

266. The mother has a blood group A and the father has a blood group AB. What blood group can their child have:

- a. homozygous B when the mother is homozygous
- b. homozygous A, regardless of the mother's genotype
- c. O if the mother is heterozygous
- d. AB, regardless of maternal genotype
- e. B if the mother is heterozygous
- f. heterozygote A, regardless of the mother's genotype
- g. O if the mother is homozygous
- h. homozygous B when the mother is heterozygous

267. Y chromosome in karyotype means:

- a. aneuploidy in mammals
- b. male sex in humans
- c. female sex in humans
- d. chromosome segregation disorder
- e. male gender in humans
- f. female gender in birds
- g. male gender in butterflies
- h. polyploidy in butterflies

268. The phenotypes ratio of cross of two single gene heterozygotes with dominancy is:

- a. 2: 1
- b. 3: 1
- c. 3: 2: 1
- d. 1: 1
- e. 66%: 33%
- f. 75%: 25%
- g. 25%: 50%: 25%
- h. 50%: 50%

269. The basic methods of true-breeding include:

- a. hybridization
- b. grafting
- c. crossbreeding
- d. self-splicing methods
- e. biotechnology
- f. selecting individuals with the required characters
- g. natural selection
- h. sex selection

270. Intermediarity is:

- a. case of incomplete dominancy in which the dominant allele does not appear in the heterozygote phenotype

- b. case of incomplete dominance, in which both alleles are equally manifest in the heterozygote phenotype
- c. interspecific crossbreeding
- d. specific case of dominance in which the dominant allele does not appear in the heterozygote phenotype
- e. phenomenon where the two alleles in the pair are different but the trait is one and both alleles cooperate on its form equally
- f. phenomenon where the two alleles in the pair are the same, the trait is one, and both alleles cooperate on its form equally
- g. phenomenon when two different alleles determined the creation of two traits
- h. particular case of incomplete dominance in which the recessive allele does not appear in the heterozygote phenotype

271. What is the probability that woman, a carrier for daltonism with a daltonistic man can have a color-blind daughter:

- a. 25%
- b. 50%
- c. 100%
- d. 0%
- e. same as the daltonic son
- f. double as the daltonic son
- g. same as the carrier daughter
- h. same as the homozygous healthy daughter

272. Both parents have a blood group AB. What blood group can their children have:

- a. heterozygous A
- b. heterozygous B
- c. homozygous O
- d. homozygous A
- e. homozygous B
- f. codominant AB
- g. heterozygous O
- h. codominant A

273. Haemophilia A (hereditary bleeding) occurs:

- a. more often in women
- b. more often in men
- c. same in both sexes
- d. in men whose father had this disease
- e. in men whose mother is a carrier
- f. in sons which mother is carrier
- g. in all sons which mother is carrier
- h. only in the men whose father suffer to haemophilia

- g. some of the prototrophic bacteria
- h. iron bacteria

466. Erythrocyte antigens are:

- a. called agglutinins
- b. called erythrogenes
- c. called agglutinogens
- d. called immunoglobulins
- e. are responsible for blood group in man
- f. allow for isohemagglutination
- g. hereditary
- h. not hereditary

467. In which prokaryotic cells are thylakoids:

- a. in Fungi
- b. in all Bacteria
- c. in all Protozoa
- d. in Cyanobacteria
- e. in photosynthetic bacteria
- f. in Cyanophyta
- g. in chemosynthetic bacteria
- h. in Cyclostomata

468. The average size of bacteria is:

- a. approximately 1 micrometer
- b. approximately 0.1 micrometer
- c. approximately 1 milometer
- d. several nanometers
- e. less than 1 micrometer
- f. 0.1 -0,5 milometer
- g. 0.3 -2.0 micrometer
- h. 0.3 -2.0 milometer

469. Nonspecific immunity is:

- a. natural defensiveness of organism
- b. hereditary disease
- c. exocytosis
- d. natural defensiveness of organism against the foreign cells and the agents of infections
- e. way of organism defense consisting of healthy skin and mucosa, natural antimicrobial compounds and cells which are capable of phagocytosis
- f. natural production of specific antibodies by T lymphocytes
- g. natural production of specific antibodies by macrophages
- h. immune response after insertion of antibody into organism

470. Sporozoa:

- a. are single celled parasites
- b. are reproduced sexually and asexually
- c. include Foraminifera
- d. live in the sea
- e. include Radiolaria
- f. live in tissues of other animals
- g. do not have locomotive organs
- h. parasitize in Hydrozoa

471. What is bacteriochlorophyll:

- a. pigment of chemosynthetic Bacteria
- b. pigment of Cormobionta
- c. pigment of some Porifera
- d. pigment photosynthetic bacteria
- e. pigment of photosynthetic Fungi
- f. mutation of chlorophyll
- g. part of the cell wall of photosynthetic bacteria
- h. pigment of eukaryotic plant

472. What belongs to manifestation of specific antibody immune response:

- a. production of antibodies in bone marrow
- b. production of antibodies in B-lymphocytes
- c. production of antibodies in T-lymphocytes
- d. production of antibodies in erythrocytes
- e. production of positive chemotaxis
- f. production of specific immunoglobulins
- g. production of specific antibiotics
- h. production of agglutinogens

473. Protective treatment at a time when the risk of infection has not yet occurred is called:

- a. pasteurization
- b. prophylaxis
- c. parallax
- d. detoxification
- e. preventive vaccination
- f. quarantine
- g. allergy
- h. purification

474. Which animals does the specific immune response take place:

- a. mammals

793. Which of these animals hibernates:

- a. a hedgehog
- b. a dormouse
- c. a hamster
- d. a marmot
- e. a ground squirrel
- f. a bat
- g. a wolf
- h. a fox

794. Which organisms create clones:

- a. bacteria
- b. single-celled cyanobacteria and algae
- c. yeast
- d. mold
- e. gametes
- f. multicellular organisms
- g. viruses
- h. sponges

795. The whales breathe with:

- a. gills
- b. lungs
- c. tracheae
- d. the entire surface of the body
- e. pulmonary bags
- f. organ of the lateral line
- g. trachea
- h. Malpighian tubules

796. The heart of a whale consists of:

- a. two atriums and two ventricles
- b. one atrium
- c. one atrium and one ventricle
- d. two atriums and one ventricle
- e. two sections
- f. three sections
- g. four sections
- h. one atrium and two ventricles

797. The excretory system of vertebrate includes:

- a. sebaceous glands
- b. kidneys
- c. urinary tracts

- d. a bladder
- e. protonephridia
- f. metanephridia
- g. nephros
- h. Malpighian tubules

798. What do we call the inner breathing:

- a. transmission of CO₂ to individual organs
- b. O₂ and CO₂ exchange between blood and alveolar air
- c. O₂ and CO₂ exchange between blood and tissues
- d. CO₂ and O₂ transfer between tissues and blood
- e. exchange of CO₂ and O₂ between blood and alveolar air
- f. exchange of breathing gases between blood and lungs
- g. exchange of CO₂ for O₂ in the lungs
- h. exchange of CO₂ for O₂ between blood and plasma

799. Animals with constant body temperature are:

- a. endothermic
- b. ectothermic
- c. thermophilic
- d. polythermic
- e. exothermic
- f. autothermic
- g. monotermic
- h. homothermic

800. The endogenous biorhythms are a manifestation of :

- a. self-acting and joint activities of organisms
- b. isolated activity of organisms
- c. activity of ones own organism
- d. autonomous activities of organisms
- e. the public institutions
- f. rhythmic activity of the society
- g. phenomena in society
- h. irregular environmental phenomena

801. The back part of the brain of the higher vertebrates consists of:

- a. spinal cord
- b. prolonged spinal cord
- c. bridge
- d. little brain
- e. thalamus
- f. hypothalamus
- g. pallium
- h. the pyramid track