PHB Education

Government Exam and D. Pharm Exit Exam Preparation Questions Bank

Subject: Pharmacognosy
Chapter -5.1: Laxative and Purgative Crude drugs
Topic: Pharmacognosy – Aloe Vera

1–10: General Information & Synonyms

1. The biological source of Aloe is:

   a) Dried latex of *Aloe barbadensis*

   b) Dried leaves of *Aloe barbadensis*

   c) Root bark of *Aloe vera*

   d) Whole plant of *Aloe indica*

   Answer: a) Dried latex of *Aloe barbadensis*

2. Aloe belongs to the family:

   a) Liliaceae

   b) Euphorbiaceae

   c) Apocynaceae

   d) Solanaceae

   Answer: a) Liliaceae

3. The botanical name of Curacao Aloe is:

   a) *Aloe barbadensis*

   b) *Aloe perryi*

   c) *Aloe ferox*

   d) *Aloe indica*

   Answer: a) *Aloe barbadensis*

4. The botanical name of Cape Aloe is:

   a) *Aloe ferox*

   b) *Aloe barbadensis*

   c) *Aloe perryi*

   d) *Aloe vera*

   Answer: a) *Aloe ferox*

5. The synonym of Aloe in Ayurveda is:

   a) Kumari

   b) Haritaki

   c) Eranda

   d) Amalaki

   Answer: a) Kumari

6. Common English name of Aloe is:

   a) Indian Aloe / True Aloe

b) Sarsaparilla

c) Castor plant

d) Myrrh

Answer: a) Indian Aloe / True Aloe

7. Socotrine Aloe is obtained from:

a) *Aloe perryi*

b) *Aloe ferox*

c) *Aloe barbadensis*

d) *Aloe indica*

Answer: a) *Aloe perryi*

8. Zanzibar Aloe is obtained from:

a) *Aloe barbadensis*

b) *Aloe perryi*

c) *Aloe ferox*

d) *Aloe indica*

Answer: c) *Aloe ferox*

9. Indian Aloe is obtained from:

a) *Aloe barbadensis*

b) *Aloe perryi*

c) *Aloe indica*

d) *Aloe succotrina*

Answer: c) *Aloe indica*

10. The chief variety of Aloe cultivated in India is:

a) *Aloe barbadensis*

b) *Aloe ferox*

c) *Aloe perryi*

d) *Aloe succotrina*

Answer: a) *Aloe barbadensis*

11–20: Morphology

11. Aloe plant is a:

a) Succulent herb

b) Woody shrub

c) Tree

d) Creeper

Answer: a) Succulent herb

12. Aloe leaves are:
    a) Fleshy and lanceolate
    b) Narrow and needle-like
    c) Compound and pinnate
    d) Small and round
    Answer: a) Fleshy and lanceolate
13. The color of Aloe leaves is:
    a) Green to grey-green
    b) Yellow to brown
    c) Red to pink
    d) Blue-green
    Answer: a) Green to grey-green
14. The margin of Aloe leaves bears:
    a) Small teeth or spines
    b) Hairs
    c) Smooth edge
    d) Serrated hairs
    Answer: a) Small teeth or spines
15. The Aloe plant contains:
    a) A central mucilaginous pulp
    b) Woody stem
    c) Bark
    d) Underground rhizome
    Answer: a) A central mucilaginous pulp
16. The latex of Aloe is obtained from:
    a) Pericyclic cells beneath the epidermis
    b) Pith cells
    c) Cortex cells
    d) Xylem vessels
    Answer: a) Pericyclic cells beneath the epidermis
17. The dried latex of Aloe is known as:
    a) Aloe juice or drug
    b) Aloe gel
    c) Gum
    d) Resin
    Answer: a) Aloe juice or drug

18. The odour of Aloe is:
    a) Characteristic and unpleasant
    b) Aromatic
    c) Odourless
    d) Sweet
    Answer: a) Characteristic and unpleasant
19. The taste of Aloe is:
    a) Bitter
    b) Sweet
    c) Tasteless
    d) Sour
    Answer: a) Bitter
20. The Aloe gel is obtained from:
    a) Parenchymatous tissue of leaf pulp
    b) Latex cells
    c) Bark
    d) Seeds
    Answer: a) Parenchymatous tissue of leaf pulp

21–30: Chemical Constituents

21. The chief chemical constituents of Aloe are:
    a) Anthraquinone glycosides
    b) Flavonoids
    c) Alkaloids
    d) Saponins
    Answer: a) Anthraquinone glycosides
22. The main active principles in Aloe are:
    a) Barbaloin and Isobarbaloin
    b) Sennosides
    c) Allicin and Ricin
    d) Glycyrrhizin
    Answer: a) Barbaloin and Isobarbaloin
23. The aglycone of Barbaloin is:
    a) Aloe-emodin
    b) Rhein
    c) Chrysophanol

d) Emodin

Answer: a) Aloe-emodin

24. Aloe contains a crystalline yellow compound known as:

a) Aloin

b) Saponin

c) Myricetin

d) Curcumin

Answer: a) Aloin

25. Barbaloin is chemically:

a) C-glycoside of aloe-emodin anthrone

b) O-glycoside of rhein

c) Flavonoid glycoside

d) Terpenoid

Answer: a) C-glycoside of aloe-emodin anthrone

26. The content of aloin in Aloe is approximately:

a) 20–25%

b) 15–30%

c) 10–15%

d) 5–10%

Answer: b) 15–30%

27. Other constituents of Aloe include:

a) Resins and polysaccharides

b) Volatile oils only

c) Alkaloids

d) Proteins only

Answer: a) Resins and polysaccharides

28. The Aloe gel mainly contains:

a) Polysaccharides (glucomannans)

b) Alkaloids

c) Flavones

d) Terpenes

Answer: a) Polysaccharides (glucomannans)

29. The latex portion of Aloe contains:

a) Anthraquinone glycosides

b) Mucilage

c) Starch

d) Amino acids

Answer: a) Anthraquinone glycosides

30. The active glycosides responsible for purgative action are:

a) Aloin and Aloe-emodin

b) Allicin and Glycyrrhizin

c) Curcumin and Flavones

d) Ricin and Abrin

Answer: a) Aloin and Aloe-emodin

31–40: Chemical Tests

31. Bornträger's test is used to detect:

a) Anthraquinone glycosides

b) Alkaloids

c) Saponins

d) Terpenoids

Answer: a) Anthraquinone glycosides

32. In Bornträger's test, the presence of anthraquinone glycosides is shown by:

a) Red color in alkaline layer

b) Green color in acidic layer

c) Blue color in ether layer

d) Violet color in aqueous layer

Answer: a) Red color in alkaline layer

33. Modified Bornträger's test is used to detect:

a) C-glycosides

b) O-glycosides

c) N-glycosides

d) Saponins

Answer: a) C-glycosides

34. In the Modified Bornträger's test, prior hydrolysis is done using:

a) Ferric chloride and HCl

b) Sulphuric acid

c) Sodium hydroxide

d) Nitric acid

Answer: a) Ferric chloride and HCl

35. The test for Aloin is performed by:

a) Adding ammonia after extraction with ether

b) Ferric chloride test

c) Froth test

d) Keller–Killiani test

Answer: a) Adding ammonia after extraction with ether

36. Aloin gives red color with:

a) Alkali

b) Acid

c) Ether

d) Alcohol

Answer: a) Alkali

37. Aqueous extract of Aloe shows fluorescence under:

a) UV light

b) Visible light

c) Infrared light

d) None

Answer: a) UV light

38. The presence of anthracene nucleus is confirmed by:

a) Bornträger's test

b) Salkowski test

c) Dragendorff's test

d) Molisch's test

Answer: a) Bornträger's test

39. The color reaction for Aloe-emodin with ammonia is:

a) Red

b) Yellow

c) Blue

d) Brown

Answer: a) Red

40. For quantitative estimation of Aloin, which method is used?

a) Spectrophotometry

b) Titration

c) Chromatography

d) Gravimetry

Answer: c) Chromatography

41–50: Uses and Applications

41. Aloe acts as a:

a) Purgative

b) Sedative

c) Antipyretic

d) Analgesic

Answer: a) Purgative

42. Aloe is used in small doses as a:

a) Bitter tonic

b) Stimulant

c) Antiemetic

d) Antiseptic

Answer: a) Bitter tonic

43. Aloe acts on:

a) Large intestine

b) Small intestine

c) Stomach

d) Esophagus

Answer: a) Large intestine

44. The onset of purgative action of Aloe is after:

a) 6–8 hours

b) 1 hour

c) 12 hours

d) 24 hours

Answer: a) 6–8 hours

45. Prolonged use of Aloe may cause:

a) Purgative dependence and electrolyte imbalance

b) Hyperglycemia

c) Hypertension

d) Anemia

Answer: a) Purgative dependence and electrolyte imbalance

46. Aloe is used externally for:

a) Burns and wounds

b) Fever

c) Rheumatism

d) Migraine

Answer: a) Burns and wounds

47. Aloe gel has:

a) Moisturizing and healing properties

b) Stimulant effect

c) Antiseptic only

d) Narcotic action

Answer: a) Moisturizing and healing properties

48. Aloe latex is contraindicated in:

a) Pregnancy and menstruation

b) Fever

c) Cold

d) Diabetes

Answer: a) Pregnancy and menstruation

49. The combination of Aloe with myrrh and saffron is known as:

a) Aloes compound

b) Aloe tonic

c) Aloe resin

d) Aloe extract

Answer: a) Aloes compound

50. Aloe is official in:

a) IP, BP, and USP

b) Only IP

c) Only USP

d) None

Answer: a) IP, BP, and USP