

**BP 809ET**

**2025**

**B.Pharm. 8<sup>th</sup> Semester (Regular) End-Term Examination**

**COSMETIC SCIENCE**

Full Marks – 75

Time – Three hours

The figures in the margin indicate full marks  
for the questions.

1. Multiple choice questions (MCQ) (Answer ALL questions) : 1 × 20
- (i) Following country has a specific category of products that are in between cosmetics and Pharmaceuticals called quasi drugs.
- (a) India (b) Japan  
(c) Russia (d) Turkey
- (ii) Which of the following is an example of an emollient used in cosmetics?
- (a) Water (b) Alcohol  
(c) Glycerine (d) Propylene glycol
- (iii) The ideal pH for a skin cream is:
- (a) 2-3 (b) 4-6  
(c) 7-8 (d) 9-10
- (iv) Which of the following tests is mandatory for eye cosmetics?
- (a) Irritation test  
(b) SPF test  
(c) Color stability test  
(d) Texture evaluation
- (v) The BIS (Bureau of Indian Standards) provides guidelines for
- (a) Cosmetic formulations  
(b) Toxicology testing  
(c) Pricing regulations  
(d) Clinical trials

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[Turn over



- (vi) What is the primary function of preservatives in cosmetic formulations?
- (a) To improve texture
  - (b) To protect against microbial contamination
  - (c) To enhance fragrance
  - (d) To increase color stability
- (vii) Sufactants used in shampoos are mainly
- (a) Cationic                      (b) Anionic
  - (c) Non-ionic                      (d) All of the above
- (viii) Which of the following agents is most commonly used as a hair conditioner?
- (a) Sodium lauryl sulfate
  - (b) Dimethicone
  - (c) Glycerin
  - (d) Tocopherol
- (ix) A hydro-alcoholic solution in which flavours, essential oils and other agents are combined to provide long term breath deodorization is
- (a) Deodorant                      (b) Toothpaste
  - (c) Mouthwash                      (d) None of the above
- (x) Vanishing cream is a ————— type emulsion.
- (a) o/w                                      (b) w/o
  - (c) o/w/o                                      (d) None of the above
- (xi) Which of the following is abrasive used in toothpaste?
- (a) Sodium lauryl sulfate
  - (b) Calcium carbonate
  - (c) Propylene glycol
  - (d) Methylparaben
- (xii) Emollients ————— water content of stratum corneum.
- (a) Increases                      (b) Decreases
  - (c) Stop                                      (d) None of the above
- (xiii) Antiperspirants contain which compound to reduce sweating?
- (a) Aluminum salts                      (b) Glycerin
  - (c) Talc                                      (d) Zinc oxide

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- (xiv) \_\_\_\_\_ is a commonly used sunscreen agent?
- (a) Titanium dioxide
  - (b) Glycerin
  - (c) Parabens
  - (d) Butylated hydroxy Toluene (BHT)
- (xv) Measurement of the transepidermal water loss is expressed in
- (a) Gram per sq. meter
  - (b) Milligram
  - (c) Milligram per meter
  - (d) Gram per centimeter
- (xvi) A rheological test for cosmetics helps determine
- (a) Viscosity and flow behavior
  - (b) Fragrance intensity
  - (c) pH stability
  - (d) Sun protection factor
- (xvii) Which of the following is commonly used as an antioxidant in cosmetics?
- (a) Sodium chloride
  - (b) Ascorbic acid
  - (c) Citric acid
  - (d) Hydroquinone
- (xviii) Which type of surfactant is commonly used in shampoo formulations?
- (a) Anionic surfactant
  - (b) Cationic surfactant
  - (c) Non-ionic surfactant
  - (d) Amphoteric surfactant
- (xix) Which ingredient is used as a thickening agent in face creams?
- (a) Xantham gum
  - (b) Glycerine
  - (c) Isopropanol
  - (d) Ethanol
- (xx) Which of the following is not a function of cosmetics?
- (a) Beautification
  - (b) Cleansing
  - (c) Treating diseases
  - (d) Enhancing appearance

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2. Short Answers (Answer seven)

7 × 5

- (a) Explain the role of surfactants in shampoos. Discuss different types with examples.
- (b) Define cosmetics as per Indian regulations. Enlist the various ingredients used in sunscreen formulations.
- (c) Write in details about the principle and formulation of Para-phenylene diamine based hair dyes.
- (d) What are preservatives in cosmetics? Give examples and explain their role in formulations.
- (e) Write the principle involved in TEWL measurement. Write applications of Corneometer.
- (f) What is SPF sunscreen? Enlist the causes of hair fall and dandruff.
- (g) Explain the symptoms and treatment of dry skin.
- (h) Describe the BIS Specification and analytical methods for Skin cream.
- (i) List out various excipients used in cosmetics and cosmeceuticals. Write in brief about rheology modifiers.
- (j) Explain the formulation considerations & mechanism of antiperspirant and deodorants.
- (k) Explain the physiological functions of skin and hair and their relevance to cosmetic formulations.

3. Long Answers (Answer any TWO) :

2 × 10

- (a) Write a detailed note on principles of formulation and building blocks of oral care products. Mention the role of neem and clove in oral care. 6 + 4
- (b) Define and classify surfactants with example. Write applications of surfactant. Write in details about prickly heat. 3 + 4 + 3
- (c) Write short note on: (Any TWO) : 5 + 5
  - (i) Hair growth cycle
  - (ii) Antidandruff shampoo
  - (iii) Mouthwash