PHB Education

Government Exam and D. Pharm Exit Exam Preparation

Questions Bank

Subject: Pharmaceutics

Chapter 3 : Pharmaceutical Aids & Preservatives

SECTION I: FLAVOURING AGENTS (1–25)

1. Flavouring agents are used to:
   a) Increase potency
   b) Improve taste and acceptability
   c) Change colour
   d) Preserve the product
   Answer: b) Improve taste and acceptability
2. Flavouring agents are also known as:
   a) Preservatives
   b) Organoleptic agents
   c) Sweeteners
   d) Antioxidants
   Answer: b) Organoleptic agents
3. Which of the following is a natural flavouring agent?
   a) Vanillin
   b) Saccharin
   c) Sodium benzoate
   d) Methylparaben
   Answer: a) Vanillin
4. Artificial flavouring agents are:
   a) Derived from natural sources
   b) Chemically synthesized
   c) Enzymatically formed
   d) None
   Answer: b) Chemically synthesized
5. The main function of flavouring agents is to:
   a) Mask unpleasant odour and taste
   b) Change colour
   c) Increase viscosity
   d) Stabilize formulation
   Answer: a) Mask unpleasant odour and taste

6. Peppermint oil provides a _____ flavour.
   a) Bitter
   b) Cooling
   c) Acidic
   d) Salty
   Answer: b) Cooling
7. Vanilla flavour is obtained from:
   a) Vanilla planifolia
   b) Mentha piperita
   c) Citrus limon
   d) Cinnamomum zeylanicum
   Answer: a) Vanilla planifolia
8. Lemon oil is obtained from:
   a) Orange peel
   b) Lemon peel
   c) Peppermint
   d) Cinnamon bark
   Answer: b) Lemon peel
9. Artificial vanilla flavour is:
   a) Vanillin
   b) Menthol
   c) Thymol
   d) Cinnamaldehyde
   Answer: a) Vanillin
10. Flavouring agents can be classified as:
    a) Natural and synthetic
    b) Artificial and mineral
    c) Metallic and organic
    d) None
    Answer: a) Natural and synthetic
11. The main mechanism of flavouring agents is:
    a) Stimulation of olfactory and taste receptors
    b) Blocking enzymes
    c) Altering pH
    d) None
    Answer: a) Stimulation of olfactory and taste receptors

12. Menthol acts as:
    a) Cooling agent
    b) Bitter agent
    c) Preservative
    d) Colourant
    Answer: a) Cooling agent
13. Cinnamon oil imparts a _____ taste.
    a) Sweet
    b) Spicy
    c) Bitter
    d) Sour
    Answer: b) Spicy
14. Flavouring agents for paediatric formulations are mainly:
    a) Fruity
    b) Bitter
    c) Metallic
    d) Salty
    Answer: a) Fruity
15. Clove oil gives a _____ flavour.
    a) Sweet
    b) Pungent
    c) Acidic
    d) Metallic
    Answer: b) Pungent
16. The main constituent of peppermint oil is:
    a) Menthol
    b) Thymol
    c) Vanillin
    d) Cinnamaldehyde
    Answer: a) Menthol
17. Flavour stability depends on:
    a) Temperature and pH
    b) Container size
    c) Colour
    d) Shape
    Answer: a) Temperature and pH

18. Artificial flavours are preferred because:
    a) They are cheaper and more stable
    b) They are less soluble
    c) They are less potent
    d) None
    Answer: a) They are cheaper and more stable
19. Example of a citrus flavouring agent:
    a) Lemon oil
    b) Rose oil
    c) Lavender oil
    d) Eucalyptus oil
    Answer: a) Lemon oil
20. Mechanism of flavour perception involves:
    a) Olfactory and gustatory receptors
    b) Visual receptors
    c) Hearing receptors
    d) All
    Answer: a) Olfactory and gustatory receptors
21. Flavouring agents should be:
    a) Safe and non-reactive
    b) Toxic
    c) Acidic
    d) Metallic
    Answer: a) Safe and non-reactive
22. Example of synthetic flavour:
    a) Vanillin
    b) Clove oil
    c) Orange oil
    d) Lemon oil
    Answer: a) Vanillin
23. Orange oil is obtained from:
    a) Peel of Citrus aurantium
    b) Lemon fruit
    c) Peppermint leaves
    d) Cinnamon bark
    Answer: a) Peel of Citrus aurantium

24. The purpose of adding flavouring agents in mouthwash is to:
    a) Mask unpleasant odour
    b) Increase pH
    c) Prevent oxidation
    d) Colour the solution
    Answer: a) Mask unpleasant odour
25. Flavouring agents improve:
    a) Palatability
    b) Toxicity
    c) pH
    d) Solubility only
    Answer: a) Palatability

SECTION II: COLOURING AGENTS (26–50)

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26. Colouring agents are used to:
    a) Increase stability
    b) Improve appearance
    c) Alter taste
    d) Enhance potency
    Answer: b) Improve appearance
27. Colouring agents are also known as:
    a) Pigments
    b) Sweeteners
    c) Flavours
    d) Preservatives
    Answer: a) Pigments
28. The ideal colourant should be:
    a) Non-toxic and stable
    b) Reactive
    c) Soluble in oil only
    d) Opaque
    Answer: a) Non-toxic and stable
29. Tartrazine gives _____ colour.
    a) Yellow
    b) Blue

c) Red

d) Green

Answer: a) Yellow

30. Indigo carmine provides:

a) Blue colour

b) Red colour

c) Orange colour

d) Green colour

Answer: a) Blue colour

31. Erythrosine gives _____ colour.

a) Red

b) Blue

c) Green

d) Orange

Answer: a) Red

32. Colouring agents can be classified as:

a) Natural and synthetic

b) Organic and metallic

c) Acidic and basic

d) None

Answer: a) Natural and synthetic

33. Example of natural colourant:

a) Caramel

b) Tartrazine

c) Indigo carmine

d) Brilliant blue

Answer: a) Caramel

34. Colouring agents should be approved by:

a) FDA or FSSAI

b) WHO

c) WHO only

d) None

Answer: a) FDA or FSSAI

35. Mechanism of action of colourants:

a) Stimulate visual perception

b) Stimulate taste buds

c) Act as preservatives

d) Neutralize pH

Answer: a) Stimulate visual perception

36. Chlorophyll gives _____ colour.

a) Green

b) Yellow

c) Blue

d) Red

Answer: a) Green

37. Sunset yellow gives:

a) Orange shade

b) Red shade

c) Blue shade

d) Green shade

Answer: a) Orange shade

38. The use of colourants helps in:

a) Identification of dosage form

b) Reducing potency

c) Increasing pH

d) Sterilization

Answer: a) Identification of dosage form

39. Natural colourants are obtained from:

a) Plants and animals

b) Metals

c) Plastics

d) Glass

Answer: a) Plants and animals

40. Example of a colouring agent used in syrups:

a) Caramel

b) Menthol

c) Sodium benzoate

d) Saccharin

Answer: a) Caramel

SECTION III: SWEETENING AGENTS (51–75)

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51. Sweetening agents are used to:
    a) Mask bitter taste
    b) Colour product
    c) Preserve formulation
    d) None
    Answer: a) Mask bitter taste
52. Natural sweeteners include:
    a) Sucrose
    b) Saccharin
    c) Aspartame
    d) Sucralose
    Answer: a) Sucrose
53. Artificial sweetener example:
    a) Saccharin sodium
    b) Glucose
    c) Fructose
    d) Sucrose
    Answer: a) Saccharin sodium
54. Aspartame is a derivative of:
    a) Amino acids
    b) Alcohol
    c) Acid
    d) Glucose
    Answer: a) Amino acids
55. Sucrose is used because:
    a) It provides sweetness and viscosity
    b) It is bitter
    c) It is unstable
    d) It is non-caloric
    Answer: a) It provides sweetness and viscosity
56. Artificial sweeteners are preferred for:
    a) Diabetic patients
    b) Children only
    c) Elderly only
    d) None
    Answer: a) Diabetic patients

57. Sucralose is _____ times sweeter than sucrose.
    a) 600
    b) 10
    c) 50
    d) 100
    Answer: a) 600
58. Mechanism of sweeteners:
    a) Stimulate sweet taste receptors
    b) Change colour
    c) Preserve product
    d) Alter pH
    Answer: a) Stimulate sweet taste receptors
59. Cyclamate is a _____ sweetener.
    a) Artificial
    b) Natural
    c) Mineral
    d) Plant
    Answer: a) Artificial
60. Sorbitol is a _____ sweetener.
    a) Sugar alcohol
    b) Artificial
    c) Mineral
    d) None
    Answer: a) Sugar alcohol

SECTION IV: PRESERVATIVES (76–100)

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76. Preservatives are used to:
    a) Prevent microbial growth
    b) Enhance colour
    c) Add sweetness
    d) Change pH only
    Answer: a) Prevent microbial growth
77. Sodium benzoate is effective against:
    a) Moulds and bacteria
    b) Viruses

c) Parasites

d) Worms

Answer: a) Moulds and bacteria

78. Preservatives prevent:

a) Spoilage

b) Oxidation

c) Colour fading

d) All of these

Answer: a) Spoilage

79. Methylparaben and propylparaben are:

a) Esters of p-hydroxybenzoic acid

b) Amino acids

c) Alcohols

d) Sugars

Answer: a) Esters of p-hydroxybenzoic acid

80. Benzoic acid is suitable for:

a) Acidic preparations

b) Alkaline preparations

c) Both

d) None

Answer: a) Acidic preparations

81. Parabens are used mainly in:

a) Cosmetics and oral liquids

b) Capsules only

c) Tablets

d) Powders

Answer: a) Cosmetics and oral liquids

82. Sorbic acid inhibits:

a) Mould and yeast

b) Bacteria only

c) None

d) All microorganisms

Answer: a) Mould and yeast

83. Mechanism of preservative action:

a) Denaturation of microbial enzymes

b) Colour change

c) Taste alteration

d) pH modification

Answer: a) Denaturation of microbial enzymes

84. Example of preservative used in injections:

a) Benzyl alcohol

b) Saccharin

c) Tartrazine

d) Vanillin

Answer: a) Benzyl alcohol

85. Sodium metabisulphite acts as:

a) Antioxidant preservative

b) Colourant

c) Flavour

d) Sweetener

Answer: a) Antioxidant preservative

86. Preservatives are not suitable for:

a) Neonatal formulations

b) Adult syrups

c) Topical creams

d) Mouthwash

Answer: a) Neonatal formulations

87. Benzalkonium chloride is a:

a) Quaternary ammonium compound

b) Phenol

c) Alcohol

d) Aldehyde

Answer: a) Quaternary ammonium compound

88. Preservatives are effective at:

a) Low concentration

b) High concentration

c) 50% strength

d) None

Answer: a) Low concentration

89. Mechanism of parabens:

a) Inhibit enzyme systems of microbes

b) Change colour

c) Add sweetness

d) Alter taste

Answer: a) Inhibit enzyme systems of microbes

90. Benzalkonium chloride is used in:

a) Eye drops

b) Tablets

c) Capsules

d) Powders

Answer: a) Eye drops

91. Sodium benzoate works best at:

a) pH below 5

b) pH above 8

c) Neutral pH

d) Any pH

Answer: a) pH below 5

92. Preservatives are essential in:

a) Multi-dose containers

b) Single-dose containers

c) Powders

d) Tablets

Answer: a) Multi-dose containers

93. Preservatives must be:

a) Non-toxic and non-irritant

b) Reactive

c) Bitter

d) Volatile

Answer: a) Non-toxic and non-irritant

94. Ethanol acts as a preservative at concentration above:

a) 15% v/v

b) 5%

c) 50%

d) 1%

Answer: a) 15% v/v

95. Formaldehyde was used as:

a) Disinfectant

b) Sweetener

c) Colourant

d) Antioxidant

Answer: a) Disinfectant

96. Sorbic acid is used in:

a) Syrups and ointments

b) Powders

c) Tablets

d) Capsules

Answer: a) Syrups and ointments

97. Preservative efficacy depends on:

a) pH and concentration

b) Colour

c) Odour

d) Shape of container

Answer: a) pH and concentration

98. Benzyl alcohol concentration for parenteral preservative:

a) 0.9%

b) 10%

c) 50%

d) 0.1%

Answer: a) 0.9%

99. Example of preservative for topical use:

a) Methylparaben

b) Sucrose

c) Tartrazine

d) Vanillin

Answer: a) Methylparaben

100. Preservatives help to:

a) Extend shelf life of product

b) Reduce sweetness

c) Add flavour

d) Change viscosity

Answer: a) Extend shelf life of product

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