

Questions for the control thematic unit "Fungi. Algae. Higher spore plants. Seed plants".

1. General characteristics of the Fungi. Structure of fungi cell. Origin of fungi, classification.
2. Division of Real Fungi. Features of their structure, method of feeding. Types of reproduction. The main classes of fungi.
3. Class Zygomycetes. Systematic position. Peculiarities of structure, development and reproduction by the example of Mucor, its life cycle. .
4. Class Ascomycetes, their structure, reproduction, practical significance.
5. Ergot, its life cycle, its application in medicine.
6. Characteristics of class Basidiomycetes, their structure, reproduction, systematic position. Life cycle by the example of mushroom.
7. Lichens, classification. Morphological types. Reproduction. Role of lichens in nature and their use in medicine.
8. General description of the Plant Kingdom. Origin of plants.
9. Division of Crimsonweed (red algae). Characteristic features of the structure, reproduction, distribution. Peculiarities of the life cycle. Iso- and heteromorphic change of generations. Practical human use.
10. Division Diatom algae. Characteristic features of structure, reproduction, distribution. Role of diatom algae in nature.
11. Brown algae. General characteristics. Cycle of life using Laminaria as an example. Representatives with medical importance.
12. Division of Green algae. General characteristics, characteristics of cell structure of green algae. Significance of green algae.
13. Genus Chlamydomonas. General characteristic, cycle of life. Their importance in nature.
14. Spirogyra, characteristics of structure, life cycle. Significance in nature.
15. Higher plants, their origin. Features of air habitat. Vegetative organs and tissues. Features of the structure of reproduction organs. The main divisions of higher plants.
16. Division Bryophytes. The class Marchantiopsida. General characteristics, life cycle and alternation of generations by the example of Marchantia polymorpha.
17. Class Briopsida. General characteristic. Classification. Life cycle and alternation of generations by the example of Cuckoo flax moss. Medical applications of representatives of Bryidae.
18. Division Lycopodiophyta. General characteristics of modern Lycopodiophyta. Life cycle of Lycopodiophyta as exemplified by Plaunus clubmoss. Use in medicine.
19. Division of Equisetophyta. General characteristics of the main representatives of the division. Life cycle of Horsetail, its medical use.

20. Division of the Polypodióphyta. General characteristics of the Division. Sequence of generations and change of nuclear phases in the cycle of life of ferns by the example of *Dryopteris filix-mas*. Use of ferns in medicine.

21. General characteristic of seminal plants.

22. Characteristics of Gymnosperms. Their origin. Progressive features which appeared in the process of evolution.

23. Structure of generative organs of Gymnosperms on the example of Scots Pine.

24. Peculiarities of life cycle of Gymnosperms division using Scots Pine as an example.

25. Characteristics of class of Conifers. Their use in national economy and medicine.