

# **PHB Education**

**Government Exam and D. Pharm Exit Exam Preparation  
Questions Bank**

**Subject: Pharmacognosy**  
**Chapter -3: Quality Control of Crude Drugs**

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1-10

1. The main objective of quality control of crude drugs is to ensure:

- A) Cost reduction
- B) Uniformity and purity
- C) Adulteration
- D) Marketing value

→ **Answer: B**

2. Quality control of crude drugs involves:

- A) Only physical evaluation
- B) Only chemical evaluation
- C) Pharmacognostical, chemical, and biological evaluation
- D) None

→ **Answer: C**

3. Adulteration of crude drugs means:

- A) Mixing with other substances
- B) Purifying the drug
- C) Removing impurities
- D) Drying the drug

→ **Answer: A**

4. The **macroscopic evaluation** of crude drugs deals with:

- A) Microscopic features
- B) Organoleptic properties
- C) Chemical constituents
- D) Biological activity

→ **Answer: B**

5. **Organoleptic evaluation** includes:

- A) Taste, odor, color, size, shape
- B) pH and moisture content
- C) Chromatographic study
- D) DNA fingerprinting

→ **Answer: A**

6. **Microscopic evaluation** is used to identify:

- A) Color

- B) Odor
- C) Cell structure and tissue arrangement
- D) Chemical constituents

→ **Answer: C**

7. The **ash value** of a drug is used to determine:

- A) Moisture content
- B) Organic matter
- C) Inorganic impurities
- D) Alcohol content

→ **Answer: C**

8. **Total ash** includes:

- A) Only carbon
- B) Both physiological and non-physiological ash
- C) Only acid-insoluble ash
- D) Moisture

→ **Answer: B**

9. **Acid-insoluble ash** indicates the presence of:

- A) Carbonates
- B) Silica and sand
- C) Organic matter
- D) Fat

→ **Answer: B**

10. **Water-soluble ash** is used to estimate:

- A) Soluble inorganic salts
- B) Alcohol content
- C) Volatile matter
- D) Fixed oils

→ **Answer: A**

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**11–20**

11. **Extractive values** determine:

- A) Purity of solvents
- B) Amount of active constituents extractable by a solvent
- C) Color of extract
- D) Odor of drug

→ **Answer: B**

12. **Alcohol-soluble extractive** value is used for:

- A) Alcohol-insoluble drugs
- B) Alcohol-soluble constituents like glycosides, tannins
- C) Volatile oils
- D) Minerals

→ **Answer: B**

13. **Moisture content** is important because:

- A) It affects taste
- B) It causes microbial growth and spoilage
- C) It improves potency
- D) It increases stability

→ **Answer: B**

14. **Chromatographic techniques** are used for:

- A) Estimating color only
- B) Separation and identification of constituents
- C) Determining odor
- D) None

→ **Answer: B**

15. **Thin Layer Chromatography (TLC)** is widely used because:

- A) It is cheap and rapid
- B) It is complex
- C) It needs expensive equipment
- D) It is not reliable

→ **Answer: A**

16. **Chemical evaluation** involves:

- A) Organoleptic properties
- B) Identification and quantification of constituents
- C) Microscopy
- D) Biological assay

→ **Answer: B**

17. **Biological evaluation** is also called:

- A) Chemical assay
- B) Bioassay
- C) TLC
- D) Macroscopic test

→ **Answer: B**

18. The **biological assay** measures:

- A) Taste
- B) Odor
- C) Biological activity of the drug
- D) Color intensity

→ **Answer: C**

19. **Pharmacopoeial standards** are published in:

- A) Textbooks
- B) Pharmacopoeias (IP, BP, USP)
- C) Magazines
- D) Drug advertisements

→ **Answer: B**

20. **Foreign organic matter** includes:

- A) Plant part not belonging to drug
- B) Color impurities
- C) Inorganic salts
- D) Volatile matter

→ **Answer: A**

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**21–30**

21. The **volatile oil content** of a drug can be determined by:

- A) TLC
- B) Steam distillation
- C) Solvent extraction
- D) Maceration

→ **Answer: B**

22. **Fluorescence analysis** is used mainly for:

- A) Microscopic study
- B) Detecting certain chemical constituents under UV light
- C) Measuring ash
- D) Estimating moisture

→ **Answer: B**

23. **Optical rotation** is used to test:

- A) Drugs containing optically active substances
- B) Insoluble drugs
- C) Colored drugs

D) Ash value

→ **Answer: A**

**24. Foreign inorganic matter** includes:

A) Stones, sand, and dust

B) Leaves and bark

C) Seeds

D) Pigments

→ **Answer: A**

**25. DNA fingerprinting** is a **modern technique** for:

A) Adulteration detection

B) Pharmacological action

C) Color estimation

D) Moisture content

→ **Answer: A**

**26. WHO guidelines** are mainly used for:

A) Adulteration

B) Quality control of herbal medicines

C) Marketing

D) Pricing

→ **Answer: B**

**27. Adulteration** can be detected by:

A) Organoleptic and chemical evaluation

B) Only organoleptic tests

C) Only biological tests

D) None

→ **Answer: A**

**28. Physical evaluation** includes:

A) Melting point, refractive index, optical rotation

B) Color, odor, taste

C) Alkaloid content

D) Chemical assay

→ **Answer: A**

**29. Melting point** helps in identifying:

A) Crystalline substances like fats and waxes

B) Alkaloids

C) Tannins

D) Sugars

→ **Answer: A**

**30. Viscosity and specific gravity** are important for:

A) Volatile oils and fixed oils

B) Alkaloids

C) Resins

D) Gums

→ **Answer: A**

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**31–40**

**31. Refractive index** helps in quality control of:

A) Oils

B) Powders

C) Gums

D) Minerals

→ **Answer: A**

**32. Foaming index** is used for evaluation of:

A) Saponins

B) Alkaloids

C) Tannins

D) Volatile oils

→ **Answer: A**

**33. Swelling index** is used to test:

A) Mucilage-containing drugs

B) Alkaloids

C) Glycosides

D) Oils

→ **Answer: A**

**34. Bitterness value** is determined for:

A) Quassia, gentian, etc.

B) Volatile oils

C) Tannins

D) Sugars

→ **Answer: A**

**35. Chemical assay** provides:

A) Quantitative estimation of active constituents

B) Qualitative analysis

C) Morphological data

D) Biological potency

→ **Answer: A**

**36. Loss on drying** determines:

A) Moisture and volatile matter

B) Ash content

C) Alcohol percentage

D) Fiber content

→ **Answer: A**

**37. High-performance thin-layer chromatography (HPTLC)** is superior to TLC because:

A) It gives better resolution and quantification

B) It is slower

C) It is cheaper

D) It is non-reproducible

→ **Answer: A**

**38. High-performance liquid chromatography (HPLC)** is used for:

A) Quantitative analysis of active constituents

B) Odor study

C) Ash determination

D) Microscopic identification

→ **Answer: A**

**39. Gas chromatography (GC)** is mainly used for:

A) Volatile compounds like essential oils

B) Sugars

C) Proteins

D) Minerals

→ **Answer: A**

**40. Spectrophotometry** is based on:

A) Absorption of light by substances

B) Refractive index

C) Melting point

D) Fluorescence

→ **Answer: A**

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41–50

41. **Infrared spectroscopy (IR)** helps in identifying:

- A) Functional groups in molecules
- B) Molecular weight
- C) Crystals
- D) pH

→ **Answer: A**

42. **Ultraviolet (UV) spectroscopy** is mainly used for:

- A) Quantitative estimation of chromophores
- B) Measuring melting point
- C) Determining ash
- D) Odor evaluation

→ **Answer: A**

43. **Phytochemical screening** is done to:

- A) Detect types of constituents like alkaloids, glycosides, etc.
- B) Determine color
- C) Test ash value
- D) Evaluate moisture

→ **Answer: A**

44. **Adulteration with exhausted drugs** refers to:

- A) Using drugs after extraction of active principle
- B) Mixing with minerals
- C) Coloring drugs
- D) Substituting with synthetic material

→ **Answer: A**

45. **Substitution** of a drug means:

- A) Replacing with a cheaper or different drug having similar effect
- B) Mixing impurities
- C) Drying
- D) Coloring

→ **Answer: A**

46. **Ash value determination** is part of:

- A) Physical evaluation
- B) Microscopic evaluation
- C) Biological evaluation
- D) Chemical assay

→ **Answer: A**

47. **Microbial contamination** can be detected by:

- A) Plate count method
- B) TLC
- C) UV spectroscopy
- D) Ash determination

→ **Answer: A**

48. **Heavy metal contamination** is detected by:

- A) Atomic Absorption Spectroscopy (AAS)
- B) Microscopy
- C) Color test
- D) Odor test

→ **Answer: A**

49. **Radioactive contamination** can be tested by:

- A) Geiger counter
- B) TLC
- C) Melting point
- D) Odor

→ **Answer: A**

50. **Standardization** of crude drugs ensures:

- A) Uniform quality, purity, and safety
- B) Market pricing
- C) Color uniformity
- D) Packing

→ **Answer: A**



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