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**SUBJECT : BP-405T, PHARMACOGNOSY & PHYTOCHEMISTRY-I**

**B.PHARM. FOURTH SEMESTER**

**UNIT- I (Introduction to Pharmacognosy, Classification of Drugs, QC of drugs)**

**MCQ:**

- 1.** The term crude drug applies to drugs obtained from
  - a) Animal origin
  - b) Mineral
  - c) Plant origin
  - d) All of the above
- 2.** Who is regarded as first Pharmacist
  - a) Hippocrates
  - b) Galen
  - c) Sertuerner
  - d) Aristotle
- 3.** Who is credited for isolation of Morphine from Opium
  - a) Derosene
  - b) Sertuerner
  - c) Pelletier
  - d) Stass and Otto
- 4.** Stass and Otto are known for the development for extraction process of
  - a) Glycosides
  - b) Alkaloids
  - c) Tannins
  - d) Flavonoids
- 5.** The term Materia Medica is used for
  - a) Pharmacology
  - b) Pharmacognosy
  - c) Pharmacy
  - d) Pharmaceutics
- 6.** The term Pharmacognosy was coined in 1815 by
  - a) Sertuerner
  - b) Stass & Otto
  - c) C.A. Sydler
  - d) Dhanvantri
- 7.** Which inhabitants are related to making of clay models of human body
  - a) Voodoo tribes
  - b) Babylonians
  - c) Both
  - d) None
- 8.** Which of the following herbal is in the tomb of mummy in University of Leipzig

- a) Pen-t-sao
  - b) Papyrus Ebers
  - c) De material medica
  - d) Charak samhita
9. The types of stomata with 2 guard cells covered with 3 subsidiary cells with 1 extremely smaller than other 2 is :
- a) Diacytic
  - b) Anisocytic
  - c) Anomocytic
  - d) Paracytic
10. Covering trichomes are also known as
- a) Glandular
  - b) Non glandular
  - c) Hydathodes
  - d) None
11. Which one the following is an example of unorganized crude drug?
- a) Aloe
  - b) Cinchona
  - c) Fennel
  - d) Tobacco
12. The uneven projecting points at fractured surface of barks is described as
- a) Granular
  - b) Laminated
  - c) Splintery
  - d) Fibrous
13. Organized crude drug means
- a) Acellular
  - b) Cellular
  - c) Both
  - d) None
14. Which one of the following is an example of bulk laxative:
- a) Gentian
  - b) Isapgula
  - c) Licorice
  - d) Senna
15. Which one of the following can be used as anti tussive?
- a) Ephedra
  - b) Opium
  - c) Tea
  - d) All of the above
16. Cell theory was given in 1838 by
- a) Stass and Otto
  - b) Mendel
  - c) Schleiden and Schwann
  - d) None

17. Presence of large vacuole and cell wall is a characteristic feature of
- Animal Cell
  - Plant cell
  - Bacteria
  - All of the above
18. Example of flat shaped bark is
- Cinnamon
  - cassia
  - Arjuna
  - Chinchona
19. Which one is man made shape for bark?
- Flats
  - curved
  - Quilled
  - Compound quills
20. If the exposed surface of the fractured bark exhibits small rounded appearance, it is
- Short fracture
  - Granular Fracture
  - Splintery Fracture
  - Fibrous Fracture
21. Which one of the following is produced as pathological product is growing under unfavourable conditions or is injured?
- Mucilages
  - Gums
  - Tannins
  - a & b
22. Following are known as balsams
- Balsam of peru
  - Balsam of Tolu
  - Canada balsam
  - Both a & b
23. Adulteration due to impairment in the equality of the drug is known as
- Spoliage
  - Substitution
  - Sophistication
  - Deterioration
24. Disc shape is a feature of
- Liquirice
  - Nux vomica
  - Clove
  - Nutmeg
25. Stomata present in the lower surface of epidermis only in
- Senna
  - Belladonna
  - Coca
  - Datura

26. Which of following stomata is of diagnostic significance?
- Gramineous
  - Gymnospermous
  - Dicotyledonous
  - Moss type
27. When the guard cells are covered by two subsidiary cells, and subsidiary cells are arranged at right angle to that of stoma is
- Rubiaceous
  - Caryophyllaceous
  - Cruciferous
  - Ranunculaceous
28. When Stoma is surrounded by varying number of subsidiary cells resembling other epidermal cells it is
- Paracytic
  - Anomocytic
  - Anisocytic
  - Diacytic
29. Example of drug with Anisocytic stomata is
- Digitalis
  - Datura
  - Vasaka
  - Mentha
30. Following fruit contains trichomes
- Nux vomica
  - Ladies finger
  - Senna
  - Digitalis
31. Which one are also called the clothing trichomes?
- Glandular
  - Non globular
  - Covering
  - Both b & c
32. Example of drug with lignified trichomes is
- Tea
  - Lobelia
  - Nux vomica
  - Cannabis
33. Sandy crystals of calcium oxalate are also known as
- Conglomerate
  - Rosette
  - Acicular
  - Microsphenoidal
34. Generally Lycopodium spores are uniform in size with
- 250 $\mu$
  - 25 $\mu$
  - 50 $\mu$

- d) 125 $\mu$
35. To determine the moisture content of crude drug, the temperature used usually is
- 121°C
  - 105°C
  - 500°C
  - None
36. Physiological ash is derived from
- Sand
  - Soil
  - Plant tissues
  - None
37. The part of total ash that is insoluble in dilute HCl is known as
- Acid soluble ash
  - Acid insoluble ash
  - Water soluble ash
  - Ether soluble ash
38. 1 mg powder of Lycopodium contains as per established records
- 95000 spores
  - 96000 spores
  - 90000 spores
  - 94000 spores
39. Water soluble extractive of Aloe should not be less than
- 10%
  - 5%
  - 2%
  - 25%
40. Alcohol soluble extractive is used as an official method for the assay of
- Senna
  - Myrrh
  - Asafoetida
  - Both b & c

### LONG QUESTIONS

- Discuss different types of ash values and extractive values.
- Define adulteration. What are different types of adulterants? Describe.
- A powdered drug can be evaluated quantitatively by Lycopodium spore method. Describe.
- Classify the crude drugs on the basis of their morphology, chemicals, Pharmacological activity with numerous examples.
- Write the history of Pharmacognosy.
- Classify unorganized drugs. Describe in detail.
- Describe various types of stomata.

### SHORT QUESTIONS

- Classify glandular trichomes with examples and diagrams.
- Classify the different calcium oxalate crystals found in Plants with diagrams.
- Define: Biological evaluation, Palisade ration, Vein islet number, stomatal index, vein termination number.

51. Write protocol for screening of anti diabetic drug of plant origin in animals.
52. Differentiate between organized and unorganized drugs.
53. Describe determination of Palisade ratio in leaves.
54. Describe determination of stomatal index in leaves.
55. Describe determination of vein islet and vein termination number in leaves.
56. What are Trichomes? Classify them with examples.
57. Define: Viscosity, Optical rotation, refractive index, Moisture content, Solubility
58. What are the various methods to determine moisture content in crude drug?
59. Write the protocol for screening of anti inflammatory drug of plant origin in animals.