Medicinal Plants: In Class Quiz

Multiple Choice:

a) Aloe vera  f) Ginkgo  j) Silphium (Ferula)
b) Ephedra  g) Saw Palmetto  k) Snakeroot
c) Feverbark tree  h) Madagascar  l) St. John’s Wort
d) Foxglove  i) Periwinkle  m) Willow
e) Happy tree  n) Pacific Yew

1. _____ acetosalicylic acid
2. _____ active ingredient in many weight loss supplements
3. _____ aloin
4. _____ analgesic
5. _____ anthraquinones
6. _____ antipyretic
7. _____ artemisinin
8. _____ aspirin
9. _____ burn treatment
10. _____ camptothecin
11. _____ chloroquine
12. _____ chemical used in plant to plant communication
13. _____ cure for dropsy
14. _____ decongestant, weight loss supplements
15. _____ digitalis
16. _____ digoxin, digitonin
17. _____ ephedrine
18. _____ extinct – over-collected for medicine
19. _____ Felix Hoffman & Bayer Co.
20. _____ gin & tonic
21. _____ Hindu healers used
22. _____ increases blood flow to brain
23. _____ Indian healers
24. _____ inhibits platelet aggregation
25. _____ inhibits DNA repair, very toxic
26. _____ contraceptive

27. _____ Jesuit powder or bark
28. _____ lowers blood pressure
29. _____ malaria treatment
30. _____ methylsalicylate
31. _____ mucilaginous sap
32. _____ palm tree, state tree of SC
33. _____ Plasmodium
34. _____ Pseudoephedrine
35. _____ purgative
36. _____ quina-quina
37. _____ quinine
38. _____ reduces risk of heart attack & stroke
39. _____ reserpine
40. _____ Rig-Veda
41. _____ salicin
42. _____ stimulant
43. _____ treatment for advanced cancer
44. _____ treatment for breast cancer
45. _____ treatment for depression
46. _____ treatment for gout
47. _____ treatment for hypertension
48. _____ treatment for leukemia & Hodgkin’s disease
49. _____ treatment for prostate enlargement
50. _____ treatment for schizophrenia
51. _____ treatment for senility
52. _____ used as a contraceptive
53. _____ vincristine/vinblastine
54. _____ William Withering
55. _____ Wintergreen & sweet birch contain similar chemicals to this plant
**Short Answer:** Please use a separate sheet of paper

1. Explain why malaria patients have recurring onset of fever and chills.
2. What is the 1994 Dietary Supplement and Health Education Act?
3. Explain how saw palmetto works to block prostate enlargement.
4. Explain why certain medications become ineffective if taking St. John’s Wort.

**Medicinal Literature Question:** The following are some classic books that are early records of medicinal plant usage. Identify the country/region of origin for each.

- Ayurvedic medicine/Rig Veda
- Badianus Manuscript
- Ebers Papyrus
- de Materia Medica

**Native American Medicine:** Match the plant with the treatment.

- a. Goldenseal
- b. Witch hazel
- c. Echinacea

- Topical antiseptic
- used for snakebites and stings
- hydrastine
- reduces blood pressure, antibacterial
- prevents colds and infections

**Mapping Question:** For each of the plants listed in the Matching Question above, write its name on the map in the general region to which it is native (or generally associated).
Essay Question on Exam #3: Select one plant-derived medicine such as quinine, reserpine, aspirin or digitalis and prepare an essay describing the type of secondary metabolite it is, its basic chemical structure, its actions in the body, the effectiveness of the medicine, the plant from which it was derived, the country of origin of the plant, a brief history of the use and discovery of the plant/medicine