

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 – Glycosides

❏ **1–10. Introduction & Distribution of Glycosides**

1. Glycosides are _____ metabolites found in plants.

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

Answer: B) Secondary

2. Glycosides are composed of a sugar part and a _____ part.

- A) Non-sugar
- B) Protein
- C) Lipid
- D) Salt

Answer: A) Non-sugar

3. The sugar part of a glycoside is called _____.

- A) Aglycone
- B) Glycone
- C) Sapogenin
- D) Flavone

Answer: B) Glycone

4. The non-sugar part of a glycoside is known as _____.

- A) Aglycone
- B) Glycone
- C) Alkaloid
- D) Steroid

Answer: A) Aglycone

5. Glycosides are widely distributed in the _____ kingdom.

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

Answer: B) Plant

6. Cardiac glycosides are obtained from which plant?

- A) *Digitalis purpurea*
- B) *Atropa belladonna*
- C) *Cinchona officinalis*
- D) *Papaver somniferum*

Answer: A) *Digitalis purpurea*

7. Saponin glycosides are found in _____.

- A) Liquorice root
- B) Opium poppy
- C) Cinchona bark
- D) Belladonna leaves

Answer: A) Liquorice root

8. Anthraquinone glycosides are mainly present in _____.

- A) Senna
- B) Rauwolfia
- C) Datura
- D) Ephedra

Answer: A) Senna

9. Cyanogenic glycosides are found in _____ seeds.

- A) Almond
- B) Coffee
- C) Datura
- D) Tobacco

Answer: A) Almond

10. Mustard oil glycosides belong to the class of _____ glycosides.

- A) Isothiocyanate
- B) Cardiac
- C) Anthraquinone
- D) Flavonoid

Answer: A) Isothiocyanate

□ **11–20. Classification & Chemical Nature**

11. Glycosides are classified based on the nature of the _____ part.

- A) Glycone
- B) Aglycone
- C) Enzyme

D) Salt

Answer: B) Aglycone

12. The sugar moiety in glycosides is linked through an _____ bond.

A) Glycosidic

B) Peptide

C) Ester

D) Amide

Answer: A) Glycosidic

13. The bond between glycone and aglycone can be hydrolyzed by _____.

A) Acids or enzymes

B) Alkali

C) Oxidizing agents

D) Solvents

Answer: A) Acids or enzymes

14. The sugar part may contain _____, glucose, or other monosaccharides.

A) Rhamnose

B) Sucrose

C) Mannitol

D) Cellulose

Answer: A) Rhamnose

15. The aglycone of cardiac glycosides is called _____.

A) Genin

B) Flavone

C) Anthrone

D) Isothiocyanate

Answer: A) Genin

16. Saponin glycosides yield _____ foam when shaken with water.

A) Stable

B) Unstable

C) Colored

D) None

Answer: A) Stable

17. Anthraquinone glycosides are derivatives of _____.

A) Anthracene

B) Benzene

C) Pyridine

D) Phenol

Answer: A) Anthracene

18. Flavonoid glycosides are derivatives of _____ nucleus.

A) Flavone

B) Steroid

C) Quinoline

D) Pyridine

Answer: A) Flavone

19. Cyanogenic glycosides release _____ on hydrolysis.

A) Hydrogen cyanide

B) Sulphur dioxide

C) Ammonia

D) Nitrogen

Answer: A) Hydrogen cyanide

20. Isothiocyanate glycosides are also known as _____ glycosides.

A) Mustard oil

B) Anthraquinone

C) Cardiac

D) Flavonoid

Answer: A) Mustard oil

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

21. Keller–Killiani test is used for the identification of _____ glycosides.

A) Cardiac

B) Saponin

C) Anthraquinone

D) Flavonoid

Answer: A) Cardiac

22. Borntrager's test is used for detecting _____ glycosides.

A) Anthraquinone

B) Cardiac

C) Flavonoid

D) Cyanogenic

Answer: A) Anthraquinone

23. Legal's test confirms the presence of _____ glycosides.

A) Cardiac

B) Cyanogenic

- C) Saponin
- D) Isothiocyanate

Answer: A) Cardiac

24. Baljet's test gives an _____ color with cardiac glycosides.

- A) Orange
- B) Blue
- C) Green
- D) Yellow

Answer: A) Orange

25. The froth test is specific for _____ glycosides.

- A) Saponin
- B) Anthraquinone
- C) Flavonoid
- D) Cardiac

Answer: A) Saponin

26. Cyanogenic glycosides can be identified by the _____ test.

- A) Sodium picrate
- B) Legal's
- C) Keller–Killiani
- D) Froth

Answer: A) Sodium picrate

27. Shinoda test is used for _____ glycosides.

- A) Flavonoid
- B) Anthraquinone
- C) Saponin
- D) Cardiac

Answer: A) Flavonoid

28. Foam formation in water is an indication of _____ glycosides.

- A) Saponin
- B) Flavonoid
- C) Cardiac
- D) Anthraquinone

Answer: A) Saponin

29. The enzyme emulsin hydrolyzes _____ glycosides.

- A) Cyanogenic
- B) Cardiac
- C) Flavonoid

D) Saponin

Answer: A) Cyanogenic

30. Hydrolysis of glycosides yields sugar and _____.

A) Aglycone

B) Salt

C) Oil

D) Ester

Answer: A) Aglycone

□ **31–40. Isolation & Extraction of Glycosides**

31. Glycosides are extracted from plants using _____ solvents.

A) Alcoholic

B) Aqueous

C) Oily

D) Non-polar

Answer: A) Alcoholic

32. Extraction of glycosides is often carried out using _____ alcohol.

A) Methanol or ethanol

B) Isopropanol

C) Benzyl alcohol

D) Glycerol

Answer: A) Methanol or ethanol

33. Enzymatic hydrolysis during extraction is prevented by _____.

A) Heating

B) Cooling

C) Drying

D) Acidification

Answer: A) Heating

34. Purification of glycosides is done by _____.

A) Recrystallization

B) Distillation

C) Sublimation

D) Filtration only

Answer: A) Recrystallization

35. Glycosides are usually found in the _____ portion of the plant.

A) Aqueous

B) Fatty

- C) Resinous
- D) Volatile oil

Answer: A) Aqueous

36. Acid hydrolysis of glycosides yields aglycone and _____.

- A) Sugar
- B) Alkaloid
- C) Terpene
- D) Protein

Answer: A) Sugar

37. The glycosidic bond is broken by _____ action.

- A) Enzymatic or acidic
- B) Basic
- C) Oxidizing
- D) Reducing

Answer: A) Enzymatic or acidic

38. The yield of glycosides is affected by _____ conditions.

- A) Environmental
- B) Color
- C) pH only
- D) None

Answer: A) Environmental

39. The enzyme that hydrolyzes cardiac glycosides is _____.

- A) Digitalis enzyme
- B) Emulsin
- C) Rhamnase
- D) Myrosinase

Answer: A) Digitalis enzyme

40. In isolation, the solvent is evaporated under _____ pressure.

- A) Reduced
- B) Increased
- C) Atmospheric
- D) High

Answer: A) Reduced

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

41. Cardiac glycosides are mainly used in the treatment of _____.

- A) Heart failure

B) Diabetes

C) Cancer

D) Fever

Answer: A) Heart failure

42. Saponin glycosides have _____ action.

A) Expectorant

B) Laxative

C) Analgesic

D) Antifungal

Answer: A) Expectorant

43. Anthraquinone glycosides are used as _____.

A) Laxatives

B) Diuretics

C) Analgesics

D) Antimalarials

Answer: A) Laxatives

44. Cyanogenic glycosides in large doses are _____.

A) Toxic

B) Harmless

C) Antiseptic

D) Digestive

Answer: A) Toxic

45. Flavonoid glycosides are used for their _____ activity.

A) Antioxidant

B) Antacid

C) Antipyretic

D) Anaesthetic

Answer: A) Antioxidant

46. Mustard oil glycosides have _____ activity.

A) Rubefacient and counter-irritant

B) Laxative

C) Sedative

D) Analgesic

Answer: A) Rubefacient and counter-irritant

47. Liquorice (contains saponin glycosides) is used as a _____ agent.

A) Demulcent

B) Analgesic

- C) Antacid
- D) Antihistamine

Answer: A) Demulcent

48. Digitalis glycosides increase the force of _____ contraction.

- A) Cardiac
- B) Skeletal
- C) Smooth
- D) Respiratory

Answer: A) Cardiac

49. Aloe and Senna contain glycosides having _____ activity.

- A) Purgative
- B) Antiseptic
- C) Sedative
- D) Antihypertensive

Answer: A) Purgative

50. Bitter glycosides act as _____ and improve appetite.

- A) Stomachic
- B) Sedative
- C) Anaesthetic
- D) Antipyretic

Answer: A) Stomachic



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