

SIMPLE PHENOLS.

1. Herbal raw material should be collected in appropriate phytocenoses. Indicate where fern rhizomes should be collected:

A * Forest phytocenosis

B Steppe phytocenosis

C Wasteland phytocenosis

D Meadow plant community

E Plant communities of swamps and water-logged places

2. Harvesting of Bearberry and Cowberry leaves is held in two stages:

A * Before flowering and after fruiting

B During flowering and after fruiting

C Before flowering and during the growth of young shoots

D During flowering and during fruiting

E Before flowering and during fruiting

3. A pharmaceutical network carries out determination of fern rhizomes reserve. How often should this medicinal plant material be collected?

A * Once in 20 years

B Yearly

C Once in 5 years

D Once in 2 years

E Once in 10 years

4. What species of wild-growing pansy is officinal and is collected along with wild pansy (heartsease)?

A * Field pansy

B Sweet violet

C Sweet white violet

D Scented violet

E Pleasant violet

5. Field pansy herb is used as expectorant, sudorific and diuretic drug. During its collection it is possible to confuse it with a similar plant:

A * Blue cow-wheat

B Primrose

C Spring Adonis

D Shepherd's purse

E Solomon's seal

6. While collecting bearberry leaves it is possible to gather the following admixture:

A * Whortleberry leaves

B Periwinkle leaves

C Bird cherry leaves

D Smoke-tree leaves

E Sicilian sumac

7. Bearberry leaves are used as a uroseptic drug. A possible admixture for this herbal raw material is:

A * Cowberry leaves

B Foxglove leaves

C Smoke-tree leaves

D Nettle leaves

E Shepherd's purse leaves

8. Rhizomes and roots of snowdon rose are used for liquid extract obtaining. The quality of the MRM is regulated by the content of:

A * Salidroside

B Panaxoside

C Salycin

D Eleutheroside

E Echinacoside

9. A number of Ukrainian and foreign remedies of the Holy thistle fruits with hepatoprotective activity is produced. The quality of the raw material is characterized by the presence of:

A * Flavolignans

B Coumarins

C Alkaloids

D Vitamins

E Terpenes

10. Eleutero rhizome and roots are used as an adaptogenic agent. What active compounds does this raw material contain?

A * Lignans

B Cardosteroids

C Polysaccharides

D Sesquiterpenes

E Flavonoids

11. Specify medicinal plant material with tonic and stimulative activity which contains lignans:

A * Fructus Schizandrae chinensis

B Radix Araliae mandshuricae

C Radix Ginseng

D Radix Gentianae

E Rhizomata cum radicibus Echinopanacis

12. The pharmacological action of mustard shows up due to the glycosides present in

seeds. Specify the basic one from the list below:

- A** * Sinigrin
- B** Alliin
- C** Amygdalin
- D** Sambunigrin
- E** Linamarin

13. The irritating action of thioglycosides on mucous membranes and skin is due to their aglycones. Specify medicinal plant material containing such glycoside - sinigrin:

- A** * Mustard seeds
- B** Garlic bulbs
- C** Onion bulbs
- D** Bitter almond seeds
- E** Pumpkin seeds

14. Preparation "Alpizarin" is used in the form of ointment and pills for herpes and other viral diseases treatment. It is obtained on the basis of xanthones of tick trefoil (Hedysarum), the main of which is:

- A** * Mangiferin
- B** Yacareubin
- C** Tovofelin
- D** Tovoltezin
- E** Visnadin

15. Party of medicinal raw material of bearberry leaves was received by pharmacy warehouse. Content of which active agents is the characteristic of quality according to the requirements of Pharmacopoeia?

- A** * Phenolic glycosides
- B** Tannins
- C** Flavonoids
- D** Coumarins
- E** Extracted matter

16. Phenolic glycoside arbutin is hydrolyzed in the alkaline media of urine and produces the substance that shows urine antiseptic action. Choose this substance:

- A** * Hydroquinone
- B** Phenol
- C** Pyrocatechol
- D** Resorcinol
- E** Pyrogallol

17. Main active agents of bearberry leaves are arbutin and methylarbutin. Which class of biologically active compounds do they belong to?

- A** * Phenolic glycosides
- B** Phenol acids

- C** Flavonoids
- D** Iridoids
- E** Thioglycosides

18. Phenolic glycoside arbutin has antiseptic and anti-inflammatory activity in urinary tract. Point out the qualitative reactions on this compound according to pharmacopoeia:

- A** * With ammonia and 10% sodium phosphomolybdate solution
- B** With Wagner's reagent
- C** With cholesterol solution
- D** With gelatin solution
- E** With tannin solution

19. Bearberry (*Arctostaphylos uva-ursi*) leaves were received at an analytical laboratory. Which method is used to determine the arbutin content?

- A** * Iodometry
- B** Permanganatometry
- C** Photoelectrocolorimetry
- D** Gravimetry
- E** Spectrophotometry

20. From which medicinal plant material containing phenolic glycosides, aqueous extract is filtered without cooling?

- A** * *Arctostaphylos uva-ursi*
- B** Snowdon rose (*rhodiola*) rhizomes and roots
- C** Oak bark
- D** Fern rhizome
- E** Willow bark

21. A patient came to a drugstore and ordered cowberry leaves. Which of the available herbal raw material can be offered as a substitute?

- A** * *Folium Uvae ursi*
- B** *Rhizoma Calami*
- C** *Rhizoma et radix Sanquisorbae officinalis*
- D** *Herba Achilleae millefolii*
- E** *Radix Taraxaci*

22. Phytomedicine «Novoimanin» is used as antibacterial remedy. Which medicinal plant material is this medicine obtained from?

- A** * *Herba Hyperici*
- B** *Herba Leonuri*
- C** *Herba Polygoni hydropiperis*
- D** *Herba Solidaginis canadensis*
- E** *Herba Equiseti arvensis*

23. Phytomedicines “Sylibor” and “Carsyl” are used as hepatoprotectives. The source of these phytomedicines is:

- A** * Milk thistle seed
- B** Cornflower flower
- C** Tansy flower
- D** Hawthorn flower
- E** Equisetum herb

24. A doctor prescribed a student a tonic medicine. Specify which medicinal plant-derived tincture a pharmacist can propose the student in this case?

- A** * Snowdon rose (*Rhodiola*)
- B** Common yarrow
- C** Java tea
- D** Foxglove purple
- E** False acacia

25. Preparations made of ginseng roots have tonic and adaptogenic properties, improve mental and physical performance. If the ginseng tincture cannot be found in a pharmacy, it can be substituted by the analogous preparations made of the following plant material:

- A** * *Radices Eleutherococci*
- B** *Radices Valerianae*
- C** *Radices Inulae*
- D** *Radices Ononidis*
- E** *Radices Rhei*

26. Preparations produced from eleutherococcus roots and rhizomes are administered as a tonic and adaptogenic drug. If these preparations cannot be found in a pharmacy, they can be substituted by the analogous preparations produced from the following plant material:

- A** * Ginseng roots
- B** Elecampane roots
- C** Rhizomes and roots of valerian
- D** Polemonium roots
- E** Calamus roots

27. Tincture of which medicinal plant can be applied as a tonic?

- A** * *Rhodiola rosea*
- B** *Achillea millefolium*
- C** *Orthosiphon stamineus*
- D** *Digitalis purpurea*
- E** *Robinia pseudacacia*

28. The Cowberry leaves contain arbutin and are used as diuretic and uroseptic. At its absence it is possible to recommend:

- A** * *Folia Uvae ursi*

- B** Folia Myrtilli
- C** Folia Padi
- D** Folia Urticae
- E** Folia Menthae

29. If adaptogenic medicines from Ginseng roots are absent in the pharmacy it is possible to replace it by medicines from:

- A** * Eleutherococcus senticosus
- B** Orthosiphon stamineus
- C** Glycyrrhiza glabra
- D** Polygala senega
- E** Astragalus dasyanthus

30. Propose the method of determination the Male fern (*Rhizoma Dryopteridis filicis-maris*) productivity:

- A** * Method of model specimens
- B** Method of record plot
- C** Method of key plot
- D** Method of projecting cover
- E** Any of these methods

31. The pharmacy has a plan for the Cowberry leaves collection. The productivity of this raw material is possible to determine by:

- A** * Method of projective cover
- B** Method of record plot
- C** Method of model specimen
- D** By sight
- E** By the Geodesic method

32. A patient appealed to a pharmacy to buy cowberry leaves. Which herbal raw material available in pharmacy could be offered as a substitute?

- A** * Folium Uvae ursi
- B** Rhizoma Calami
- C** Rhizoma et radix Sanquisorbae officinalis
- D** Herba Millefolii
- E** Radix Taraxaci officinalis

33. Snowdon rose rhizomes contain salidroside. This biologically active substance is a:

- A** * Phenolic glycoside
- B** Alkaloid
- C** Coumarin
- D** Flavonoid
- E** Hydrocarbons

34. "Novoimanin" is used as an antibacterial drug. What herbal plant material is the source of it?

A * Herba Hyperici

B Herba Leonuri

C Herba Polygoni hydropiperis

D Herba Solidaginis canadensis

E Herba Equiseti arvensis

35. A consignment of bearberry leaves was received by a laboratory for analysis. Choose method for quantitative analysis of arbutin:

A * Iodometry

B Photocolorimetry

C Permanganatometry

D Gravimetry

E Spectrophotometry

36. A pharmaceutical enterprise received coneflower rhizomes for tincture production. What effect does this medicine have?

A * Immune modulation

B Expectorant

C Purgative

D Cardiotonic

E Enterosorbic

37. Rhizomes and roots of snowdon rose are used for tonic and stimulant drugs production. Standardization of raw material is carried out according to the content of:

A * Rhodiololide

B Araloside

C Isoflavonoids

D Arbutin

E Hyperoside

38. A pharmacy received a plan of cowberry leaves collection. To determine productivity of this raw material the following method is used:

A * Method of projective cover

B Method of permanent quadrat

C Method of model specimen

D by sight

E By a geodesic method

39. The officinal species of St-john's-wort herb is:

A * Hypericum maculatum

B Hypericum hirsutum

C Hypericum elegans

D Hypericum montanum

E *Hypericum linariodes*

40. The preparations of *Silybum marianum*. "Silibor" and "Carsil" have hepatoprotective action. What parts of *Silybum marianum* are the herbal raw material from which these medicines are being made?

- A** * Seeds
- B** Flowers
- C** Grass
- D** Leaves
- E** Roots

41. *Arctostaphylos* leaves have uroseptic effect. The following is an allowable admixture to this herbal raw material:

- A** * *Folia Vitis idaeae*
- B** *Herba Bursae pastoris*
- C** *Folia Digitalis lanata*
- D** *Folia Urticae*
- E** *Folia Cotini coggygriae*

42. *Schisandra chinensis* seeds contain lignans. What pharmacological effect will the preparations made of *Schisandra chinensis* have?

- A** * Tonic
- B** Antitumor
- C** Reparative
- D** Sedative
- E** Hepatoprotective

43. Silibor is a herbal drug that is used as a hepatoprotector. This drug is made from:

- A** * *Semina Sylibi*
- B** *Flores Centaureae cyani*
- C** *Flores Tanaceti*
- D** *Flores Crataegi*
- E** *Herba Equiseti arvensis*

44. "Immunal" immunostimulant is often prescribed against chronic upper respiratory tract infections. What herbal raw material is used in its production?

- A** * *Herba Echinaceae purpurea*
- B** *Radices Araliae elata*
- C** *Radices Rhei*
- D** *Radices Ginseng*