

Ministry of Science and Higher Education of the Russian Federation
Federal State Budgetary Educational Institution of Higher Education "Yaroslav-
the-Wise Novgorod State University"

STATED BY:



Vice-Rector for Educational
Activities of NovSU
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PROGRAM
of entrance examination in Biology

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The program of the entrance examination is compiled on the basis of the requirements of the federal state educational standard of general secondary education.

The purpose of the entrance examination is to conduct an objective and reliable assessment of the level of training of applicants entering undergraduate/specialist programs of NovSU and to select the best trained applicants.

The program contains the procedure for the conduct of the entrance examination, criteria for evaluating the examination paper, program content, a list of recommended literature, an example of an examination test.

The procedure for the conduct of the entrance examination

The entrance examination is conducted in written or remote form and involves answers to the questions of an examination test, which allow to determine the level of training of applicants entering undergraduate/specialist programs of NovSU. The duration of the entrance examination is 2 astronomical hours (120 minutes).

Criteria for evaluating the examination paper

The maximum possible number of points that an applicant can receive on the entrance examination is 100 points.

The minimum number of points confirming successful completion of the entrance examination is 39 points. Applicants who receive 38 or less points are not allowed to participate in the competition.

An examination test contains:

25 tasks in part A

15 tasks in part B

20 tasks in part C

| Part | Number of tasks in a part | Number of points for each correctly completed task | Maximum total number of points |
|------|---------------------------|--|--------------------------------|
| 1 A | 25 | 2 | 50 |
| 2 B | 15 | 2 | 30 |
| 3 C | 20 | 1 | 20 |

Program content

Botany

Botany is the science of plants. Flora as an integral part of nature, its diversity, distribution on Earth. Flowering plant and its structure.

Seed. The structure of seeds (on the example of dicotyledonous and monocotyledonous plants). Conditions for seed germination. Seed respiration.

Root. Development of the root from the seminal root. Types of roots. Types of root systems (rod and fibrous). Root growth. The concept of fabric. Absorption by the roots of water and mineral salts needed by the plant. Fertilizers. Root crops (root modifications). The value of the root.

Leaf. The external structure of the leaf. Venation. Simple and compound leaves. Leaf arrangement. Features of the internal structure of the leaf in connection with its functions, skin and stomata, the main tissue of the leaf, conductive bundles. Leaf respiration. Evaporation of water by leaves. Leaf fall. The importance of leaves in plant life. The role of green plants in nature and human life.

Stem. The concept of the plant shoot. Vegetative and flower buds, their structure and location on the stem. Development of a shoot from the bud. Stem growth in length. The internal structure of a woody stem in connection with its functions: bark, cambium, wood, duramen.

Stem growth in thickness. The formation of annual rings. The movement of mineral and organic substances along the stem. The value of the stem. Modified shoots: rhizomes, tuber, bulb; their structure, biological and economic importance.

Vegetative reproduction of flowering plants. Reproduction of plants by means of shoots, roots, leaves in nature and crop production (by means of modified shoots, stem and root cuttings, layering, dividing the bush, grafting). Biological and economic value of vegetative reproduction.

Flower and fruit. Flower structure: peduncle, receptacle, perianth (calyx and corolla), stamens, pistil or pistils. The structure of the stamen and pistil. Inflorescences and their biological significance. Cross-pollination by insects, wind. Self-pollination. Fertilization. Formation of seeds and fruits. The significance of flowers, fruits and seeds in nature and human life.

General biology

Biology is the science of living nature. It studies the levels of organization of living nature: molecular, cellular, organismal, population-species, biogeocenotic, biospheric. It explores characteristics of living things: cellular structure, chemical composition, metabolism and energy conversion, irritability, homeostasis, growth, development, reproduction, movement, adaptation. Important topics of study are the following. Evolution of the organic world. Factors of evolution: heredity, variability, struggle for existence, natural selection. Directions and results of evolution. The system of the organic world. Classification of organisms. Biogeocenoses: natural and artificial. Ecosystem. Environmental factors. The cycle of substances and the conversion of energy in the ecosystem. Biosphere, the role of biological diversity in sustainable development and conservation of the biosphere.

Cell. Cell theory. Cellular structure of organisms. A cell is a structural, functional and genetic unit of living things. The structure and functions of the cell. Cells of prokaryotes and eukaryotes, autotrophic and heterotrophic organisms. Viruses, features of their structure and functioning. The chemical composition of the cell. The role of water and organic substances (carbohydrates, lipids, proteins, nucleic acids, ATP) in the cell. Metabolism and energy conversion in the cell. Enzymes, their role in accelerating chemical reactions in the cell. Energy and plastic metabolism, their role in the organism. Protein biosynthesis. Photosynthesis. Somatic and germ cells. Chromosomes, their set in somatic and germ cells. Cell division: mitosis and meiosis. Biological significance of mitosis and meiosis. Fertilization and its importance.

Heredity and variability of organisms. Crossing and analysis of offspring is the main method for studying heredity. Mono- and dihybrid crossing. Dominant and recessive traits. Allelic genes. Phenotype and genotype. Homozygote and heterozygote. The laws of heredity established by G. Mendel: uniformity of the first generation of hybrids; law of segregation; law of independent assortment. T. Morgan's law of genetic linkage. The genotype as an integral system. Modification variability, its limits. The role of the genotype and environmental conditions in the formation of the phenotype. Mutations, their material basis — changes in genes and chromosomes.

Evolution of the organic world. The diversity of species in nature, of plant varieties and animal breeds. Ch. Darwin's theory about the causes of diversity of species in nature, their adaptability to the environment. A species, its characteristics. A population is a structural unit of a species and evolution. Natural selection is the driving and guiding force of evolution. Prerequisites for the action of natural selection. Hereditary heterogeneity of individuals and the struggle for existence. Forms of the struggle for existence as the basis of natural selection. The main forms of selection. The role of natural selection in the formation of new properties, traits and new species. Mutations are the material for natural and artificial selection. The results of evolution: the diversity of species, the adaptability of organisms to the environment. Evidence of the evolution of the organic world and the origin of man from animals. The main directions of evolution. The main aromorphoses in the evolution of plants and animals. Biological and social factors of human evolution. The main stages of human evolution.

Ecosystems. Biogeocenosis or ecosystem. Environmental factors: abiotic, biotic, anthropogenic. The value of various species, populations in ecosystems. Adaptation of organisms to living in an ecosystem. Food chains. Organisms are producers, consumers and destroyers of organic matter. Circulation of substances. Changes in ecosystems. Artificial ecosystems, their features. Biosphere is the biological shell of the Earth, the distribution of biomass in it, the boundaries of the biosphere.

The major kingdoms of nature. Bacteria. Unicellular organisms. The structure, vital activity, reproduction and distribution of bacteria. Diversity of bacteria in structure, mode of nutrition, habitat. The place of bacteria in the system of the organic world.

Fungi. Unicellular and multicellular organisms, eukaryotes, heterotrophs. Features of the structure and functions of the fungal cell. The structure and activity of the fungal organism. The place of fungi in the system of the organic world, the diversity of fungi in structure, modes of nutrition, habitat.

Lichens. Complex symbiotic organisms, features of their nutrition, habitat. The place of lichens in the system of the organic world. Diversity of lichens, their role in ecosystems.

Plants. Flora as an integral part of nature, its diversity. Features of the plant organism as autotrophic and eukaryotic. Features of the structure and vital activity of a plant cell, tissues, organs.

Plant nutrition. Movement of substances. Mineral nutrition. The structure of the root and its role in the absorption of water and minerals. Photosynthesis. Features of the leaf structure in connection with photosynthesis, the role of chloroplasts and chlorophyll in this process.

Plant respiration, its role in providing the plant organism with energy.

Stomata, lenticels, their role in gas exchange.

Reproduction, growth and development of plants. Asexual and sexual reproduction. Flower, its structure and significance in the formation of seeds and fruits. Pollination. Fertilization. Plant development from fertilization to seed formation.

Plant classification. Algae, mosses, ferns, horsetails, club mosses, gymnosperms, angiosperms. Their origin, features of structure and life, place in the system of the organic world, in ecosystems. The main features of the main departments. Classes and families of angiosperms. Their significance in nature and for men.

Animals. Fauna as an integral part of nature, its diversity. Features of the animal organism as heterotrophic and eukaryotic. The difference between animals and plants. Features of the structure and vital activity of cells, tissues, organs, organ systems, the animal organism, their relationship.

Nutrition. Herbivores, carnivores, omnivores, parasites. Digestion in unicellular and multicellular animals, the entry of nutrients into the cells of the body and their transformation into cell substances. The role of enzymes in digestion. Removal of undigested residues from organisms.

Breath. Diversity of animal respiratory organs. Gas exchange in them. The supply of oxygen to the cells of the body, the oxidation of organic substances and the release of energy.

Transport of substances in animals. The role of the liquid internal environment in the transport and provision of body cells with oxygen and nutrients, in the removal of waste products from the body. Circulatory organs of vertebrates: heart and blood vessels. The work of the mammalian heart.

Excretion, its value. Excretory organs.

Metabolism. Energy transformation. The dependence of the intensity of metabolism on the amount of oxygen entering the cells. Cold-blooded and warm-blooded animals.

The role of *the nervous system* in the regulation of animal life processes, in establishing the connection of the organism with the environment. A neuron is a structural unit of the nervous system. The reflex is the basis of the nervous activity of animals. Animal behavior.

Animal movement. The musculoskeletal system, its complication in the process of evolution of animals.

Reproduction, growth and development of animals. Reproduction, its meaning. Asexual and sexual reproduction. Fertilization. The value of combining the maternal and paternal sets of chromosomes during fertilization. Animal growth. Cell division. Age restrictions on the growth of animals.

Animal classification. Unicellular animals, features of their habitat, structure and life. The origin of multicellular animals, the specialization of their cells. Features of the structure, life, diversity, adaptability to the habitat of invertebrates, their classification. Types: coelenterates, flatworms, roundworms, annelids, mollusks, arthropods. Classes of arthropods: crustaceans, arachnids, insects. The type of chordates: diversity, features of the structure and life, classification. Features of the structure and life of vertebrates, their behavior, reproduction and development. The main classes of vertebrates: cartilaginous and bony fishes, amphibians, reptiles, birds, mammals. Orders of mammals. The main stages and directions of evolution of vertebrates, their origin.

Human. The place and role of man in nature. Similarities and kinship between humans and mammals. Cellular structure of the human body.

Movement. The structure of the human skeleton, its composition and functions. Bone tissue is a type of connective tissue. The structure, composition and growth of bones, their connection. Similarities between human and mammalian skeletons. Features of the human skeleton associated with labor activity and upright posture.

Muscles. Structure and functions of skeletal muscles. Muscular fiber, its structure. Muscle work and fatigue.

Transport of substances. The circulatory system and its significance. The internal environment, its role in the body. The chemical composition of blood and its structure. Blood plasma. Blood coagulation as a protective reaction of the body. The structure and functions of erythrocytes and leukocytes. Blood groups. Immunity.

Blood circulation organs. Heart and blood vessels. The structure of arteries, veins and capillaries. Striated cardiac tissue. The work of the heart and its regulation. Systemic circulation and pulmonary circulation, changes in the composition of the blood in them. The movement of blood through the vessels. Blood pressure. Pulse. Lymphatic circulation. The structure of the lymphatic system.

Breath. Respiratory system, vocal apparatus, their structure and functions.

The mechanism of respiratory movements and their regulation. Gas exchange in the lungs and tissues.

Nutrition and digestion. Foods and nutrients. Digestive system, its structure and significance. The role of teeth and digestive glands in mechanical and chemical changes of food. Absorption of nutrients, their entry into cells, tissues. Regulation of the activity of the digestive organs.

Metabolism. Plastic and energy exchanges, their relationship. The value for the body of proteins, fats, carbohydrates, water and mineral salts. Metabolism regulation. Vitamins and their role in metabolism. Energy consumption. Excretion from the body of end products of metabolism. Skin, its structure and functions, role in metabolism and thermoregulation.

Reproductive system. Sex glands, their functions. The formation of germ cells. Fertilization and intrauterine development. The role of hormonal regulation in the sexual development of the organism. Birth, growth, development of the child. Adolescence.

Regulation in the process of life. Neurohumoral regulation, its role in ensuring the connections of organs, organ systems, the relationship of the organism and the environment. Endocrine glands, hormones, their importance in the regulation of body functions, for its growth and development.

Nervous system, its central and peripheral parts. Neuron. Reflex. Reflex arc. Spinal cord and brain, their structure and functions. Large hemispheres of the brain. Sense organs. Analyzers, their value. Unconditioned and conditioned reflexes, their role in human life. Significance of

inhibition of conditioned reflexes. Features of the higher nervous activity of man. Speech and thinking. Social conditioning of human behavior. Sleep and its meaning.

Anthropogenesis. The place of man in the system of the organic world. Evidence of the origin of man from animals. Driving forces of anthropogenesis. Biological and social factors of anthropogenesis. The main stages of human evolution. Ancestral homeland of mankind. Settlement of man and the formation of races. Population structure of *homo sapiens* species. Adaptive types of a person. Development of material and spiritual culture, transformation of nature. Factors in the evolution of modern man.

Breeding basics. Genetic bases of plant, animal and microorganism breeding. Tasks of modern selection. N.I. Vavilov about the origin of cultivated plants. The value of the source material for breeding.

Plant breeding. Basic breeding methods: hybridization and artificial selection.

The role of natural selection in breeding. Self-pollination of cross-pollinated plants. Heterosis. Polyploidy and distant hybridization. Achievements in plant breeding.

Animal breeding. Types of crossing and methods of breeding. Method for the analysis of hereditary economically valuable traits in breeding animals. Remote hybridization of domestic animals.

Breeding of bacteria, fungi. its importance for the microbiological industry (obtaining antibiotics, enzyme preparations, fodder yeast, etc.). The main directions of biotechnology (microbiological industry, genetic and cell engineering).

Biosphere and scientific and technological progress. Biosphere in the period of scientific and technological progress and human health. Environmental problems: protection from pollution, preservation of standards and monuments of nature. species diversity. biocenoses. landscapes.

List of recommended literature

Main literature:

1. Belyakova G.A., Zdanovich V.V., Rostovtseva E.L. *Biologiya. Botanika. Zoologiya* [Biology. Botany. Zoology]. Ilekso Publ., 2019.
2. Bogdanova T.L., Solodova E.A. *Biologiya. Spravochnik dlya shkol'nikov i postupayushchikh v vuzy. FGOS* [Biology. Handbook for schoolchildren and applicants to universities. Federal State Educational Standard]. AST-Press Publ., 2019.
3. Bilich G.L., Kryzhanovsky V.A. *Biologiya dlya postupayushchikh v vuzy* [Biology for applicants to universities]. Rostov-on-Don, Feniks Publ., 2019.
4. Bilich G.L., Zigalova, E.Yu., Pasechnik, V.V. *Biologiya dlya abiturientov: YEGE, OGE i olimpiady lyubogo urovnya slozhnosti* [Biology for university applicants: Unified State Examination, Main State Examination and Olympiads of any level of complexity]. In 2 volumes. Vol. 1. Moscow, Eksmo Publ., 2019.
5. Lemeza N.A., Kamlyuk L.V., Lisov N.D. *Biologiya dlya postupayushchikh v vuzy* [Biology for applicants to universities]. Moscow, Knizhny Dom Publ., 2019.
6. Lerner G.I. *YEGE. Biologiya. Novyy polnyy spravochnik dlya podgotovki k YEGE* [Unified State Examination. Biology. A new complete guide for preparing for the Unified State Examination]. Moscow, AST Publ., 2019.
7. Mamontov S.G., Zakharov V.B., Sonin N.I. *Biologiya. Obshchiye zakonomernosti. 9 kl.: Ucheb. dlya obshcheobrazovatel'nykh uchrezhdeniy* [Biology. General patterns. Grade 9: Textbook for educational institutions]. 5th ed. Moscow. Drofa Publ., 2004. 208 p.
8. Pasechnik V.V. *Biologiya. 6 kl. Bakterii, griby, rasteniya: Ucheb. dlya obshcheobrazovatel'nykh uchrezhdeniy* [Biology. Grade 6. Bacteria, fungi, plants: Textbook for educational institutions]. 7th ed. Moscow, Drofa Publ., 2003. 272 p.

Additional literature:

1. Biological sciences:an inquiry into life / F.M.Hickman, .H.Kennedy,E.A.Combs,C.M.Marble. - 4th ed. - Orlando : Harcourt Brace Jovanovich, 1980. - XIII, 754 p. : ill. - (Biological sciences curriculum study). - Библиогр. в конце гл. - Index:p.743-754. - ISBN 0-15-360755-6.
2. Berrill, N.J. Biology in action:a beginning college textbook. - New York : Dodd, Mead & Company, 1966. - XVI, 878 p. : ill. - Библиогр. в конце гл. - Glossary:p.845-859,index:p.861-878.
3. Voss, Burton E. Biology as inquiry : A book of teaching methods / Burton E.Voss,Stanley B.Brown. - Saint Louis : The C. V. Mosby Company, 1968. - 239 p. : ill. - Библиогр. в конце гл. - Index:p.234-239.
4. Biochemistry / Thomas Briggs,Albert M.Chandler. - 3rd ed., rev. - New York : Springer-Verlag, 1995. - XI, 287 p. : ill. - (Oklahoma Notes). - ISBN 0-387-94398-6 : 15.00.
5. Physiology / Edited by Roger Thies. - rev.4th ed. - New York : Springer-Verlag, 1995. - X, 280 p. : ill. - (Oklahoma Notes). - ISBN 0-387-94397-8
6. Jecklin, Erica. Arbeitsbuch Anatomie und Physiologie : Fur Krankenschwestern,Krankenpfleger und andere Medizinalfachberufe. - 4 neubearb. u. erw. Aufl. - Stuttgart : Gustav Fischer Verlag, 1986. - XII, 318 S. : Ill. - (Semper Bonis Artibus). - Библиогр.: с. 293-294. - Verzeichnis:S. 295-318. - ISBN 3-437-00453-0

Examination test example

BIOLOGY

Variant 1

Maximum number of points is 100.

Part 1

Each correctly completed task is 2 points.

For tasks A1–A25, choose one or more correct answers, write the corresponding letter(s) on your answer sheet.

A1. What organelles are found only in plant cells?

- a) mitochondria
- b) Golgi apparatus
- c) chloroplasts

A2. Of the listed organelles, there are no membranes in

- a) chloroplasts
- b) ribosomes
- c) vacuoles

A3. In addition to the nucleus, they have their own genome

- a) peroxisomes
- b) plastids
- c) Golgi apparatus

A4. Cellulose in the cell wall performs mainly

- a) skeletal function
- b) signaling function
- c) secretory function

A5. The nucleus does not contain

- a) DNA
- b) histones
- c) proteolytic enzymes

A6. A single set of chromosomes is

- a) karyotype
- b) autosome
- c) genome

A7. The process leading up to mitosis

- a) disappearance of nuclear membrane
- b) duplication of chromosomes
- c) spindle formation

A8. How many chromatids does a pair of homologous chromosomes in the metaphase of mitosis contain?

- a) 2
- b) 4
- c) 6

A9. How many periods does interphase include?

- a) 1
- b) 2
- c) 3

A10. The theory of double symbiosis refers to the theory that describes

- a) the relationship between mycorrhizal fungi and plants
- b) the use of oxygen by animals, released by plants during photosynthesis
- c) the origin of mitochondria and chloroplasts by integration into the plant cell of bacteria

A11. The presence of plasmodesmata is characteristic of

- a) animals

- b) fungi
- c) plants

A12. The most active absorption of water by roots occurs in the zone of

- a) growth
- b) branching
- c) root hair

A13. Valves in the human heart are located

- a) between veins and atria
- b) in the cavity of large veins
- c) between atria and ventricles

A14. Fish oil for humans is a source of vitamin

- a) B₁
- b) B₁₂
- c) D

A15. What systems of the human body coordinate the work of internal organs?

- a) muscular and excretory
- b) nervous and endocrine
- c) digestive and respiratory

A16. When providing first aid, an ice pack or cold water is used in case of

- a) sprains or displacement of bones in the joint
- b) open fracture of the bones of the limbs
- c) damage to the vertebrae of the spine

A17. The breakdown of carbohydrates in the human digestive system begins under the influence of digestive juice, which is formed in

- a) pancreas
- b) salivary glands
- c) gastric glands

A18. Which of the following features can be attributed to the ecological criterion of the common hedgehog species?

- a) the presence of needles on the body
- b) terrestrial way of life
- c) distribution in Europe

A19. Natural selection, as opposed to artificial selection,

- a) takes place over millions of years
- b) is carried out by man based on their needs
- c) leads to the creation of new breeds

A20. Eristalis (drone flies) look like bees. What form of adaptation does this example illustrate?

- a) disguise
- b) mimicry
- c) seasonal coloration
- d) divisive coloration

A21 What organisms are classified as consumers of organic matter?

- a) bacteria
- b) algae
- c) mosses
- d) animals

A22. Where do autotrophs fit in the ecological pyramid?

- a) the base of the ecological pyramid
- b) the top of the ecological pyramid
- c) any place
- d) average levels

A23. Chromosomes are structures made up of

- a) protein
- b) DNA
- c) RNA
- d) protein and DNA

A24. The role of the nucleolus is to form

- a) chromosomes
- b) lysosomes
- c) ribosome
- d) mitochondria

A 25. The nucleus of a cell is

- a) single membrane structure
- b) two-membrane structure
- c) non-membrane
- d) homogeneous structure

Part 2

(Each correctly completed task is 2 points).

For tasks B1–B15, find a match, make a sequence, choose one or more correct answers, write down the corresponding letter(s) on your answer sheet.

B1. Human embryonic development mainly occurs in

- a) ovary
- b) fallopian tubes
- c) oviduct
- d) uterus

B2. Damage to what part of the brain in a human stops cardiac activity?

- a) front
- b) average
- c) intermediate
- d) oblong

B3. The habitat of the common mole in the soil is an indicator of the following species criterion:

- a) geographic
- b) ecological
- c) morphological
- d) physiological

B4. Intraspecific struggle for existence occurs as a result of

- a) relationship of individuals of the same population
- b) competition between populations of different species for food
- c) relations of the predator-prey type
- d) reducing the number of species in the ecosystem

B5. Mitosis is

- a) synthesis of proteins and RNA
- b) accumulation of energy for the next division
- c) random distribution of chromosomes
- d) a method of orderly division of the cell nucleus

B6. Chromatin is made up of repeating units called nucleosomes. Each nucleosome contains the following number of histone molecules:

- a) 4

- b) 8
- c) 16
- d) 32

B7. All cells of any organism come from

- a) zygotes
- b) chromosomes
- c) mitochondria
- d) acrosomes

B8. What can act as coenzymes?

- a) hormones
- b) water soluble vitamins
- c) alcohols
- d) polyunsaturated fatty acids
- e) metal ions

B9. The active site of an enzyme is

- a) the organelle in which the reaction it catalyzes takes place
- b) the set of conditions under which the reaction takes place
- c) a set of functional groups of the enzyme molecule directly involved in the enzymatic

reaction

B10. An inhibitor is called a competitive when it

- a) prevents the breakdown of the enzyme-substrate complex
- b) interacts with the enzyme in the region of the active center
- c) interacts with the enzyme outside the region of the active center

B11. What protein substances are synthesized in the human body in response to the penetration of pathogens into it?

- a) carbohydrates
- b) enzymes
- c) antibodies
- d) hormones

B12. If light rays are focused behind the retina, this causes

- a) conjunctivitis
- b) farsightedness
- c) night blindness
- d) inflammation of the cornea

B13. The prerequisite for speciation is

- a) mitigation of intraspecific relations
- b) formation of a new complex of genes in a population
- c) the formation of a single range of the species
- d) change in the age structure of the population

B14. Selection, as a result of which individuals with an average manifestation of a trait are preserved in nature, and individuals with deviations from the norm are discarded, is called

- a) driving
- b) methodical
- c) disruptive
- d) stabilizing

B15. What allows the ordinary squirrel to remain active at low winter temperatures?

- a) burrowing in the snow
- b) thick coat
- c) eating animal food
- d) living in the crowns of trees
- c) jointed limbs
- d) tracheal breathing

Part 3

(Each correctly completed task is 1 point).

For tasks C1–C20, write the correct answers and the corresponding terms in the tables on your answer sheet.

- C1.** Female sex hormones are produced in
- C2.** In dogs with the aaBB genotype, the following gametes can be:
- C3.** In dogs, black coat color dominates over fawn, short coat over long. What percentage of shorthair black puppies can be expected from mating heterozygous individuals?
- C4.** A protein molecule forms a tertiary structure due to the presence in it of the following bonds
.....
- C5.** Potato tuber is a modified
- C6.** What type of animals are earthworms?
- C7.** When dropping leaves by trees and shrubs, their absorption of water is significantly reduced, since
- C8.** Rod-shaped spore-forming bacteria are called
- C9.** The pigment found in the epidermis of the skin is called
- C10.** The corpus luteum produces the following hormone:
- C11.** The cerebellum belongs to the brain.
- C12.** The substance that gives hardness to the cell wall of bacteria is
- C13.** In what group of animals is the circulatory system transporting nutrients throughout the body?
- C14.** Where are germ cells formed in?
- C15.** As a result of what process in the organism of bacteria energy is accumulated in ATP?
.....