquid product used to rinse the mouth, aimed at freshening breath and supporting oral cleanliness.
- **Toothpaste:** A paste or gel used with a toothbrush to clean teeth and support oral hygiene.
- **Herbal oral care cosmetic:** An oral care product containing plant-derived ingredients (such as neem, clove, or miswak), traditionally used for mouth care.

3. Terminology

Term	Meaning in simple words
Halitosis	The technical word for bad breath.
Caries	The technical word for tooth decay/cavity formation.

Term	Meaning in simple words
Plaque	Soft sticky film on teeth; the starting point of many oral problems.
Calculus	The technical word for tartar — hardened plaque.
Gingiva	The technical word for gums.
Abrasive	A mildly scrubbing ingredient in toothpaste that helps remove stains and plaque.
Humectant	An ingredient that keeps the paste moist and stops it drying out.
Binder	An ingredient that holds the paste together in a smooth uniform mass.
Surfactant	An ingredient that helps the paste foam and spread during brushing.
Fluoride	An ingredient used in many toothpastes, described generically here as a common toothpaste ingredient aimed at tooth care.

4. Simple Explanation

Various problems of the oral cavity — described simply.

1. **Bad breath:** Food particles and bacteria in the mouth can produce unpleasant smells. Poor cleaning of teeth and tongue makes it worse.
2. **Dental cavities:** When sugary food stays on teeth, bacteria act on it and produce acids that slowly damage the tooth surface, forming a cavity (hole).
3. **Gum problems:** If plaque stays along the gum line, gums can become red, swollen, and bleed while brushing.
4. **Plaque and tartar:** Plaque is a soft film that forms daily on teeth. Brushing removes it. If plaque is not removed, minerals from saliva harden it into tartar, which sticks tightly and needs professional cleaning.
5. **Tooth sensitivity:** When the protective outer layer of the tooth wears or gums shrink back, hot, cold, or sweet foods can cause a brief sharp feeling.

Oral cosmetics and cosmeceuticals — overview. These are products used in and around the mouth aimed at cleanliness, fresh breath, and healthy-looking teeth and gums. The two main products are mouth wash and toothpaste. They are cosmetics/hygiene products, not medicines — they support daily oral care; they do not cure dental disease.

Mouth wash — general composition. A mouth wash is mostly a flavored liquid. Its illustrative general composition includes:

- **Water:** the main base.
- **Flavoring agents:** give fresh taste and breath-freshening feel.
- **Sweeteners:** improve taste (non-sugar types).
- **Surfactant/solubilizer:** helps mix flavor and other ingredients evenly.
- **Coloring:** gives the product its look.

- **Optional functional ingredients:** used in products aimed at freshening breath or supporting gum care (described generically, no specific claims).

Mouth wash — method of preparation (general steps).

1 Take purified water in a clean mixing vessel.

2 Dissolve the soluble ingredients (sweeteners, and any soluble functional ingredients) with stirring.

3 Add flavor and solubilizer; mix until uniform.

4 Add color; mix gently.

5 Check clarity and uniformity; filter if needed.

6 Fill into bottles.

Mouth wash — packing. Mouth washes are packed in plastic or glass bottles with screw caps or flip-top caps, often with a measuring cap so the user can pour the right amount. The label carries directions for use (rinse, do not swallow) and storage guidance.

Mouth wash — evaluation parameters.

- Appearance: clear liquid, uniform color, no particles.
- Odor and taste: pleasant, matching the flavor.
- pH: within a mouth-friendly range (generic check).
- Uniformity of fill: each bottle filled to the stated volume.
- Stability: no separation or color change on storage.
- Microbial quality: product stays clean and safe during use (generic concept).

Toothpaste — general composition. A toothpaste is a smooth paste built from several ingredient families:

- **Abrasives:** mildly scrub the tooth surface to remove plaque and stains.
- **Humectants:** keep the paste moist and smooth (stop it from drying in the tube).
- **Binders:** hold all ingredients together as one uniform paste.
- **Surfactants:** help the paste foam and spread while brushing.
- **Flavoring agents:** give the familiar minty taste.
- **Fluoride:** mentioned generically as a common ingredient used in many toothpastes (no concentration figures stated here).
- **Water:** base medium.
- **Preservatives and colors:** keep the product stable and attractive.

Toothpaste — method of preparation (general steps).

1 Prepare the liquid phase: mix water, humectant, and dissolved ingredients (sweetener, fluoride where used, preservative).

2 Disperse the binder in the liquid phase with stirring to form a smooth gel base.

3 Add the abrasive powder gradually with mixing until a uniform paste forms.

4 Add surfactant and flavor; mix gently to avoid excess air.

5 De-aerate (remove trapped air) so the paste is smooth.

6 Check uniformity, texture, and flavor before filling.

Toothpaste — packing. Toothpastes are packed in collapsible tubes (plastic or laminated) with a cap, sealed at one end. Tubes are placed in cartons carrying the product name, directions, and net quantity. The tube protects the paste from air and drying.

Toothpaste — evaluation parameters.

- Appearance and texture: smooth, uniform paste; no lumps or grit.
- pH: within a mouth-friendly range (generic check).
- Foam: forms a reasonable lather on brushing (generic check).
- Spreadability and extrudability: squeezes easily from the tube and spreads on the brush.
- Stability: no separation of liquid, no hardening, on storage.
- Flavor: pleasant and stable.
- Microbial quality: stays clean and safe during use (generic concept).

Herbal oral care cosmetics. These are oral care products containing plant ingredients traditionally used for mouth care in India:

- **Neem:** traditionally used in oral care products; valued traditionally for mouth freshness.
- **Clove:** traditionally used in oral care for its familiar strong taste and traditional use in tooth-related products.
- **Miswak (chewing stick):** traditionally used in many regions as a natural tooth-cleaning stick; its concept is used in some herbal toothpastes.

These are described by traditional use only — no disease-treatment claims are made here.

5. Classifications

Common oral cavity problems:

1 Bad breath (halitosis)

2 Dental cavities (caries)

3 Gum problems (redness, swelling, bleeding)

4 Plaque and tartar build-up

5 Tooth sensitivity

Oral cosmetics and cosmeceuticals (main types):

1 Mouth wash (liquid rinse)

2 Toothpaste (paste/gel for brushing)

3 Herbal oral care cosmetics (plant-based variants of the above)

Toothpaste ingredient families:

- Abrasives | Humectants | Binders | Surfactants | Flavoring agents | Fluoride (generic) | Water | Preservatives/colors

6. Mechanisms / Processes

How cavities form (simple steps):

1 Sugary food stays on teeth after eating.

2 Mouth bacteria act on the leftover sugar.

3 Acids are produced.

4 Acids slowly damage the tooth surface → a cavity forms.

Takeaway: regular cleaning removes the food and plaque before acids do damage.

How plaque becomes tartar (simple steps):

1 Soft plaque film forms on teeth daily.

2 Brushing removes soft plaque.

3 Plaque left behind picks up minerals from saliva.

4 It hardens into tartar, which sticks firmly and needs professional cleaning.

Takeaway: daily brushing breaks the chain at step 2.

How toothpaste cleans (simple steps):

1 Paste is applied to the brush; surfactant helps it foam and spread.

2 Brushing moves the mild abrasive over tooth surfaces.

3 Plaque and surface stains are loosened and lifted.

4 Rinsing washes everything away; flavor leaves a fresh feel.

How mouth wash is used (simple steps):

1 Pour the measured amount using the cap.

2 Rinse and swish around the mouth for the time on the label.

3 Spit out; do not swallow.

7. Textual Diagrams / Flowcharts

Flowchart: plaque → tartar chain

```
Soft plaque forms daily --> brushed away = clean teeth
                    |
              NOT brushed away
                    |
        minerals harden it --> TARTAR (sticks firmly)
```

Takeaway: brushing daily stops plaque from becoming tartar.

Flowchart: toothpaste preparation (general)

```
Liquid phase (water + humectant + dissolved items)
        |
  Add binder --> smooth gel base
        |
  Add abrasive powder gradually --> uniform paste
        |
  Add surfactant + flavor (gentle mixing)
        |
  Remove air --> check --> fill into tubes
```

Takeaway: build the smooth base first, then add the powder, then the foam and flavor.

Flowchart: mouth wash preparation (general)

```
Purified water --> dissolve solubles --> add flavor + solubilizer
--> add color --> check clarity --> filter --> fill bottles
```

Takeaway: everything must dissolve and mix uniformly before filling.

Diagram: toothpaste ingredient families and their jobs

```
ABRASIVE  = the scrubber (removes plaque/stains)
HUMECTANT = the moisturizer (stops drying)
BINDER    = the glue (holds paste together)
SURFACTANT= the foamer (spreads the paste)
FLAVOR    = the taste (fresh feel)
```

Takeaway: each family has one clear job.

8. Infographic Concept Box

INFOGRAPHIC CONCEPT: A visual titled "Inside Your Toothpaste Tube — Who Does What?" A large toothpaste tube in the center squeezes out a ribbon divided into six colored bands, each labeled with an ingredient family and a one-line job: Abrasive = "gentle scrubber," Humectant = "keeps it moist," Binder = "holds it together," Surfactant = "foam maker," Flavor = "fresh taste," Fluoride = "common tooth-care ingredient." Below, a simple "brush twice daily" reminder strip. Clean, bright colors, student-friendly.

9. Tables

Table 1: Illustrative general composition of a mouth wash (typical, not an official formula)

Ingredient type	Purpose
Purified water	Main base/vehicle
Flavoring agents	Fresh taste and breath-freshening feel
Sweetener (non-sugar)	Improves taste
Surfactant/solubilizer	Mixes flavor and ingredients uniformly
Color	Product appearance
Functional ingredients (optional, generic)	Used in products aimed at breath freshness or gum care

This table shows a typical/illustrative idea of composition, not an official or pharmacopoeial formula.

Table 2: Illustrative general composition of a toothpaste (typical, not an official formula)

Ingredient type	Purpose
Abrasive	Mild scrubbing to remove plaque and stains
Humectant	Keeps paste moist, stops drying in the tube
Binder	Holds ingredients as a smooth uniform paste
Surfactant	Foam and spreading during brushing
Flavoring agent	Pleasant minty taste
Fluoride (mentioned generically)	Common ingredient in many toothpastes
Water	Base medium
Preservative/color	Stability and appearance

This table shows a typical/illustrative idea of composition, not an official or pharmacopoeial formula.

Table 3: Evaluation parameters — mouth wash vs toothpaste

Parameter	Mouth wash	Toothpaste
Appearance	Clear liquid, uniform color	Smooth paste, no lumps/grit
pH	Mouth-friendly range (generic)	Mouth-friendly range (generic)
Performance check	Pleasant taste, fresh feel	Foam, easy squeeze from tube
Stability	No separation or color change	No liquid separation or hardening
Pack check	Correct fill volume, leak-free cap	Sealed tube, intact carton

10. Examples

- Mouth wash example: a mint-flavored rinse used after brushing at night for fresh breath.
- Toothpaste example: a regular mint toothpaste used twice daily with a soft brush.
- Herbal example: a toothpaste containing neem and clove, traditionally used ingredients in Indian oral care.
- Problem example: bleeding gums while brushing — a sign of gum problems linked to plaque along the gum line.

- Packing example: mouth wash bottle with a measuring cap; toothpaste in a sealed collapsible tube inside a carton.

11. Analogies

- **Plaque on teeth** is like **dust settling on furniture daily**: wipe it daily and it never builds up; ignore it and it becomes hard to remove.
- **Tartar** is like **limescale in a kettle**: soft deposits that harden over time and then need special cleaning.
- **Abrasive in toothpaste** is like **a soft scrub pad on a dish**: strong enough to lift the dirt, mild enough not to scratch the plate.
- **Mouth wash after brushing** is like **a final rinse after mopping the floor**: the main cleaning is done; the rinse adds the finishing freshness.

12. Pharmacy Relevance

Pharmacists are often the first point of advice for oral care: which toothpaste suits sensitive teeth, how to use a mouth wash correctly (rinse and spit, do not swallow), and when a problem like persistent bleeding gums or a cavity needs a dentist rather than a cosmetic product. Knowing the general composition helps explain product differences to customers, and knowing evaluation basics helps in quality discussions. The pharmacist must remember: these are hygiene/cosmetic products that support daily care; they do not replace dental treatment.

13. India Context

India has a strong tradition of herbal oral care — neem twigs and miswak sticks have been used for tooth cleaning in many regions for generations, and clove has long been a familiar traditional ingredient for tooth-related products. Today the Indian market carries both modern and herbal toothpastes and mouth washes, and customers frequently ask pharmacists about herbal options containing neem, clove, or miswak alongside regular products.

14. Key Points

- Common oral problems: bad breath, cavities, gum problems, plaque/tartar, tooth sensitivity.
- Plaque is soft and removable by brushing; tartar is hardened plaque needing professional cleaning.
- Mouth wash: flavored liquid rinse; illustrative composition = water, flavor, sweetener, solubilizer, color, optional functional ingredients.
- Mouth wash preparation: dissolve, mix flavor, color, check clarity, fill bottles with measuring caps.
- Toothpaste ingredient families: abrasives, humectants, binders, surfactants, flavoring, fluoride (generic), water, preservative/color.
- Toothpaste preparation: liquid phase → binder gel → add abrasive → surfactant/flavor → de-aerate → fill tubes.
- Evaluation covers appearance, pH, performance, stability, pack integrity, microbial quality.

- Herbal oral care: neem, clove, miswak — traditionally used ingredients.

15. Common Confusions

- **Mouth wash vs toothpaste:** mouth wash is a rinse used after brushing; it does not replace brushing with toothpaste.
- **Plaque vs tartar:** plaque is soft and brushable; tartar is hardened and not removable by brushing.
- **Cosmetic vs medicine:** toothpastes and mouth washes support daily hygiene; they do not cure cavities or gum disease — a dentist treats those.
- **"Herbal" vs "stronger":** herbal describes the ingredient source, not a guarantee of better or faster results.

16. Common Mistakes

- Swallowing mouth wash instead of spitting it out.
- Using mouth wash as a substitute for brushing.
- Brushing too hard thinking it cleans better — it can harm gums and enamel.
- Expecting a toothpaste to fill or cure an existing cavity.
- Storing toothpaste tubes open or mouth wash bottles uncapped, affecting quality.

17. Mnemonics

- **"B-C-G-P-S"** for oral problems: **B**ad breath, **C**avities, **G**um problems, **P**laque/tartar, **S**ensitivity — "Brush Carefully, Gums Prefer Softness."
- **"A-H-B-S-F"** for toothpaste families: **A**brasive, **H**umectant, **B**inder, **S**urfactant, **F**lavor — "A Happy Brush Smiles Fresh."
- **"N-C-M"** for herbal oral trio: **N**eem, **C**love, **M**iswak — "Nature Cleans Mouth."

18. Exam Summary

This chapter covered common oral cavity problems — bad breath, dental cavities, gum problems, plaque and tartar, and tooth sensitivity — explained simply without statistics. Oral cosmetics and cosmeceuticals are hygiene products supporting daily mouth care, mainly mouth wash and toothpaste. Mouth wash is a flavored liquid (illustrative composition: water, flavor, sweetener, solubilizer, color, optional functional ingredients), prepared by dissolving and mixing steps and packed in bottles with measuring caps. Toothpaste is built from abrasives, humectants, binders, surfactants, flavoring agents, fluoride (generic mention), water, and preservative/color; it is prepared by forming a binder gel, adding abrasive, then surfactant and flavor, de-aerating, and filling into tubes. Both are evaluated for appearance, pH, performance, stability, pack integrity, and microbial quality. Herbal oral care uses neem, clove, and miswak by traditional use.

19. One-Minute Revision

Oral problems: bad breath, cavities, gum issues, plaque (soft) → tartar (hard), sensitivity. Mouth wash = flavored rinse; dissolve → mix → color → fill in bottles. Toothpaste families: abrasive, humectant, binder, surfactant, flavor, fluoride (generic); gel base → abrasive → flavor → tube. Evaluate: look, pH, performance, stability, pack. Herbal trio: neem, clove, miswak. Rinse and spit — never swallow mouth wash.

20. Short Questions

1 List five common problems of the oral cavity.

2 Differentiate plaque from tartar.

3 Give the illustrative general composition of a mouth wash.

4 Write the general steps for toothpaste preparation.

5 Name the ingredient families in toothpaste with one job each.

6 How is a mouth wash packed? Mention one special feature of its pack.

7 Name three herbal ingredients used in oral care products.

21. Long Questions

1 Describe the common problems of the oral cavity in simple terms.

2 Describe the general composition, method of preparation, packing, and evaluation of mouth wash.

3 Describe the general composition, method of preparation, packing, and evaluation of toothpaste.

4 Write a short note on herbal oral care cosmetics with examples.

22. MCQs

1 The technical term for bad breath is:

a) Caries b) Halitosis c) Calculus d) Gingiva

1 Tartar is:

a) Soft plaque removed by brushing b) Hardened plaque stuck firmly to teeth c) A type of toothpaste d) A mouth wash flavor

1 In toothpaste, the ingredient that keeps the paste moist is the:

a) Abrasive b) Humectant c) Surfactant d) Flavor

1 The binder in toothpaste mainly:

a) Creates foam b) Holds the paste together uniformly c) Gives mint taste d) Scrubs stains

1 Mouth wash is packed in bottles often with:

a) A measuring cap b) A spray pump c) A dropper d) An aerosol valve

1 Which step comes first in toothpaste preparation?

a) Adding flavor b) Preparing the liquid phase with humectant c) Filling tubes d) Adding surfactant

1 Fluoride is mentioned in this chapter as:

a) A banned ingredient b) A common ingredient in many toothpastes (generic mention) c) A flavoring agent d) A preservative

1 Which of these is traditionally used as a natural tooth-cleaning stick?

a) Miswak b) Shikakai c) Amla d) Reetha

1 Clove and neem are examples of:

a) Abrasives b) Herbal ingredients traditionally used in oral care c) Surfactants d) Preservatives

1 A mouth wash should be:

a) Swallowed after rinsing b) Rinsed, swished, and spit out c) Applied with a brush d) Heated before use

1 Dental cavities form when:

a) Acids from bacterial action damage the tooth surface b) Teeth are brushed twice daily c) Cold water is drunk d) Mouth wash is used

1 Tooth sensitivity is best described as:

a) A hole in the tooth b) Brief sharp discomfort with hot, cold, or sweet foods c) Bleeding gums d) Bad breath

Answer key: 1-b, 2-b, 3-b, 4-b, 5-a, 6-b, 7-b, 8-a, 9-b, 10-b, 11-a, 12-b

23. Viva Questions

1 What is the difference between plaque and tartar?

2 Name the ingredient families in a toothpaste.

3 What is the job of a humectant in toothpaste?

4 How should a mouth wash be used?

5 Name two herbal ingredients used in oral care products.

6 Why should mouth wash not replace brushing?

24. Application-Based Questions

1 A customer says he uses mouth wash instead of brushing because it is faster. Explain why this is wrong and what correct daily oral care looks like.

2 A mother asks for a toothpaste for her child who complains of sharp pain with cold water. How would you explain sensitivity simply and what general guidance would you give?

3 A customer wants a herbal toothpaste and asks what neem and clove do in it. How would you answer without making disease-cure claims?

25. References

- Baki & Alexander
- Barel/Paye/Maibach
- Benson & Watkinson
- Chisvert & Salvador
- Dweck & Santos
- Matsumoto
- Rosen

CHAPTER 10: Cosmetics for Nails, Eyes, Body Odor, Lips, Cleansing; Intimate Hygiene Products

1. Learning Objectives

After studying this chapter, the student will be able to:

- Describe types of cosmetics for nails: nail enamels and nail enamel removers.
- Describe eye cosmetics — kajal, mascara, eyeliner — with eye-safety cautions.
- Explain the concept of deodorants versus antiperspirants in simple terms.
- Describe lip care products: lip balm and lipstick.
- Classify cleansing cosmetics: cleansers, face wash, scrubs, and masks.
- Describe intimate hygiene products for males and females in general terms, including the pH-balance concept.

2. Definitions

- **Nail enamel (nail polish):** A colored lacquer applied to nails to decorate and protect them.
- **Nail enamel remover:** A liquid used to dissolve and wipe off nail enamel.
- **Kajal:** A traditional eye cosmetic applied to the rims of the eyes to darken and define them.
- **Mascara:** A cosmetic applied to the eyelashes to darken, lengthen, or thicken their look.
- **Eyeliner:** A cosmetic applied along the eyelid edge to define the eye shape.
- **Deodorant:** A product aimed at reducing body odor, mainly by masking smell or limiting odor-causing bacteria.
- **Antiperspirant:** A product aimed at reducing sweat itself, which in turn reduces odor.
- **Lip balm:** A waxy product applied to lips to keep them soft and prevent dryness.

- **Lipstick:** A colored cosmetic for decorating the lips.
- **Cleansing cosmetic:** A product whose main job is to remove dirt, oil, sweat, and makeup from the skin.
- **Intimate hygiene product:** A gentle wash or wipe product made for the external intimate areas, aimed at daily freshness and comfort.

3. Terminology

Term	Meaning in simple words
Enamel	The hard colored coating painted on nails.
Lacquer	The film-forming liquid base of nail enamel.
Smudging	When eye makeup spreads or blurs beyond where it was applied.
Waterproof (mascara)	A mascara type that resists water and smudging; needs proper removal.
Body odor	Unpleasant smell from the body, mainly when sweat meets skin bacteria.
Exfoliation	Removing dead surface skin cells to reveal fresher-looking skin.
Scrub	A cleansing product with fine particles that gently exfoliate.
Mask	A thick product applied to the face, left for some minutes, then removed.
pH balance	Keeping a product's acidity level gentle and suitable for the area it is used on.
Patch test	Trying a product on a small skin area first to check for irritation.

4. Simple Explanation

Cosmetics for nails.

- **Nail enamels:** These are colored liquids that dry into a hard shiny film on the nail. Their general makeup idea: a film-forming base (which makes the hard coating), color pigments, a solvent (which keeps it liquid in the bottle and evaporates after application), and additives for shine and adhesion. They decorate the nail and give it a protective coat.
- **Nail enamel removers:** These are liquids that dissolve the dried enamel film so it can be wiped off. They work by softening and lifting the film from the nail surface. Because removers can dry the nail and surrounding skin, moisturizing the nails after use is common advice.

Cosmetics for eyes.

- **Kajal:** A traditional Indian eye cosmetic, usually black, applied to the inner rims or edges of the eyes to darken and define them. It has deep cultural roots in India.
- **Mascara:** Applied with a small brush to the eyelashes; it coats each lash so lashes look darker, longer, or thicker.

- **Eyeliner:** Applied as a line along the upper or lower eyelid edge to define the shape of the eye; available as pencil, liquid, or gel forms (general concept).
- **Eye-safety caution:** The eye area is delicate. Eye cosmetics should never be shared between people, should be removed before sleeping, and should not be applied with dirty applicators. If redness, itching, or irritation occurs, stop use. Old or dried-out eye products should be discarded.

Cosmetics for body odor — deodorants vs antiperspirants.

- Sweat itself has little smell; body odor mainly forms when skin bacteria act on sweat.
- **Deodorant:** aimed at the *smell* — it masks odor with fragrance and/or limits odor-causing bacteria. It does not stop sweating.
- **Antiperspirant:** aimed at the *sweat* — it reduces the amount of sweat reaching the skin surface, so less odor forms.
- Simple rule: deodorant fights odor; antiperspirant fights sweat (and thereby odor). Many products combine both ideas.
- They come as sprays, roll-ons, and sticks (general product forms).

Lip care.

- **Lip balm:** A waxy, moisturizing product applied to lips to keep them soft and protect them from dryness and cracking, especially in dry or cold weather. Its general makeup idea: waxes (for structure), oils/butters (for softness), and optional flavor.
- **Lipstick:** A colored stick cosmetic used to decorate the lips. Its general makeup idea: waxes (give the stick its shape), oils (give smooth application), and color pigments. Some lipsticks include moisturizing ingredients aimed at lip comfort.

Cleansing cosmetics.

- **Cleansers:** The general family of products that remove dirt, excess oil, sweat, and makeup from skin. This includes cleansing milks, creams, and lotions (general types).
- **Face wash:** A foaming or gel product used with water to clean the face; usually milder than body soap (general concept).
- **Scrubs:** Cleansers containing fine particles that gently rub away dead surface skin cells (exfoliation). Used occasionally, not daily, and gently — harsh scrubbing can irritate skin.
- **Masks:** Thick creams, clays, or gels applied to the face, left for several minutes, then washed or peeled off. Different masks are aimed at different purposes: cleansing-type masks for oily-feeling skin, hydrating-type masks for dry-feeling skin (general concept, no medical claims).

Intimate hygiene products for males and females.

- These are gentle wash products (and sometimes wipes) made for the external intimate areas, aimed at daily freshness, cleanliness, and comfort.
- They are made milder than regular soap, because the intimate area is sensitive.

- **pH-balance concept (generic):** The intimate area has its own natural balance; intimate washes are therefore made pH-balanced and gentle so they clean without disturbing comfort. (No specific pH numbers are stated here.)
- Products exist for both males and females; the shared idea is the same: gentle external cleansing, freshness, and comfort. They are hygiene products, not medicines, and are for external use only.

5. Classifications

Cosmetics by body area (this chapter):

1 Nails — enamels, enamel removers

2 Eyes — kajal, mascara, eyeliner

3 Body odor — deodorants, antiperspirants

4 Lips — lip balm, lipstick

5 Cleansing — cleansers, face wash, scrubs, masks

6 Intimate hygiene — intimate washes, wipes (for males and females)

Cleansing cosmetics (by type):

- Cleansers (milk/cream/lotion) | Face wash (foam/gel) | Scrubs (exfoliating) | Masks (leave-on-then-remove)

Body odor products (by main action):

- Deodorant (targets odor) | Antiperspirant (targets sweat)

Eye cosmetics (by where applied):

- Kajal (eye rims) | Eyeliner (eyelid edge) | Mascara (eyelashes)

6. Mechanisms / Processes

How nail enamel works (simple steps):

1 Liquid enamel is brushed onto the nail.

2 The solvent evaporates into the air.

3 The film-former hardens into a colored protective coat.

4 Remover later dissolves this film so it wipes off.

How deodorant vs antiperspirant work (simple concept):

- Deodorant: fragrance masks smell + ingredients limit odor-causing bacteria → less odor, same sweat.
- Antiperspirant: temporarily reduces sweat reaching the skin surface → less moisture for bacteria → less odor.

How a scrub exfoliates (simple steps):

1 Fine particles in the scrub are massaged gently over damp skin.

2 The particles loosen dead surface skin cells.

3 Rinsing washes away the loosened cells.

4 Skin looks fresher; used occasionally and gently to avoid irritation.

How a face mask works (simple concept):

1 Thick product is spread on the face and left for several minutes.

2 During this time it sits on the skin surface (cleansing-type masks may absorb excess surface oil — general concept).

3 It is then washed or peeled off, and the face is rinsed.

Correct gentle intimate wash use (general steps):

1 Use a small amount of the gentle wash with water.

2 Clean only the external area gently.

3 Rinse well and pat dry.

4 External use only; stop if irritation occurs.

7. Textual Diagrams / Flowcharts

Diagram: deodorant vs antiperspirant — the simple split

```
SWEAT reaches skin --> bacteria act --> ODOR forms
        |                                    |
  ANTIPERSPIRANT                       DEODORANT
  reduces the sweat                    fights the smell
```

Takeaway: one targets the cause (sweat), the other targets the result (odor).

Flowchart: cleansing routine order

```
1. Cleanser / face wash (daily cleaning)
        |
2. Scrub (occasionally, gently — exfoliation)
        |
3. Mask (occasionally — sits, then removed)
```

Takeaway: daily cleaning is the base; scrubs and masks are occasional extras.

Flowchart: safe eye-cosmetic habits

```
Clean applicator --> apply --> do NOT share
--> remove before sleep --> discard old/dried products
--> stop if irritation
```

Takeaway: hygiene and removal matter as much as application.

Diagram: lipstick general makeup idea

```
WAXES (shape of the stick) + OILS (smooth glide) + PIGMENTS (color)
```

Takeaway: three ingredient families build every lipstick.

8. Infographic Concept Box

INFOGRAPHIC CONCEPT: A visual titled "Your Daily Clean — Know Your Cleansers." Four illustrated panels in a row: (1) Cleanser — a milk bottle icon, "daily dirt + makeup remover"; (2) Face wash — a foam pump icon, "wash-with-water daily cleaner"; (3) Scrub — a jar with tiny dots icon, "occasional gentle exfoliator — go easy!"; (4) Mask — a face-mask icon, "sit-on, then rinse — occasional treat." A footer strip reads "Daily: cleanser/face wash • Sometimes: scrub, mask." Soft pastel colors, simple icons, student-friendly.

9. Tables

Table 1: Illustrative general composition idea — nail enamel (typical, not an official formula)

Ingredient type	Purpose
Film former	Makes the hard colored coating on drying
Solvent	Keeps it liquid in the bottle; evaporates after application
Color pigments	Give the shade
Additives	Shine, adhesion, smooth flow

This table shows a typical/illustrative idea of composition, not an official or pharmacopoeial formula.

Table 2: Illustrative general composition idea — lipstick (typical, not an official formula)

Ingredient type	Purpose
Waxes	Give the stick its solid shape
Oils	Smooth application and comfortable feel
Color pigments	Give the shade
Optional moisturizing ingredients	Aimed at lip comfort

This table shows a typical/illustrative idea of composition, not an official or pharmacopoeial formula.

Table 3: Comparison — deodorant vs antiperspirant

Feature	Deodorant	Antiperspirant
Main target	Body odor (smell)	Sweat itself
How it helps	Masks odor / limits odor-causing bacteria	Reduces sweat reaching skin surface
Stops sweating?	No	Aims to reduce it
Common forms	Spray, roll-on, stick	Spray, roll-on, stick

Table 4: Cleansing cosmetics — types and use frequency

Type	What it does	How often (general)
Cleanser (milk/cream/lotion)	Removes dirt, oil, makeup	Daily
Face wash (foam/gel)	Cleans face with water	Daily
Scrub	Gently exfoliates dead surface cells	Occasionally, gently
Mask	Sits on skin, then removed; aimed at cleansing or hydration feel	Occasionally

Table 5: Evaluation parameters — general idea for these cosmetics

Parameter	What is checked
Appearance	Color, uniformity, no separation
Texture/feel	Smooth application, comfortable on skin
pH (where relevant)	Gentle, suitable range (generic check)
Stability	No change in look or smell on storage
Irritation check	No redness or burning on test skin
Performance	Does its basic job (cleans, colors evenly, freshens)

10. Examples

- Nail example: a red nail enamel applied for a function; removed later with enamel remover, followed by moisturizing the nails.
- Eye example: kajal applied to the eye rims for a traditional look; mascara brushed onto lashes for a party.
- Body odor example: a deodorant spray used before college; an antiperspirant roll-on used on a hot day.
- Lip example: lip balm used in winter to prevent chapped lips; lipstick used to add color for an occasion.
- Cleansing example: face wash used every morning and night; a clay-type mask used once a week.
- Intimate hygiene example: a gentle pH-balanced intimate wash used for daily external freshness.

11. Analogies

- **Deodorant vs antiperspirant** is like **air freshener vs closing a tap**: the freshener hides the smell; closing the tap stops the flow that causes it.
- **Scrub on skin** is like **a soft eraser on pencil marks**: gentle rubbing lifts the top layer; pressing too hard tears the paper.
- **Nail enamel** is like **paint on a wall**: liquid goes on, the carrier evaporates, and a hard colored coat remains.
- **Lip balm in winter** is like **a blanket for lips**: a protective cover against dry, harsh air.

12. Pharmacy Relevance

Customers ask pharmacists about these products constantly: which makeup remover suits sensitive eyes, whether a scrub can be used daily, how an antiperspirant differs from a deodorant, and which intimate wash is gentle. The pharmacist explains correct use, warns about eye hygiene and over-scrubbing, and reminds customers that cosmetics decorate, clean, and freshen — they do not treat medical conditions. Knowing the general composition ideas also helps answer "what is inside this product" questions simply.

13. India Context

Kajal is one of India's oldest and most widely used eye cosmetics, with deep cultural roots across regions. The Indian market also has a strong tradition of herbal and ayurvedic-positioned cleansing and lip care products. Deodorants and intimate washes are growing categories in Indian pharmacies, and customers often ask pharmacists — as trusted advisors — for guidance on gentle, suitable options for Indian skin and climate.

14. Key Points

- Nails: enamels (colored film: film former + solvent + pigments) and removers (dissolve the film; moisturize after).
- Eyes: kajal (traditional, eye rims), mascara (lashes), eyeliner (lid edge) — never share, remove before sleep, stop if irritation.
- Body odor: deodorant targets smell; antiperspirant targets sweat.
- Lips: lip balm (waxy protector against dryness), lipstick (waxes + oils + pigments for color).
- Cleansing: cleansers and face wash daily; scrubs and masks occasionally and gently.
- Intimate hygiene: gentle washes/wipes for external use, for males and females; pH-balanced and mild; hygiene products, not medicines.

15. Common Confusions

- **Deodorant vs antiperspirant:** deodorant does not stop sweat; antiperspirant does not just add fragrance.
- **Scrub vs face wash:** a scrub exfoliates with particles and is occasional; a face wash is for daily cleaning.
- **Kajal vs eyeliner:** kajal traditionally goes on the eye rims; eyeliner lines the eyelid edge — related but different placement.
- **Lip balm vs lipstick:** balm protects and softens; lipstick mainly decorates with color.
- **Intimate wash vs regular soap:** intimate washes are made gentler and pH-balanced for a sensitive area; regular soap is not designed for it.

16. Common Mistakes

- Sharing kajal or mascara between people — spreads eye infections.
- Sleeping with eye makeup on.
- Scrubbing the face daily or harshly, causing irritation.

- Using an intimate wash internally instead of externally only.
- Expecting cosmetics (lipstick, deodorant, masks) to treat medical conditions.

17. Mnemonics

- **"K-M-E"** for eye cosmetics: **K**ajal, **M**ascara, **E**yeliner — "Keep Makeup Elegant."
- **"D-O, A-S"**: **D**eodorant = **O**dor, **A**ntiperspirant = **S**weat — "Deo for Odor, Anti for Sweat."
- **"C-F-S-M"** for cleansing types: **C**leanser, **F**ace wash, **S**crub, **M**ask — "Clean Face Softly, Mask sometimes."
- **"N-E"** for nails: **E**namel on, **R**emover off — "Enamel, then Erase."

18. Exam Summary

This chapter covered cosmetics for nails (enamels — film former, solvent, pigments; and removers), eyes (kajal, mascara, eyeliner — with eye-safety cautions: no sharing, remove before sleep), body odor (deodorant targets odor; antiperspirant targets sweat), lips (lip balm for protection against dryness; lipstick — waxes, oils, pigments — for color), and cleansing cosmetics (cleansers and face wash for daily use; scrubs and masks occasionally and gently). It also covered intimate hygiene products for males and females — gentle washes/wipes for external use, made pH-balanced and mild, aimed at daily freshness and comfort; they are hygiene products, not medicines.

19. One-Minute Revision

Nails: enamel paints on (film former + solvent + pigment), remover takes off. Eyes: kajal (rims), eyeliner (lid edge), mascara (lashes) — never share, remove at night. Deo = odor, Anti = sweat. Lips: balm protects, lipstick colors. Cleanse: cleanser/face wash daily; scrub/mask occasionally, gently. Intimate: gentle pH-balanced external wash, males and females, hygiene not medicine.

20. Short Questions

1 Give the illustrative general composition idea of a nail enamel.

2 How does a nail enamel remover work?

3 Name three eye cosmetics and state where each is applied.

4 List three eye-safety cautions for eye cosmetics.

5 Differentiate a deodorant from an antiperspirant.

6 Give the illustrative general composition idea of a lipstick.

7 Classify cleansing cosmetics with one line on each type.

8 What is the pH-balance concept in intimate hygiene products?

21. Long Questions

1 Describe the types of cosmetics for nails: nail enamels and nail enamel removers, including their general composition idea.

2 Write a note on eye cosmetics (kajal, mascara, eyeliner) with eye-safety cautions.

3 Explain the concept of deodorants versus antiperspirants with examples of product forms.

4 Describe lip care products: lip balm and lipstick.

5 Classify cleansing cosmetics and describe each type with its frequency of use.

6 Write a short note on intimate hygiene products for males and females.

22. MCQs

1 The ingredient in nail enamel that forms the hard coating after drying is the:

a) Solvent b) Film former c) Pigment d) Perfume

1 Nail enamel remover works by:

a) Scraping the nail b) Dissolving the dried enamel film c) Bleaching the nail d) Heating the nail

1 Kajal is traditionally applied to the:

a) Eyelashes b) Rims of the eyes c) Eyebrows d) Cheeks

1 Mascara is applied to the:

a) Lips b) Eyelashes c) Nails d) Eyebrows

1 An important eye-safety habit is:

a) Sharing mascara with friends b) Removing eye makeup before sleeping c) Using dried-out kajal d) Applying with unwashed hands

1 A deodorant mainly targets:

a) Sweat production b) Body odor (smell) c) Skin color d) Hair growth

1 An antiperspirant mainly aims to:

a) Add fragrance only b) Reduce sweat reaching the skin surface c) Color the skin d) Remove hair

1 Lip balm is mainly used to:

a) Color the lips bright red b) Keep lips soft and protect from dryness c) Whiten teeth d) Remove lipstick

1 The three main ingredient families in a lipstick are:

a) Waxes, oils, pigments b) Acids, bases, salts c) Water, soap, foam d) Alcohol, acid, alkali

1 Which cleansing product is used only occasionally and gently?

a) Face wash b) Scrub c) Cleansing milk d) Water

1 A face mask is:

a) Applied, left for some minutes, then removed b) Eaten as a supplement c) Used instead of brushing d) Applied permanently

1 Intimate hygiene washes are:

a) For internal use as medicines b) Gentle, pH-balanced products for external use c) The same as regular strong soap d) Only for females

Answer key: 1-b, 2-b, 3-b, 4-b, 5-b, 6-b, 7-b, 8-b, 9-a, 10-b, 11-a, 12-b

23. Viva Questions

1 What are the main ingredient types in a nail enamel?

2 Where is kajal applied?

3 What is the difference between a deodorant and an antiperspirant?

4 Why should eye cosmetics not be shared?

5 How often should a scrub be used?

6 What does "pH-balanced" mean for an intimate wash?

24. Application-Based Questions

1 A customer uses a face scrub every day and now has red, irritated skin. Explain what went wrong and advise correct scrub use.

2 Two sisters share one kajal pencil. As a pharmacist, what hygiene advice would you give and why?

3 A customer cannot decide between a deodorant spray and an antiperspirant roll-on for a hot, sweaty day. How would you explain the difference to help her choose?

25. References

- Baki & Alexander
- Barel/Paye/Maibach
- Benson & Watkinson
- Chisvert & Salvador
- Dweck & Santos
- Matsumoto
- Rosen