

# PHB Education

Government Exam and D. Pharm Exit Exam Preparation  
Questions Bank

**Subject: Pharmacognosy**

**Chapter -4 : Distribution, Identification tests, pharmaceutical applications, isolation, the therapeutic activity of Crude drugs**

**Topic: Pharmacognosy – Tannins**

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☐ **1–10. Introduction and Distribution of Tannins**

1. Tannins are \_\_\_\_\_ metabolites of plants.

- A) Primary
- B) Secondary
- C) Essential
- D) Structural

**Answer:** B) Secondary

2. Tannins are chemically \_\_\_\_\_ compounds.

- A) Polyphenolic
- B) Polysaccharide
- C) Alkaloidal
- D) Terpenoidal

**Answer:** A) Polyphenolic

3. Tannins are mainly found in the \_\_\_\_\_ kingdom.

- A) Animal
- B) Plant
- C) Fungal
- D) Mineral

**Answer:** B) Plant

4. The characteristic property of tannins is their ability to precipitate \_\_\_\_\_.

- A) Proteins
- B) Carbohydrates
- C) Fats
- D) Alkaloids

**Answer:** A) Proteins

5. Tannins are widely distributed in plant parts such as bark, leaves, fruit, and \_\_\_\_\_.

- A) Roots
- B) Flowers
- C) Seeds
- D) All of the above

**Answer:** D) All of the above

6. Tannins are abundantly found in which plant?

- A) *Acacia catechu*
- B) *Digitalis purpurea*
- C) *Atropa belladonna*
- D) *Papaver somniferum*

**Answer:** A) *Acacia catechu*

7. Tannins are absent in \_\_\_\_\_.

- A) Fungi
- B) Algae
- C) Minerals
- D) Both B and C

**Answer:** D) Both B and C

8. The tannins found in tea are known as \_\_\_\_\_.

- A) Catechins
- B) Anthocyanins
- C) Glycosides
- D) Alkaloids

**Answer:** A) Catechins

9. Tannins are soluble in \_\_\_\_\_.

- A) Water and alcohol
- B) Ether only
- C) Oils
- D) None

**Answer:** A) Water and alcohol

10. The taste of tannins is \_\_\_\_\_.

- A) Bitter and astringent
- B) Sweet
- C) Salty
- D) Sour

**Answer:** A) Bitter and astringent

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□ **11–20. Classification of Tannins**

11. Tannins are broadly classified into \_\_\_\_\_ main groups.

- A) Two
- B) Three
- C) Four

D) Five

**Answer:** A) Two

12. The two main classes of tannins are hydrolysable and \_\_\_\_\_ tannins.

A) Condensed

B) Simple

C) Complex

D) Mixed

**Answer:** A) Condensed

13. Hydrolysable tannins yield \_\_\_\_\_ and gallic or ellagic acid on hydrolysis.

A) Glucose

B) Fructose

C) Sucrose

D) Maltose

**Answer:** A) Glucose

14. Condensed tannins are also known as \_\_\_\_\_.

A) Catechol tannins

B) Pyrogallol tannins

C) Simple phenols

D) Polyesters

**Answer:** A) Catechol tannins

15. Hydrolysable tannins contain which acid?

A) Gallic acid

B) Citric acid

C) Lactic acid

D) Malic acid

**Answer:** A) Gallic acid

16. Ellagitannins yield \_\_\_\_\_ acid on hydrolysis.

A) Ellagic

B) Gallic

C) Tartaric

D) Succinic

**Answer:** A) Ellagic

17. Condensed tannins are polymers of \_\_\_\_\_.

A) Flavan-3-ols

B) Gallic acid

C) Glucose

D) Phenylalanine

**Answer:** A) Flavan-3-ols

18. Upon dry distillation, condensed tannins yield \_\_\_\_\_.

A) Phlobaphenes

B) Catechols

C) Quercetin

D) Gallic acid

**Answer:** A) Phlobaphenes

19. Hydrolysable tannins are easily hydrolyzed by \_\_\_\_\_.

A) Acids or enzymes

B) Alkali

C) Oxidizing agents

D) Light

**Answer:** A) Acids or enzymes

20. Condensed tannins are resistant to \_\_\_\_\_.

A) Hydrolysis

B) Oxidation

C) Reduction

D) Solubilization

**Answer:** A) Hydrolysis

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□ **21–30. Identification Tests of Tannins**

21. Ferric chloride test gives \_\_\_\_\_ color with hydrolysable tannins.

A) Blue-black

B) Green

C) Red

D) Orange

**Answer:** A) Blue-black

22. Ferric chloride test gives \_\_\_\_\_ color with condensed tannins.

A) Green

B) Blue

C) Yellow

D) Pink

**Answer:** A) Green

23. Gelatin test for tannins produces \_\_\_\_\_ precipitate.

A) White

B) Buff-colored

C) Blue

D) Red

**Answer:** B) Buff-colored

24. Goldbeater's skin test is used to detect \_\_\_\_\_.

A) Tannins

B) Alkaloids

C) Glycosides

D) Resins

**Answer:** A) Tannins

25. Lead acetate test gives a \_\_\_\_\_ precipitate with tannins.

A) White

B) Blue

C) Yellow

D) Red

**Answer:** A) White

26. Vanillin-HCl test gives red color with \_\_\_\_\_ tannins.

A) Condensed

B) Hydrolysable

C) Mixed

D) Ellagic

**Answer:** A) Condensed

27. Bromine water test gives a precipitate with \_\_\_\_\_ tannins.

A) Condensed

B) Hydrolysable

C) None

D) Both A and B

**Answer:** A) Condensed

28. When tannins are treated with alkalies, they give a \_\_\_\_\_ solution.

A) Dark brown

B) Blue

C) Green

D) Colorless

**Answer:** A) Dark brown

29. The presence of tannins in crude drugs produces a \_\_\_\_\_ sensation in mouth.

A) Dry and puckering

B) Sweet

C) Cooling

D) Burning

**Answer:** A) Dry and puckering

30. Hide-powder test is used to confirm the \_\_\_\_\_ property of tannins.

A) Astringent

B) Solubility

C) Sweetness

D) Volatility

**Answer:** A) Astringent

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□ **31–40. Isolation and Extraction of Tannins**

31. Tannins are generally extracted using \_\_\_\_\_ as solvent.

A) Water

B) Ether

C) Chloroform

D) Acetone

**Answer:** A) Water

32. For better extraction, water is sometimes mixed with \_\_\_\_\_.

A) Alcohol

B) Ether

C) Acid

D) Base

**Answer:** A) Alcohol

33. The plant material containing tannins should be protected from \_\_\_\_\_.

A) Moisture

B) Sunlight

C) Heat

D) All of the above

**Answer:** D) All of the above

34. Tannins are purified by precipitation with \_\_\_\_\_.

A) Lead acetate

B) Silver nitrate

C) Sodium chloride

D) Ammonium sulphate

**Answer:** A) Lead acetate

35. The tannin extract can be concentrated under \_\_\_\_\_ pressure.

A) Reduced

B) Increased

C) Normal

D) High

**Answer:** A) Reduced

36. The yield of tannins depends upon \_\_\_\_\_ and maturity of plant.

A) Climate

B) Soil

C) Harvest time

D) All of the above

**Answer:** D) All of the above

37. Hydrolysable tannins can be separated by treating the extract with \_\_\_\_\_.

A) Acid

B) Alkali

C) Salt

D) Alcohol

**Answer:** A) Acid

38. Condensed tannins are extracted from plant using \_\_\_\_\_.

A) Alcohol-water mixture

B) Ether

C) Oil

D) Benzene

**Answer:** A) Alcohol-water mixture

39. Tannins are non-volatile and \_\_\_\_\_ in nature.

A) Amorphous

B) Crystalline

C) Volatile

D) Powdery

**Answer:** A) Amorphous

40. Tannins are precipitated from solution by \_\_\_\_\_.

A) Salts of heavy metals

B) Alkali

C) Organic acids

D) Sugars

**Answer:** A) Salts of heavy metals

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□ **41–50. Pharmaceutical Applications and Therapeutic Activity**

41. Tannins have a characteristic \_\_\_\_\_ action.

A) Astringent

- B) Antacid
- C) Diuretic
- D) Sedative

**Answer:** A) Astringent

42. Tannins are used in the treatment of \_\_\_\_\_.

- A) Diarrhoea
- B) Fever
- C) Hypertension
- D) Asthma

**Answer:** A) Diarrhoea

43. Tannins form a protective layer on the \_\_\_\_\_.

- A) Mucous membrane
- B) Skin pores
- C) Bones
- D) Eyes

**Answer:** A) Mucous membrane

44. Tannins act as \_\_\_\_\_ agents for alkaloids and heavy metals.

- A) Antidotes
- B) Catalysts
- C) Preservatives
- D) Stimulants

**Answer:** A) Antidotes

45. Tannins are used in \_\_\_\_\_ industry for leather preparation.

- A) Tanning
- B) Textile
- C) Food
- D) Cosmetic

**Answer:** A) Tanning

46. Tannins are used in the manufacture of \_\_\_\_\_.

- A) Inks
- B) Plastics
- C) Glass
- D) Cement

**Answer:** A) Inks

47. Tannins possess \_\_\_\_\_ properties.

- A) Antimicrobial
- B) Neurotoxic

- C) Narcotic
- D) Hallucinogenic

**Answer:** A) Antimicrobial

48. Tannins are used to stop \_\_\_\_\_ bleeding.

- A) Minor
- B) Internal
- C) Both A and B
- D) None

**Answer:** C) Both A and B

49. In pharmaceutical formulations, tannins act as \_\_\_\_\_ agents.

- A) Astringent and antioxidant
- B) Sweetening
- C) Flavoring
- D) Lubricating

**Answer:** A) Astringent and antioxidant

50. Excessive consumption of tannins may cause \_\_\_\_\_ absorption of iron.

- A) Reduced
- B) Enhanced
- C) Neutral
- D) No effect

**Answer:** A) Reduced



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