

English quiz for IIIrd year Veterinary students

1. Pharmacology is the science that deals with the study of medicinal products in terms of:
 - a) origin
 - b) physical structure
 - c) kinetics and their action
 - d) toxicity.
2. The allopathic principle was introduced by:
 - a) Euphrast
 - b) Hahnemann
 - c) Hippocrates
 - d) Galenos
 - e) Paracelsus.
3. The principles of homeopathy are the:
 - a) principle of complementarity
 - b) principle of similarity
 - c) principle of infinitesimal doses
 - d) principle of individualised treatment
 - e) principle of substituted dosage.
4. Pharmacognosy deals with:
 - a) synthesis and chemical structure of the drugs, knowledge of drugs from which medicinal substances are extracted
 - b) the main therapeutic characteristics
 - c) the effect of drug on laboratory animals or isolated organs.
5. Clinical pharmacodynamics aims the effect of medicines:
 - a) during treatment
 - b) on laboratory animals or isolated organs
6. Pharmacokinetics is the pharmacology branch that deals with the:
 - a) study of drug circulation in organism
 - b) temporal alterations- dose relation
 - c) physico - chemical properties of drugs.
7. Pharmacokinetics sub-branches are:
 - a) invasion
 - b) coupling
 - c) evasion
8. Invasion phase includes:
 - a) drugs absorption
 - b) drugs metabolism
 - c) drugs distribution
 - d) drugs disposal
9. Pharmacometry studies the:
 - a) effect of medicines during treatment
 - b) movement of drug within the body
 - c) measurements of drugs' effect intensity
10. Therapeutic efficacy of drugs on affections is dealt by:
 - a) pharmacodynamics
 - b) pharmacokinetics
 - c) clinical pharmacology
 - d) pharmacometry
11. Pharmacogenetics deals with the:
 - a) prescribing and preparing medicinal forms
 - b) study of drugs chronic or acute toxicity
 - c) correlation between: activity of intracellular biochemical substances and components
12. Pharmacogenetics deals with:
 - a) the study of drugs chronic or acute toxicity
 - b) the drug influence on genetic factors
 - c) the correlations between the enzymatic activity and genome
13. Molecular pharmacology establishes correlations between:
 - a) the activity of intracellular biochemical substances and components
 - b) drug side effects
 - c) synthesis and chemical structure of the active substances.
14. Molecular pharmacology establishes correlations between:
 - a) adverse effects of drugs
 - b) synthesis and chemical structure of the active substances
 - c) effect of medicines on humans and animals.
15. Bioavailability refers to:
 - a) how the substance is released from the drug form
 - b) elements which determine the absorption and diffusion of substances
 - c) correlations established between the activity of biochemical substances and components.
16. Biopharmacy deals with:
 - a) the release way of active substances
 - b) relations between physico - chemical properties of active substances
 - c) form preparation and drug administration
 - d) pharmacokinetic parameters and their effects.
17. The first phase of dissolution of the tablets:
 - a) disaggregating
 - b) disintegration
 - c) spraying.

English quiz for IIIrd year Veterinary students

18. The first stage of dissolution of capsules is:
 a) disintegration
 b) disaggregation.
19. A drug is:
 a) a substance of vegetable, animal or synthetic origin entering the body's metabolism and being strictly necessary
 b) a substance that introduced into the body produces general disorder.
20. A drug is a substance:
 a) used in diagnosis, treatment, mitigation or prevention of a disease
 b) of vegetable, animal or synthetic origin entering the body's metabolism being necessary
21. A drug is able to:
 a) make it possible to recognize, remove, ease or prevent symptoms
 b) make it possible to recognize or influence organic structures, functions or behavior typology
 c) to be a plastic source and reserve with whom the body maintains its life.
22. An ideal drug has:
 a) a precise activity
 b) a known mechanism of action
 c) constant efficiency
23. An ideal drug has:
 a) constant efficiency
 b) tolerable side effects
 c) absence of side effects.
24. All drugs that are absorbed in the body are toxic:
 a) in higher doses than therapeutic
 b) below the therapeutic dose
 c) in therapeutic doses.
25. Food - medicine - toxic can be, for example:
 a) acetyl salicylic acid
 b) glucose
 c) minerals
 d) hormones
26. Food - medicine - toxic can be, for example:
 a) microelements
 b) minerals
 c) vitamins
27. Standardization drug includes:
 a) adoption of tests that determine the purity and identity of a source of medicine
 b) recommendations related to dose size
 c) recommendations on the frequency of administration.
28. In Pharmacopoeia is given the:
 a) accepted name
 b) officinal name
 c) owner's name
29. In current clinical practice is used the drug's:
 a) Latin name
 b) official name
 c) trade name
30. The drug's Common International Name (DCI) is determined by:
 a) chemical structure
 b) product's Latin name
 c) filed name of the active substance
31. The first Pharmacopoeia appeared in:
 a) Japan
 b) China
 c) Sumer
 d) Greece
32. Romanian Pharmacopoeia appeared to date from:
 a) X - edition
 b) XI - edition
 c) XII - edition.
33. Medications can be given
 a) magisterially
 b) officinal
 c) typified
 d) standardized.
34. The dosage form means:
 a) pharmacy executable form with a fixed composition
 b) finite presentation of a drug for administration.
35. The chemical name is:
 a) officinal name in pharmacopoeia
 b) the correlation of the chemical structure
 c) producing company name given.
36. The bioavailability of a drug is the relationship of:
 a) peak plasma drug test and reference drug
 b) variability expressed as a percentage of a reference product compared with a product under test.

English quiz for IIIrd year Veterinary students

37. Bioavailability of a drug is relationship of:
- variability expressed as a percentage of a reference medicinal product compared to a drug test
 - blood test drug concentration compared to a reference medicinal**
 - peak plasma drug test and reference drug
38. The therapeutic effect of a drug is influenced primarily due to:
- dissolution constant**
 - absorption constant**
 - biological half-life**
 - rate of passage through lipophilic barriers
 - elimination constant**
 - the constant accumulation in tissues.
39. Bioavailability is:
- inversely proportional to the dissolution rate
 - directly proportional to the rate of dissolution**
 - It is not affected by this parameter.
40. An oral solution preparation form has a:
- great availability**
 - low availability
 - equal to an bolus oral preparation.
41. Bioequivalence of a drug is determined by:
- its chemical bioequivalence**
 - its clinical bioequivalence**
 - its therapeutic bioequivalence**
 - isomeric bioequivalence
 - all above
42. Polymorphism is the property of a drug:
- to determine different therapeutic effect at the same species
 - to determine the clinical responses identical, but different speeds
 - to determine different therapeutic effects depending on the species.
43. Polymorphism is the property of a drug to:
- to determine different therapeutic effects at the same species
 - crystallize different**
 - to determine the clinical responses identical, but different speeds
44. Polymorphs of active substances have:
- totally different physical and chemical properties
 - identical physical properties but different chemical properties
 - different physical properties but chemical identical.**
45. Polymorphs of active substances:
- identical physical but different chemical properties
 - identical physico-chemical properties and different chemical
 - chemical and physical properties totally different.
46. Thermodynamic unstable polymorphs are called also:
- hipostable
 - metastable**
 - thermolysis.
47. The amorphous forms, as compared to the crystalline or anhydrous, have a dissolution speed usually:
- smaller
 - greater**
 - equal.
48. Designation of polymorphs is made with:
- Arabic numerals
 - uppercase**
 - roman numerals.**
49. Aspirin given as monoparticles causes:
- far fewer gastric bleeding**
 - more stomach bleeding
 - as many gastric bleeding as macroparticles.
50. Nitrofurantoin administered in the form of microcrystals (10µm), causes effect:
- more efficient
 - dizziness and nosea**
 - effect identical to that produced by the larger crystal forms
51. Antihelminthic digestive products for a complex action, must:
- dissolve very rapidly
 - dissolve slowly**
 - not dissolve, but stationed at the action site
52. Griseofulvin shredded ultrafine allows healing skin mycoses using only half the usual recommended dose.
- real**
 - false
 - action is not influenced by the particle size
53. Cortisone with a great grinding will have action 20 times slower than the finely ground.
- action is not influenced
 - false
 - real.**

English quiz for IIIrd year Veterinary students

54. Barium sulfate fine particles are:
a) a very good digestive
b) a digestive irritant (because it forms granulomas)
c) removed as such due to the reduction of particle.
55. Decrease size of hydroxypropiophenone crystals entails:
a) two times faster inhibition of gonadotropins
b) loss of specific inhibitory activity
c) diversion of estrogenic activity
56. Great reduction of the particle size generate:
a) solubility decreasing
b) rheological properties change
c) environment moisture absorbing
d) loss of stability
57. A deliquescent active substance is:
a) a substance that has the ability to dispose water of crystallization
b) an active substance that can lower the melting point of another active substance
c) a substance that has the ability to absorb quantities of vapors to be transformed into its liquid form.
58. A deliquescent active substance is:
a) an active substance that can lower the melting point of another active substance
b) a substance that has the ability to give up water of crystallization
59. An efflorescent active substance is:
a) a substance that can lower the melting point of the other active substances
b) a substance which may lose all or part of crystallization water
c) a hygroscopic substance capable of absorbing moisture from the air.
60. An eutectic mixture is:
a) a combination of active substances that decrease each others melting point and ultimately liquefaction;
b) a combination of substances that change their hygroscopicity;
c) an association that determines the loss of water of crystallization.
61. Which of these substances is efflorescent?
a) aluminum sulphate
b) zinc carbonate
c) borax
d) aluminum silicate
e) codeine sulfate
62. Which of these combinations is not deliquescent but efflorescent?
a) aluminium sulphate - borax
b) phenol - thymol
c) camphor - Menthol
d) aspirin - acetanilide.
63. An oral tablet will dissolve in (after R.Ph X)
a) 15 minutes
b) within 5 minutes
c) 30-60 minutes.
64. A solution is considered weak alkaline at a pH value between:
a) 7.5-10
b) 6.5 to 7.5
c) 10-12.
65. A euhidric pH is a:
a) pH is adjusted towards acidic or alkaline
b) pH adjusted to optimum stability
c) pH adjusted to a total dissociation of solute.
66. Liophobic colloids are:
a) macromolecular compounds
b) corpuscular compounds
c) association colloids.
67. Liophobic colloids are insoluble substances in dispersed phase being a set of neutral atoms or molecules that:
a) have affinity for the dispersion medium
b) have affinity for dispersion mode.
68. Plasma substitutes are administered iv because:
a) have a high molecular weight
b) do not cross the intestinal wall
c) replace the red blood cell mass.
69. Strictly i.v solutions can be administered with extreme pH:
a) only acid
b) only basic
c) both acidic and basic conditions.
70. Blood has an increased potential buffer than other tissues:
a) real
b) false
c) blood has no buffer system.
71. Drug solutions with a lower molecular concentration than blood serum are called:
a) hypotonic
b) isotonic
c) hypertonic.

English quiz for IIIrd year Veterinary students

- 72.** Hypertonic dehydration is expressed through:
- increase cellular spaces and edema
 - intake of electrolytes without input energy solutions
 - loss of water without loss of electrolytes
- 73.** Electrolyte balance may be amended:
- changing acid-base balance
 - glandular disorders and kidney
 - inadequate sodium intake.
- 74.** Which explanation is correct for im injections
- hypotonic solutions IM causes turgor, swelling protoplasm, expansion of the cell membrane, even plasmolyzing;
 - the cell membrane voltage translates into pain
 - excessive hypertonic solutions IM causes moisture, protoplasm expands.
- 75.** Which explanation is correct for im injections?
- hypertonic solutions IM dry the area, releasing cellular water
 - protoplasm shrinks its volume and detaches from the membrane
 - permeability alterations, with the final hemolysis.
- 76.** Which explanation is correct if IV injection?
- hypertonic solutions in excess affect the viability of cells (osmotic variation), the phenomenon of hemolysis can be faster
 - a hypertonic solution should be administered only IV.
 - in contact with hypotonic solutions erythrocytes swell and burst due to osmotic pressure
 - Interstitial fluid circuit is slow and preferably not to use in this case
- 77.** Injections to be very well tolerated by the body must be blood serum:
- hypotonic
 - isotonic
 - hypertonic
 - it has no importance.
- 78.** A drug solution will be isotonic with serum when:
- it has the same osmotic pressure
 - the same freezing point
 - it has the same molecular concentration.
- 79.** Hyperhydration isotonic entails:
- massive intake of water and / or energy solutions without electrolyte intake
 - water depletion and accumulation of electrolytes
 - increasing intercellular space and edema.
- 80.** Pyrogenic substances are:
- natural substances, endotoxins from microorganisms
 - thermoset macropolizaharide substances
 - unsterile synthetic substances
- 81.** Pyrogens can produce:
- hypothalamic centers impairment (for 2-12 hours)
 - a specific clinical picture: rapid pulse, respiratory changes, hyperthermia in 15-60 minutes
 - hyperexcitation and hypothermia followed by exitus in 10-15 minutes.
- 82.** A preparation for infusion contains:
- drugs with pharmacodynamic activity
 - dispersion in the form of suspensions
 - molecular and colloidal dispersions, emulsions rarely.
- 83.** The rate of aerosol to the respiratory tract absorption compared to absorption by the iv route is:
- lower
 - higher
 - at least equal.
- 84.** The aerosols can be used to achieve systemic effects:
- yes
 - no
 - have only local effect
- 85.** The most appropriate size for spray medicine to be held in bronchioles is:
- 20-30 μm
 - 0.8 - 2 μm
 - 10 - 20 μm
 - 2-5 μm
- 86.** Thixotropy is:
- the ability of a liquid to cover a wide surface area
 - the ability of an ointment to cover a wide surface area
 - the ability of an ointment to return, more or less to the original shape

English quiz for IIIrd year Veterinary students

- 87.** Acanthosis test gives data on:
- tolerance to solutions with increasing dose administered IV
 - the degree of swelling of the tissue after IM
 - skin tolerance.
- 88.** Intrarectally can be given:
- sedative
 - analgesics
 - antispasmodics.
- 89.** Intrarectal way will not be chosen for:
- animals too young
 - rectal mucosal lesions
 - animals in fatigue.
- 90.** Hepatic barrier has an essential role, being:
- an advantage in administering drugs
 - a disadvantage in the administration
 - an advantage in poisonings
 - a disadvantage in intoxication.
- 91.** An alkaline metal salt of penicillin generates diffusible ions as compared with an organic salt in:
- 20-30 minutes with a duration of action is 4-6 hours;
 - 6-hour ,duration of action of 18 hours.
- 92.** Between i.m drug injection sites are bioavailability differences:
- true
 - False
 - is dependent on muscle group.
- 93.** After sc administration of ampicillin in the shoulders, peak plasma will occur in:
- 3.9 hours
 - 3.3 hours
 - 4.6 hours.
- 94.** The tolerance to pain in animals, depending on the route of administration, increases:
- IV < IM < SC
 - SC < IM < IV
 - IM < SC < IV
- 95.** At the basis of homeopathy were the first principles:
- isopathy
 - zooiasic
 - vedic
- 96.** The first book of veterinary homeopathy was published in 1837 in:
- Austria - Hungary
 - Germany
 - Netherlands.
- 97.** The benefits of homeopathy are:
- the use of very small doses
 - efficacy in diseases where the body reactivity is blocked
 - achieving rapid and uncomplicated results
 - potency choice, even wrong, is not harmful
- 98.** Homeopathy has the drawback:
- is not effective in severe poisoning or cancer
 - is not effective in the fields of harmful interference
 - injections are painful and toxic in wrong choice potencies.
- 99.** Hahnemieni principles of homeopathy are:
- principle of similarity
 - the principle of antagonism
 - the principle of dilution
 - the principle of individualization.
- 100.** In homeopathy, healing occurs rapidly late or sometimes after a phase of worsening auspicious:
- no worsening of disease treatment is considered as auspicious
 - true
 - false.
- 101.** Potentiation theory is confirmed in allopathic medicine
- true
 - false
 - there is no correlation between allopathy and homeopathy
- 102.** The drug from which dilutions start will be noted:
- DH1
 - DH2
 - DH3
- 103.** The first decimal dilution is obtained:
- mixing 10 g of the homeopathic with 90 g excipient principle
 - mixing 1 g of the homeopathic principle to 9 g excipient
 - any sequence mixture fulfilling ratio 1g decimal dilution to 9 g excipient.
- 104.** Admittedly, the highest dilution is DH30, but are apparently active dilutions to DH23:
- true
 - false.

English quiz for IIIrd year Veterinary students

- 105.** Decimal dilutions will run for each stage in decimal part being wrong skipping a dilution:
- true
 - false.
- 106.** Dilution DH4 is:
- dilution of 1: 1,000
 - dilution 1: 10,000
 - dilution of 1: 100,000
- 107.** A centesimal dilution is:
- mixture of 1 g homeopathic medicine and 9 g excipient
 - the mixture of 1 g homeopathic medicine to 0.9 g excipient
 - the mixture of 1 g homeopathic medicine to 99 g excipient
- 108.** Homeopathic constitutional types are:
- oxigenoid
 - carbonic
 - phosphoric
 - fluoric
- 109.** Homeopathic temperamental types are:
- oxigenoid
 - fluoric
 - hidrogenoid
 - carbonitrogenoid
- 110.** "The degree of laterality" in homeopathy is:
- the involvement of other external factors in body pathogenesis
 - the "passage" of homeopathic effect from visceral to another
 - how to act predominantly on one side or the other (or both), of a homeopathic compound
- 111.** Between homeopathic remedy and animal temperament precise analogies exist:
- true
 - false.
- 112.** The conditions in which the disease progresses and the proper remedy is called:
- degree of laterality
 - establishing chronotropism
 - disease modalities
- 113.** Pursued homeopathic symptoms are:
- the essential symptoms
 - physiological symptoms
 - the removal and analysis of feces
 - urine analysis.
- 114.** The homeopathic remedies are called also:
- hahnemian dilutions
 - constitutional remedies
 - remedies with specific organotropism
 - polichrests
- 115.** In combination of homeopathic principles antagonisms may occur. These include:
- successive
 - antidote
 - in homeopathic therapy there is no antagonism
 - concomitant
- 116.** In the pathogenesis, antagonisms are totally harmful for animals:
- true
 - false
- 117.** Synergisms in homeopathy are:
- simultaneous
 - complementary (successive)
 - constitutional
- 118.** Homeopathic remedies are known in:
- herbs
 - metals and minerals
 - produced by chemical synthesis
 - insects and animals
- 119.** Nosodes are:
- products of secretion and excretion from animals and live insects
 - microbial products
 - pathological secretions and excretions
 - products derived from animals or insects dry grinded.
- 120.** The homeopathic injectable solutions to be used can suffer isotoning:
- yes, it is mandatory and is performed by autoclaving
 - it is not necessary, being natural products
 - a homeopathic product would degrade by sterilization.
- 121.** Homeopathic injectable solutions can suffer isotoning?
- it is not necessary
 - Yes, as any injection
 - Yes, only with sodium chloride.
- 122.** Homeopathic granules have the weight of:
- 3 - 5 mg
 - 10 - 20 mg
 - 50 - 60 mg.

English quiz for IIIrd year Veterinary students

- 123.** The globules are larger than granules formulation:
 a) yes
 b) no
- 124.** The choice of potency (dilution) in homeopathy is:
 a) essential to the success of treatment
 b) is less important.
- 125.** In acute character diseases will be used potencies:
 a) low (DH1 - DH5)
 b) average (DH6 - DH19)
 c) high (dH20 - DH25).
- 126.** Subacute diseases have better character potencies between DH7 and DH19:
 a) true
 b) false.
- 127.** Chronic developments will appeal to potencies between DH2-DH6 (or CH1-CH3)
 a) true
 b) false.
- 128.** Chronic developments in homeopathy, organic reaction type is:
 a) hipoergic
 b) hiperergic.
- 129.** In administration of homeopathic remedies:
 a) treatments are not repeated until the disappearance of the effects of the previous dose
 b) repeat treatments daily with potent depending on the disease evolution
 c) treatments are made with potent increased gradually.
- 130.** If desired renewal of homeopathic treatment after a break:
 a) change remedies
 b) change potency
 c) no longer carry homeopathic intervention
- 131.** homeopathic acute disease, the affected function is organic in most cases the remedies are of plant origin:
 a) true
 b) false
- 132.** In acute homeopathic disorders type are made:
 a) 1-2 doses from 15-30 days
 b) 1-2 doses / day
 c) more administrations per day.
- 133.** In homeopathic subacute disease the most affected is the function - constitutional:
 a) true
 b) false.
- 134.** In homeopathic chronic diseases the most affected is the functional - constitutional:
 a) true
 b) false
- 135.** Homeopathic treatment failure causes are related to:
 a) medicine or potency of the drug were not chosen right
 b) preparing homeopathic remedy has not been correctly
 c) maintenance and habitus of animals was inadequate
- 136.** Homeopathic treatment failure causes are related to:
 a) homeopath not knowing provings
 b) homeopath not properly administered dose and frequency of treatment
- 137.** The reactivity of animals is poor, blocked or absent (organic serious processes, cancer); could something be done?
 a) no not at all
 b) yes, any homeopathic intervention
 c) with fewer opportunities only after unlocking the body reactivity
- 138.** There are times when homeopathic therapy gives positive signals but improvement is taken or short. In this case:
 a) will stimulate the body's reactivity
 b) decreasing will be administered more frequently potencies
 c) will receive increasing potency.
- 139.** If symptoms intensifie, it can be considered that it is worsening phase:
 a) true
 b) false.
- 140.** In case of worsening phase is valid explanation:
 a) the drug was infelicitous but potency is good
 b) the drug was well chosen, too high potency
 c) the drug was particularly bad choice , talking about intoxication
 d) the drug was well chosen but is too low potency

English quiz for IIIrd year Veterinary students

- 141.** If appears homeopathic symptoms identical to the pathogenesis of drug will intervene as:
- will continue with the same remedy but to a lesser dilution
 - will continue with the same remedy but in a higher dilution
 - will appeal to specific antidote
- 142.** If the symptoms intensify and the disease progresses:
- will appeal to the specific antidote
 - may seek additional boost reactivity
 - will continue with the same remedy but less dilution
- 143.** During homeopathic therapy if other newly diseases appear, the new one will be:
- additionally stimulated immunity
 - considered auspicious
 - additionally treated
 - called specific antidote
- 144.** Hipoergic organic reaction particularly affects the function:
- organic
 - constitutional
 - mental
- 145.** Hiperergic organic reaction particularly affects the function:
- sensory
 - lesion - organic
 - functional
- 146.** Homeopathic potencies recommended in subacute disease type are:
- 1-2 doses from 15 - 30 days
 - more administrations per day
 - 1-2 administrations per day
 - administration every other day
- 147.** Homeopathic potencies in chronic diseases are recommended:
- 1-2 doses from 15-30 days
 - 1-2 administrations per day
 - more administrations per day
- 148.** Homeopathic potencies recommended in acute type diseases are:
- 1 to 2 doses at 15-30 days
 - more administrations per day
 - 1-2 administrations per day
- 149.** Impaired function in acute conditions is type:
- functional
 - sensory
 - lesion - organic
- 150.** Homeopathic potency of chronic diseases is recommended to be:
- high
 - average
 - low
- 151.** Homeopathic potency of subacute disease is recommended to be:
- high
 - average
 - low
- 152.** Homeopathic potency is recommended in acute conditions to be:
- low
 - average
 - high
- 153.** Parenteral doses of homeopathic remedies for large animals are:
- 5-10 ml
 - 10-20 ml
 - 1-5 ml
 - 20-30 ml
- 154.** Parenteral doses of homeopathic remedies for small animals are:
- 5-10 ml
 - 10-15 ml
 - 15 - 20 ml
 - 1-5 ml
- 155.** Animal research is carried out by scientific rules that are based on:
- Fundamental studies of laboratory
 - a sufficient number of animals
 - thorough knowledge of the daily level of scientific studies.
- 156.** Planning and conducting an experiment with drugs:
- It must be well established by a research protocol
 - You must follow scientific rules generally known
 - preceded by calculating the risk involved in the benefits.
- 157.** During clinical testing, the clinician should have the freedom to use methods of diagnosis and new therapy:
- when they increase the chance of survival or cure and reduce suffering.
 - false

English quiz for IIIrd year Veterinary students

- 158.** In a drug clinical research possible benefits, risks or side effects of a new method should be:
- relative to the best advantage of the methods known until that time
 - false
- 159.** A veterinarian can perform clinical trials in order to obtain new scientific information:
- only when these experiments are conformable with the medical act
 - only when research subjects have significance for diagnostics
 - only when investigations have therapeutic significance for test subjects
- 160.** Placebo veterinary substances may be used when a real pharmacotherapy is not necessary:
- true
 - false
- 161.** Placebo veterinary substances may be used when the veterinarian is aware that using on animal placebo substances administered the owner can perform psychotherapy:
- true
 - false
- 162.** Pharmacokinetics studies:
- how and implications of placing drugs into the body in various ways
 - absorption of drug substances
 - drugs undergo biotransformation in the body
 - the manner and pathways of drug elimination
- 163.** General kinetics of drugs can be classified into:
- the absorptive phase
 - phase-invasive
 - phase elusive
- 164.** Invasive phase includes:
- absorption
 - transport
 - distribution
 - metabolism
 - coupling
- 165.** Evasive (elusive) phase comprises:
- coupling
 - metabolism
 - elimination.
- 166.** The term dosage form pharmaceutical preparation designates the active ingredient and is administered into the body in this form:
- true
 - false
- 167.** The choice of route of a drug administration is done by:
- physico-chemical properties of the drug substance
 - the place of action
 - condition of the animal
 - the speed and intensity of drug action
- 168.** The period of time that elapses from the drug administration and until starts its action is called:
- period of action
 - latency period
 - therapeutic period
- 169.** The size of the latency is dependent upon the administration route and depending on:
- the rate of absorption
 - coupling speed
 - duration of transport in liquid environments of the body
- 170.** The size of the latency is dependent upon the administration route and depending on:
- duration of transport in body fluids
 - duration of metabolism
 - the diffusion in the tissues
 - the time needed to produce biological changes that triggers a therapeutic effect
- 171.** The drug effect installing is directly influenced by the:
- rate of absorption
 - duration of transport
 - diffusion time
 - period of time to produce biological changes
 - time of disposal
- 172.** For urgent pharmacodynamic activity will choose the path:
- i.m.
 - s.c.
 - i.d.
- 173.** For urgent pharmacodynamic activity will choose the path:
- s.c.
 - i.m.
 - i.v.

English quiz for IIIrd year Veterinary students

- 174.** Some drugs are administered only in one way:
 a) true
 b) false.
- 175.** The effect of the drug varies depending on the route of administration:
 a) true
 b) false
- 176.** Local applications put the remedy:
 a) in indirect contact with the place of action and reduce risk of damage to other organs
 b) in direct contact with risk of affecting other organs
 c) in direct contact with the site of action and reduce the risk of damage to other organs
 d) direct contact, in the highest concentration
- 177.** A systemic effect can be obtained orally?
 a) yes
 b) no
- 178.** A systemic effect can be achieved by the administration of preparations:
 a) orally
 b) parenterally.
- 179.** Dosage will vary depending upon the route of administration as follows:
 a) I.V. < SC < I.M. < PO
 b) P.O. > I.M. > SC > I.V.
 c) P.O. < I.M. SC < IV
- 180.** Natural mucosal routes are:
 a) digestive
 b) respiratory
 c) genitourinary system
 d) sinus teat
 e) conjunctival mucosa.
- 181.** Natural apparent drug administration routes are:
 a) the nasal mucosa
 b) vaginal mucosa
 c) gastric mucosa
 d) the intestinal mucosa
 e) conjunctival mucosa.
- 182.** Unapparent natural drug administration ways are:
 a) the nasal mucosa
 b) bronchial mucosa
 c) the buccal mucosa
 d) gastric mucosa
 e) the intestinal mucosa.
- 183.** Drug administration is more efficient by the naturally apparent comparatively to the inapparent mucosa:
 a) true
 b) false.
- 184.** Parenteral route is a route:
 a) natural route
 b) artificial route
 c) ambivalent route
- 185.** Absorption has the most important role when the pharmacon is:
 a) injected directly into the blood stream
 b) not injected directly into the blood stream.
- 186.** Absorption of a pharmacon molecule will be terminated when it:
 a) passes the body
 b) reaches the vascular bed
 c) reaches the site of action.
- 187.** Low polarity and high lipophilicity are factors that:
 a) mainly promote absorption
 b) absorption disadvantage
 c) absorption is not influenced by these factors.
- 188.** Size of molecule and blood irrigation have over absorption the role of:
 a) amplifier
 b) reduction
 c) whatever.
- 189.** Oral administration is recommended in:
 a) horse
 b) cow
 c) dog
 d) cat
 e) pig.
- 190.** Digestive mucosal changes (e.g. gastroenteritis) lead to changes in the rate of absorption leading to the phenomenon of:
 a) retroabsorption
 b) malabsorption
 c) disabsorption
- 191.** The mechanism of absorption by oral route through the mechanism of passive diffusion and absorption by connection is present in:
 a) mouth
 b) stomach
 c) small intestine
 d) intestine
 e) the rectum.

English quiz for IIIrd year Veterinary students

- 192.** The mechanism of absorption by oral pinocytosis mechanisms may be present in:
- mouth
 - stomach
 - small intestine
 - large intestine.
- 193.** The mechanism of oral absorption by passive transport mechanisms is present in:
- mouth
 - stomach
 - the rectum.
- 194.** Oral absorption mechanism through passive & tonic transport mechanisms is present in:
- mouth
 - stomach
 - small intestine
 - large intestine.
- 195.** Perlingually path has the advantage of providing direct penetration of drugs into the systemic circulation:
- true
 - false.
- 196.** Policompartmented stomach of ruminants has the capacity (due to pH 5.5 to 6.5) to operate as an ion trap for:
- acidic drugs
 - alkaline drugs
 - neutral drugs.
- 197.** Specific ruminal activities (fermentation and microbial population) influences mainly the:
- rate of drug absorption
 - chemical stability of the drug
 - drug clearance rate.
- 198.** Sulfadimerazine, having $pK_a = 7.4$ will be found in the rumen (pH 5.5 to 6.5) almost in its entirety:
- dissociated, which will allow a better absorption
 - non-dissociated, which will allow a better absorption
 - dissociated, which will not allow a good absorption
 - non-dissociated, which will not allow a good absorption.
- 199.** Oral drugs can not avoid regurgitation reflex (by closing the esophageal tray):
- true
 - false.
- 200.** Oral drugs can prevent esophageal reflex of the tray so that they will arrive directly in omas or abomas, determined by:
- PK_a of the administered substance
 - drugs can not reach directly into the stomach compartments mentioned
 - pH of the substance or formulation administered.
- 201.** In the process of absorption, the non-dissociated component penetrates free according to the concentration gradient:
- true
 - false
 - only drugs enter freely dissociated according to the concentration gradient.
- 202.** Knowing the drugs' dissociation constant and the digestive compartment pH, absorption rate can be calculated:
- true
 - false.
- 203.** The Henderson-Hasselbach equation applies to active substances from category:
- strong acids
 - salts of weak acids
 - strong bases
 - weak base.
- 204.** Dissociated components, in absorption, are restricted by electrical charges and, as such, do not absorb:
- true
 - false.
- 205.** Closing the pylorus for a period of time may affect the absorption of drugs through:
- cessation of absorption
 - selective and delayed absorption
 - increase the rate of absorption in the digestive segment.
- 206.** The dissolution of a drug in gastric or intestinal total will bring:
- slowing or blocking absorption
 - the appearance of an insoluble compound
 - massive engagement in these segments.
- 207.** Limited absorption is advantageous in therapeutics:
- yes, because it maintains high concentrations of certain drugs used locally
 - no, have to solubilize drugs sequentially
 - yes, for all active substances (to avoid poisoning).

English quiz for IIIrd year Veterinary students

- 208.** The gastric mucosa (ruminants) is:
- secretory mucosa
 - absorptive mucosa
 - selective secretory and absorption mucosa (for aspirin, alcohol, caffeine, strychnine, vitamin PP, iodide, peptin, sweet substances).
- 209.** Substances covered with keratin, salol, gluten or formalin gelatin will dissolve in:
- stomach
 - small intestine
 - large intestine.
- 210.** Gastric absorption length is dependent on:
- type of drug substance (or lipo- soluble)
 - particle size
 - ionization constant and pH
 - physiological state of fullness and stomach.
- 211.** In a strongly acidic pH of gastric fluid are absorbed especially weak acids and bases are not absorbed:
- true
 - false.
- 212.** In normal stomach will absorb well salicylic acid, aspirin, barbiturates because:
- at the pH dissociates in an increased percentage
 - at this pH dissociates only a very small percentage
 - totally dissociated at this pH.
- 213.** A weak acid drug ($pK_a = 4$) in the stomach ($pH = 1$) will be:
- dissociated and absorbed
 - non-dissociated and absorbed
 - separated and not absorbed
 - non-dissociated, and is not absorbed.
- 214.** Administration of hyposecretion adsorbent orally or antacid substances:
- will increase the ionization of weak acids and will reduce the absorption rate
 - will decrease the degree of ionization of weak acids and increase the absorption rate
 - will decrease the degree of ionization of weak acids and will reduce the absorption rate.
- 215.** Weak bases (eg alkaloids) associated with oral substances that increase gastric pH:
- does not soak and will not dissociate
 - will strongly dissociate and will absorb
 - will absorb well, being less dissociated.
- 216.** Co-administration of isotonic solution at body temperature:
- rush absorption
 - does not affect absorption, which is an independent process.
- 217.** Saponins and bile salts produce mucosa hyperemia, the result will be:
- increase the rate of absorption
 - decrease absorption rate
 - lining the digestive hyperemia does not influence the absorption rate.
- 218.** Milk-administration therapy influences the absorption rate?
- does not affect the absorption rate
 - yes, by binding to the protein component
 - yes, by delaying the opening of the pylorus
 - yes, by increasing the absorption rate.
- 219.** In order that the pH of the intestine is over 5, and gastric between 1 - 3, it is expected that the rate of absorption of the same drug in two locations to be different:
- yes, the difference will depend on drug's pK_a
 - no
- 220.** When the pH of the drug is much higher than the pK_a of an acidic drug would be:
- highly ionized
 - weakly ionized.
- 221.** When the pH of the drug is much higher than the pK_a value of a drug with basic character will be:
- weakly ionized
 - highly ionized.
- 222.** Alkaline substances with a pK_a between 6-9 will ionize in the stomach, thus:
- better absorbed at this level
 - poorly absorbed at this level.
- 223.** Oesophageal mucosa is:
- important for absorption
 - it is not important for absorption only in esophageal diverticulum at birds
 - it is important for absorption only in the esophageal obstruction.
- 224.** The intestinal mucosa acts as a membrane with lipid pores and transport systems:
- true
 - false.

English quiz for IIIrd year Veterinary students

- 225.** Intestinal absorption can occur in:
- only in some parts of the body
 - all body segments, regardless of pH or histological differences between different sections.
- 226.** A drug, the more fat-soluble, so it will absorb more rapidly in the intestine:
- true
 - false
 - absorption of a drug is possible and whose pKa indicates a significant degree of ionization in the intestine.
- 227.** Occasionally, the rate of drug absorption is recorded at less than the rated. One explanation is that :
- the rate of infusion and diffusion are greatly enhanced
 - inadequate blood perfusion rate (to remove the drug rapidly, from where he crossed the membrane)
 - diffusion is suspended, if the non-ionized fraction concentration levels on both sides of the membrane are equal.
- 228.** Barrier desmosomes (intestinal barrier) is a brake passage for:
- completely undissolved particles
 - water-soluble high molecular weight compounds
 - highly ionized particles
 - the non-ionised particles
 - The fat-soluble low molecular weight compounds.
- 229.** The mechanisms of absorption through the intestinal mucosa are:
- saturable passage (active transport)
 - unsaturated passage (passive transport).
- 230.** Intestines absorb in particular:
- weak bases with pKa below 8
 - weak acids with pKa of more than 3
 - strong bases with pKa of more than 8
 - strong acids with pKa below 3.
- 231.** Between the salicylic acid (pKa = 3) and piramidon (pKa = 5), the better intestinal absorption (pH = 7) will be:
- first substance
 - second substance
 - both in equal rate
 - none of the two substances.
- 232.** Between the salicylic acid (pKa = 3) and piramidon (pKa = 5) the good gastric absorption will be at:
- first substance
 - second substance
 - both substances
 - none of the two substances.
- 233.** The absorption by the intestinal mucosa is selective ,absorbers order will be:
- dissociated drugs > drug dissociated> divalent ions > monovalent ions
 - non-differentiated medicines> drugs dissociated> divalent ions> monovalent ions
 - monovalent ions> divalent ions> dissociated drugs> drug dissociated
 - divalent ions > dissociated drugs > monovalent ions> dissociated drugs.
- 234.** Neomycin (hydrophilic base) is hardly absorbed in the intestine:
- true
 - false.
- 235.** If a substance is absorbed mainly in the intestine, stomach fullness state can:
- determine its amplification effect
 - determine its delay effect
 - late reaching the site of absorption due to the fact that the pylorus is closed.
- 236.** An intestinal mucosal lesion will absorb:
- amplified
 - low
 - non selectively.
- 237.** Vasodilation caused by some medications will:
- enhance intestinal absorption rate
 - decrease intestinal absorption rate
 - block the intestinal absorption.
- 238.** Vasoconstriction caused by some medications will:
- enhance intestinal absorption rate
 - decrease intestinal absorption rate
 - block the intestinal absorption.
- 239.** Streptomycin administered orally acts:
- local because it absorbs in small proportions (5%)
 - general because it is a general antibiotic use
 - mixed.

English quiz for IIIrd year Veterinary students

- 240.** The fact that tetracyclines form chelated complex with salts of iron in the intestine will:
- enhance the absorption of the antibiotic
 - prevent the absorption of the antibiotic.
- 241.** Drug substances absorbed in the stomach and intestine will reach the liver through the portal circulation:
- true
 - false.
- 242.** By lining the large intestine can absorb:
- moieties of drugs that have not been absorbed in the small intestine
 - substances with high molecular weight
 - small molecule drug substances.
- 243.** The rectal administration has the following a:
- slower diffusion throughout the body
 - more rapid diffusion throughout the body
 - rapid metabolism
 - delayed metabolism.
- 244.** Rectal administration is a:
- alternative to the oral route (impractical)
 - alternative when seeking local effect
 - a very common alternative when seeking general effect.
- 245.** The dosage used for rectal administration will be:
- 10 - 20% higher than normal
 - 20-30% higher than normal
 - 30-50% higher than normal
 - 10 - 20% lower than normal
 - equal to the usual ones.
- 246.** The absorption in the intestine is mainly dependent on:
- particle size of the pharmacon
 - particle solubility of the pharmacon
 - the degree of dissociation of acids and bases
 - suitability for a particular transport mechanism.
- 247.** Portal circulation ("first pass effect") is avoided if :
- administering to the buccal mucosa
 - sublingual
 - parenteral administration
 - intraruminal administration
 - rectal administration.
- 248.** After rectal administration blood concentration cannot be predicted:
- true
 - false.
- 249.** After rectal administration the recorded: blood concentration is
- much higher
 - unchanged
 - much lower.
- 250.** If a drug is quickly decomposed down in the liver significant differences between the effects caused by this substance if it was administered by another route that avoids liver.
- yes
 - no
 - no difference.
- 251.** From the oral administration way it must be removed the active substances that are not stable in the digestive tract:
- yes, should be avoided
 - has no significance, because pharmacons dissociate anyway.
- 252.** The pharmacon absorption rate is unstable and:
- safe
 - uncertain
 - unimportant.
- 253.** Enteral absorption is influenced by distortions caused by ubiquitous bacteria?
- no, is the same situation as in the rumen
 - yes, influenced by the ubiquitous bacteria.
- 254.** Absorption at respiratory mucosa occurs:
- very fast
 - the average speed
 - slowly
 - very slowly.
- 255.** Inhaled drugs can be administered in the following forms:
- gaseous
 - liquid volatile
 - liquid
 - very fine solid particles.
- 256.** In the respiratory therapy parasympathomimetic substances (e.g. pilocarpine, arecoline, eserine) can produce:
- bronchodilatation
 - bronchoconstriction
 - have no significant effect.

English quiz for IIIrd year Veterinary students

- 257.** In respiratory therapy parasympatholytic substances (e.g. atropine) can produce:
- bronchodilatator
 - bronchoconstrictor
 - has no significant effect.
- 258.** In respiratory therapy sympathomimetic substances (e.g. ephedrine) have an effect:
- bronchodilatator
 - bronchoconstrictor
 - have no significant effect.
- 259.** Histamine, in respiratory therapy can be:
- bronchodilatator
 - bronchoconstrictor
 - has no noticeable effects.
- 260.** Conjunctival mucosa is used for specific treatments:
- local
 - general
 - can register and accidental systemic effects.
- 261.** On conjunctival mucosa can be applied:
- eye drops
 - ointment
 - pasta
 - fines.
- 262.** Eye drops should be:
- hypertonic and neutral
 - isotonic and neutral
 - hypotonic and neutral.
- 263.** Drugs penetrate hard the skin because they are forced to cross:
- a lipid layer
 - a protidic gel
 - a hydroelectrolytic barrier.
- 264.** Drugs crossing through the skin can be done by:
- active diffusion
 - passive diffusion
 - pinocytosis.
- 265.** The main mechanism for passage through the skin is passive diffusion and can be made:
- transfollicular or intercellular
 - transpidemic or transcellular.
- 266.** Transepidermal path involves crossing the lipidic film on the surface and penetration through the *stratum corneum* of the skin cells. The best cross is:
- high molecular ionized particles and partition coefficient around value 1
 - small molecule ionized particles and partition coefficient around value 4
 - the non-ionised particles with small molecule and partition coefficient about value 1.
- 267.** The rectal absorption to rabbit is greater than that of the small intestine and therefore the dose administered in this way will be:
- 5-10% greater
 - equal to the oral therapeutic dose
 - 5-10% lower
 - 25-50% lower
- 268.** Enemas can be:
- food or nutritional
 - evacuating
 - medicinal.
- 269.** If frictioned, the addition of keratolytic skin layer favors medicines penetration quickly.
- true
 - false.
- 270.** Vaginal administration can be made by:
- collision
 - sprinkling
 - irrigation
 - fumigation.
- 271.** The corect intramammary ointments are administered in the:
- teat canal
 - teat sinus
 - nipple ampoule.
- 272.** The transcutaneous penetration of the active substances is entering intradermaly:
- without their resorption into lymphatic and blood vessels
 - their resorption in blood and lymphatic system
 - the failure of the active substance intradermally without systemic effects.
- 273.** Percutaneous absorption involves the transfer of active substances through the skin's entire thickness, main ways being the:
- intercellular
 - transcellular
 - transglandular
 - transfollicular.

English quiz for IIIrd year Veterinary students

- 274.** The active substances with the molecular weight less than 20,000 Daltons can be resorbed through the skin by the
- blood capillaries
 - lymphatic vessel
 - either, being too heavy.
- 275.** Active substances with molecular weight of 20,000 Daltons can be resorbed through the skin by the:
- the blood capillaries
 - the lymphatic vessel
 - either being too heavy.
- 276.** Nutrients administered in enemas depending on the animal size are between:
- 10-50 ml
 - 50-500 ml
 - 50-1000 ml.
- 277.** In mid-size animals the amount of water that can be inserted into rectum can be of:
- 0-0.5 liters
 - 1-2 liters
 - 2-5 liters.
- 278.** According to size, the amount of water that can be introduced in an evacuation enema to a dog may be of:
- 0.1-0.5 liters
 - 0.5-1 liters
 - 1-2 liters.
- 279.** The inhalation duration to an animal can be:
- 1-5 minutes
 - 5-10 minutes
 - 10-30 minutes.
- 280.** Intact bladder mucosa can absorb drugs:
- true
 - false.
- 281.** The medication liquid quantity for urethral and bladder lavage will be up to:
- 300 ml in large animals; 80 ml midsize animals and 20 ml small animals
 - 100 ml of the large animal; 50 ml midsize animals and 10 ml small animals
 - 500 ml in large animals; 150 ml midsize animals and 50 ml to small animals.
- 282.** Vaginal administration purposes are:
- strictly local lesions
 - stimulating functions
 - general.
- 283.** Systemic alkalosis influences the degree of percutaneous absorption by:
- increasing the percutaneous absorption
 - decreasing the percutaneous absorption
 - higher disposal of active substances.
- 284.** It was found that to ointments, in case of concentrations between 1% and 10%, the proportion reabsorbed does not increase (proportionally).
- true
 - false.
- 285.** A dry dermatosis will be treated most quickly and accurately with:
- lotions
 - ointment
 - pasta
 - liniments
 - emulsion.
- 286.** In acute inflammatory dermatitis, with secretory character, the most quick and accurate treatment is with:
- wet compresses
 - lotions
 - pasta
 - adsorbants
 - ointments.
- 287.** The order of release rate of the active substances in the ointment bases is:
- hydrocarbons > fat > emulsions / U > O / W emulsions > hydrophilic bases
 - hydrophilic bases > O / W emulsions > emulsions / U > fat > Oil
 - fats > hydrophilic base > emulsions / U > O / W emulsions > hydrocarbons.
- 288.** Vaseline is an excipient with potential:
- non-acantogenic
 - medium acantogenic
 - strong acantogenic.
- 289.** Glycerin, propyleneglycol and hydrous lanolin are ointments base with potential:
- non-acantogenic
 - medium acantogenic
 - strong acantogenic.
- 290.** Paraffin oil and cocoa butter are potentially ointment bases:
- non-acantogenic
 - medium acantogenic
 - strong acantogenic.

English quiz for IIIrd year Veterinary students

- 291.** Cationic substances on normal skin may cause irritation at concentrations above:
- 0.5%
 - 1%
 - 5%.
- 292.** In the normal skin, the anionic substances can cause irritation at concentrations of:
- 0.1-0.5%
 - 0.5-5%
 - 5-10%
- 293.** Toxicity of skin is in order:
- non-ionic < anionic < cationic
 - cationic > anionic > non-ionic
 - cationic < anionic < non-ionic.
- 294.** Local skin applications of liquid dosage forms are called:
- "spot-on"
 - "pour-on"
 - liniments.
- 295.** Vesicatories are a special type of ointments that contain:
- strong skin irritant substances
 - powerful painkillers and skin relievers
 - keratoplastic substances.
- 296.** The amount of ointment used in a dermatologic treatment is recommended to be for a medium size dog, of:
- 1-5 g
 - 5-10 g
 - 10-50 g.
- 297.** A mustard plaster (poultice) will remain on the skin of adult animals no more than:
- 1 hour
 - 2 - 3 hours
 - more than 4 hours.
- 298.** In order to not affect the cornea, the optimum pH of drugs applied on conjunctival mucose is:
- less than 3
 - less than 5
 - less than 7.
- 299.** In order to not impair the cornea the optimum pH of the applied conjunctival drug will range from:
- 5.5-6.5
 - 6.5-7.5
 - 7.5-8.5.
- 300.** A medicinal pencil may contain substances:
- hemostatic substances
 - caustic substances
 - cauterisant substances.
- 301.** Auricular mucosa therapy can be made with:
- sprays
 - washes
 - instillations and irrigations
 - ointments application.
- 302.** The alkali salts (Na, K) of penicillin G, in i.m route, generating ions that are circulated in:
- short time, with high plasma peak (30 minutes) and short-acting
 - short time, with low plasma peak (60 minutes) and short-acting
 - long time with high plasma peak (after 15 minutes) and long duration of action.
- 303.** The organic ions salts (procaine) of penicillin G ion releases in a manner:
- fast with plasma peak at 30 minutes and the duration of action up to 6-12 hours
 - progressively, with the peak plasma from 6-12 hours and a duration of action up to 18 hours
 - slowly, with peak plasma at 24 hours and a duration of action up to 24 - 36 hours.
- 304.** The administration of a drug in the same way, but at different points will affect the bioavailability of the drug:
- yes
 - no
- 305.** Pathological factors that can alter blood concentration curve and so the overall effect of a drug are diseases of:
- liver
 - renal
 - heart
 - thyroid.
- 306.** Drug suspensions i.m. administered are:
- better tolerated than solutions
 - less tolerated than solutions
 - they are tolerated as there are no significant differences.
- 307.** Injectable forms containing povidone may cause histamine release in small animals:
- true
 - false.

English quiz for IIIrd year Veterinary students

- 308.** The administration of injectable forms that contain propyleneglycol as cosolvent in horse require:
- increased attention because it can induce nerve disorders (ataxia)
 - elimination of administration in this species
 - does not impose any caution, being only an excipient.
- 309.** Needle types can be distinguished by:
- standard dimensions given in numbers on the packaging
 - the color code (on the cover)
 - the bevel.
- 310.** The order and distance of penetration by cutis by type of ointment is:
- ectodermic > diadermic > endodermic
 - diadermic > endodermic > ectodermic
 - ectodermic < endodermic < diadermic.
- 311.** The intradermal route is used for:
- diagnosis
 - test of sensitivity to cutaneous allergens
 - for the administration of chemotherapy in small doses.
- 312.** Via I.M. at large animals it can be administered in a single point, no more than:
- 5-15 ml
 - 15-20 ml
 - 20-30 ml.
- 313.** In contrast to humans, the I.M. injection to animals is:
- as painful
 - less painful
 - more painful.
- 314.** The overall absorption of an aqueous solution administered I.M. occurs in:
- 1-5 minutes
 - 5-10 minutes
 - 10-15 minutes
 - 15-20 minutes.
- 315.** The main intraperitoneal administration risks are related to:
- injection into the abdominal organs
 - shock at administration
 - the occurrence of adhesions.
- 316.** Epidural injections are needed for:
- desired abolition of uterine contraction
 - lombo-sacral region anesthesia
 - local therapy.
- 317.** Subarachnoid injections (intrathecal) involve penetration of the membrane covering SNC usually in radiographic diagnosis purposes.
- true
 - false.
- 318.** The duration of therapeutic effect to injectable solutions increases in the order:
- aqueous < aqueous suspensions < oil solutions < suspensions < implants
 - oil solution < oil suspensions < aqueous < aqueous suspensions < implants
 - Implants < oil suspensions < oily solutions < aqueous suspensions < aqueous solution.
- 319.** Intrauterine administration aims to obtain:
- general effects
 - local effects
 - a residence time, as high as possible in the uterus.
- 320.** In blood, medicines exist as:
- free, uncoupled
 - reversible coupled
 - none of these forms.
- 321.** Through biological membranes can pass:
- only the unbound drugs
 - only the linked drugs
 - both forms
 - none of these forms.
- 322.** The drugs bind to proteins through the following links:
- covalent
 - non-polar
 - ion
 - hydrogen.
- 323.** Irreversible drug-protein links treatments are desired for their duration.
- true
 - false.
- 324.** In the equine species, the proportion of blood protein bound drug of penicillin G comparative to cloxacillin is:
- inferiour
 - higher
 - equal.
- 325.** Coupling drugs predilection for transport occurs on:
- globulins
 - lymphocytes
 - albumin.

English quiz for IIIrd year Veterinary students

- 326.** Coupling of the drugs for transport is especially made by the peptide chains with:
- low molecular weight
 - large molecular weight
 - high molecular weight.
- 327.** In rabbits, comparatively, the highest proportion of coupling between cloxacillin and sulfadiazine, is for:
- cloxacillin
 - sulfadiazine
 - both engage the same.
- 328.** Ions have different affinity for coupling depending on the nature of the group that is bound:
- true
 - false.
- 329.** The anion - coupling affinity order is:
- acetate < chloride < citrate < nitrate < bicarbonate
 - nitrate < citrate < chloride < acetate < bicarbonate
 - sodium bicarbonate < acetate < chloride < citrate < nitrate.
- 330.** Albumins have more coupling places for the:
- acidic drugs
 - neutral drugs
 - basic drugs.
- 331.** Globulins have much less importance for coupling drugs:
- true
 - false.
- 332.** The biotransformation:
- increases the proportion of drug amount and the free drug amount in plasma.
 - decreases the proportion of drug amount and the amount of free drug in plasma
 - increase the proportion of drug amount in the plasma and the amount of coupled product
 - reduce the proportion of drug amount in plasma and the amount of coupled product.
- 333.** Drugs coupled in a large proportion to the plasma proteins are:
- cleared rapidly and have short duration of action
 - slowly eliminated and have large duration of action
 - not removed and produce poisoning.
- 334.** Between releasing from to the plasmatic proteins and action duration of strofantine and phenylbutazone there are differences related to:
- the rate of coupling of the protein
 - the duration of complete elimination
 - duration of action.
- 335.** Saturation of the plasmatic protein binding capacity and the raising of unbound places will lead to a:
- faster drugs metabolism
 - faster drugs elimination
 - balance between free and coupled fractions
 - irreversible imbalance between free/coupled components.
- 336.** Hypoproteinemia status and alteration of the albumin – globulin can be followed by a:
- rapid saturation of the coupling capacity
 - massive increase of the unbound fraction
 - massive increase of the coupled fraction
 - risk of side effects
 - poisoning danger.
- 337.** During the therapy is recommended to monitor the plasma drug levels especially for substances with a:
- small therapeutic index
 - great therapeutic index
 - index regardless.
- 338.** In new-borns, protein level is:
- reduced
 - increased
 - plasma proteins are absent.
- 339.** In new-borns, the free fraction of a drug compared to adults is:
- lower
 - higher
 - equal.
- 340.** In pregnant females, plasma proteins are occupied therefore:
- increases the fraction of free drug in plasma
 - the coupling capabilities are occupied by endogenous products
 - increases the fraction of coupled medicine.
- 341.** Some basic drugs (e.g. sulphonamides) are competing for the same plasma protein binding sites:
- true
 - false.

English quiz for IIIrd year Veterinary students

- 342.** Certain acidic drugs (e.g., phenylbutazone, salicylic acid) may compete for the same plasma protein binding sites.
- true
 - false.
- 343.** Competition for the same coupling places:
- is beneficial for treatment
 - can cause toxic effects.
- 344.** In new – borns the serum albumin is present in a large amount and the coupling sites are typically unsaturated:
- true
 - false.
- 345.** The new-born serum albumin is reduced and the coupling of sites will be saturated with bilirubin:
- true
 - false.
- 346.** Treatments with salicylates, sulphonamides or other drugs or weak acid can displace bilirubin base, causing jaundice:
- true
 - false.
- 347.** Anticoagulants (e.g. coumarin) are coupled to serum albumin, by moving them from coupling places to other will lead to:
- drug jaundice
 - toxicity
 - antidotism.
- 348.** The drugs diffusion via the circulatory system is possible:
- only in some compartments of the body
 - in all body compartments in the same concentration
 - in all body compartments in different concentrations.
- 349.** Blood compartment *versus* the intra- and extra-cellular compartments, is:
- dominant
 - equal with the two compartments
 - equal to each of the two compartments
 - smaller, compared to the two compartments.
- 350.** Diffusion process begins with the vascular wall penetration and ends with the drug penetration to the action site, known as the:
- drug coupling
 - drug distribution
 - drug elimination
 - drug penetration.
- 351.** Endothelias that are important for the drugs transport are endothelium of:
- capillary
 - renal glomerulus
 - peripheral nerves
 - CNS
 - abdominal organs.
- 352.** Endothelias "*tight junctions*" are:
- favourable for transport by pinocytosis
 - unfavourable for transport by pinocytosis
 - unfavorable for the substances' intercellular exchange
 - a base blood - brain barrier.
- 353.** The permeability of vascular endothelium causes a passage which is:
- very rapidly from blood into the extracellular compartment
 - gradually, out from the blood to the extracellular compartment.
- 354.** By solubility, the medicinal substances can be divided as:
- purely water-soluble compounds
 - strict fat-soluble compounds
 - amphiphilic compounds
 - neutral compounds.
- 355.** Purely water-soluble compounds are those which:
- hardly absorb after the oral administration
 - distribute only in the extracellular after I.V
 - are removing difficultly renally
 - are easy eliminated through the kidneys.
- 356.** Strict fat-soluble compounds can solubilize in:
- polar lipids from the cell membranes
 - neutral lipids
 - hydrophilic extracellular compartment.
- 357.** The surfactants group may be considered amphiphilic compounds?
- yes
 - no
- 358.** Amphiphilic substances can accumulate in interphase.
- true
 - false.
- 359.** In neutral pharmacons, the amphiphilic lipids can be identified to an extent:
- very high extent
 - very low extent
 - as the interphase.

English quiz for IIIrd year Veterinary students

- 360.** The protein content of extracellular fluid as compared to that of blood plasma is:
- higher than of blood plasma
 - equal to blood plasma
 - lower than of blood plasma.
- 361.** The protein content of the extracellular fluid is lower than that of blood plasma, and the total pharmacon concentration coupled to the albumin in this area will be:
- less than the plasma
 - higher than the plasma
 - equal to the plasma concentration.
- 362.** Since the entrance into the blood stream, several factors tend to decrease the concentration of the active drug like:
- the protein binding
 - diluting in the body fluid
 - medicines storage in the body.
- 363.** The diffusion processes are made possible through the hydrophilic membrane through which the drug is able to leave the vascular space.
- true
 - false.
- 364.** The diffusion processes of drugs are possible through the:
- lipoidic membrane with pores of 1/2 nm
 - lipoidic membrane with pores of 4 nm
 - lipoidic membrane with pores of 8 nm
 - capillary walls fenestrations.
- 365.** The speed at which balance is achieved in plasma for a drug concentrations, and ECL (extracellular fluid) initially depends on:
- drug concentration
 - isotonic environment
 - the degree of the vascular tissue perfusion.
- 366.** Different concentrations in body compartments is due to the:
- ionizing factions
 - unionized factions
 - neutral factions.
- 367.** A weak acid (with $pK_a = 4$) will be almost completely ionized in the stomach while the majority of ECL will be unionized.
- true
 - false.
- 368.** A weak acid (with $pK_a = 4$) will be in the stomach almost totally unionized, while the ECL will ionized.
- true
 - false.
- 369.** In the case of anesthesia with barbiturates there is a possibility that:
- blood pH to be more acidic
 - the pH of the blood to become more basic
 - barbiturates will become less ionized in plasma
 - shall identify plasma barbiturates in unionized form.
- 370.** Binding sites available in the body distribution compartments, does not exert any effect on drug's total amount in each compartment.
- true
 - false.
- 371.** Even if the pH has the same value, due to the coupling process it is possible to record changes in concentration between the two compartments and thus, the concentration of the unionized drug will be the same in both compartments.
- true
 - false.
- 372.** The presence of active transport mechanism between the compartments can cause the drugs unequal distribution?
- yes
 - no
 - there are no known active transport mechanism between compartments.
- 373.** The active drug concentration is:
- the fraction coupled
 - the fraction uncoupled
 - one that is able to leave and reach the site of action.
- 374.** Among the free and coupled drug factions there is a dynamic equilibrium. When the substance leaves the circulation the:
- free fraction is liberated to restore the balance
 - coupled fraction is liberated to restore balance
 - free fraction can be considered as deposit
 - coupled fraction can be considered as deposit.

English quiz for IIIrd year Veterinary students

- 375.** Drugs coupling to proteins may increase the plasma loss rate?
 a) yes
 b) no
- 376.** Drugs coupling to proteins can reduce the plasma leakage rates?
 a) yes
 b) no
- 377.** Drugs coupling to proteins reduces the rate of loss of substance in plasma:
 a) only to the extent that it determines the loss of plasma concentration of unbound fraction
 b) only to the extent that it diminish the serum coupled fraction
 c) increasing the concentration gradient, which occurs on the drug exposure
 d) by decreasing the concentration gradient, which occurs on exposure to the drug.
- 378.** Drugs coupling proteins may result in higher concentration in the compartments, possible through them simple solubilization?
 a) yes
 b) no
- 379.** Drugs coupling can reduce the loss rate of them through the kidney?
 a) yes
 b) no
- 380.** Drugs coupling reduces the kidney loss rate:
 a) because only coupled fraction will be filtered
 b) only the free fraction will be filtered
 c) drug coupling increases rate of kidney loss.
- 381.** When a drug is excreted the active protein coupling will not confer protection.
 a) true
 b) false.
- 382.** Report of coupled and free faction concentrations of a drug may depend on the total drug concentrations.
 a) due to release of the available coupling sites
 b) due to occupancy of available coupling sites
 c) report is not influenced by total drug concentrations.
- 383.** A consequence of the proteins coupling is:
 a) toxicity and effect of a protein that couples a drug massively in hyperproteinemia
 b) toxicity and effect of a drug which will reduce protein coupled massive in hypoproteinemia
 c) toxicity and effect of a drug that couples massively proteins in case of hypoproteinemia.
- 384.** A consequence of the proteins coupling is:
 a) the concentration of coupled fraction will be increased to the administration of a drug with higher affinity to the same sites of the coupling.
 b) concentration of free fraction of a drug will be reduced to the administration of a drug with higher affinity to the same coupling sites
 c) concentration of the free fraction of a drug will be increased to the administration of a drug with higher affinity to the same coupling sites.
- 385.** The competition for the same coupling site of two drugs may promote the toxicity:
 a) when the replaced drug is protein-coupled, only to a small extent
 b) be when the replaced drug is not coupled to proteins, but drugs interact
 c) when the replaced drug is protein-coupled in a large proportion
- 386.** Coupling of drugs in circulation is made especially on serum albumin, the connection type being a:
 a) ionic
 b) hydrogen
 c) Van der Waals
 d) hydrophobic type
- 387.** The proportion of drug coupled can normally exceed 99%?
 a) yes
 b) no
- 388.** The proportion of a coupled drug can be under normal conditions invalid?
 a) yes
 b) no
- 389.** In coupling, serum albumins are able to achieve couples of the type:
 a) high affinity - small capacity
 b) high affinity - high capacity
 c) low affinity - high capacity
- 390.** Estimated unbound concentration and total concentration of a drug can be made by:
 a) gradual increase in the drug coupled fraction concentration
 b) gradual increase in free drug concentration
 c) gradually increasing the total concentration of the drug

English quiz for IIIrd year Veterinary students

- 391.** Data on the number of sites coupling of albumin molecules and the constant affinity value coupling are important for:
- dosing of antimicrobials
 - determining the amount of the drug required to saturate the antimicrobial coupling capacity
 - determining the quantities of antimicrobial drug free form that will exceed MIC (Minimum Inhibiting Concentration) for microorganism
- 392.** Drugs are able to diffuse into:
- blood plasma space
 - the extracellular space
 - the intracellular space
 - intestinal luminal space
- 393.** In percentage, the largest area of distribution of medicinal products is:
- blood plasma space
 - the intercellular space (extracellular)
 - the extracellular space
- 394.** In percentage, the smallest area of distribution of medicinal products is:
- the intracellular space
 - the extracellular space
 - the intravascular space
- 395.** The drug distribution volume means that:
- part of serum albumin able to diffuse into body fluid spaces
 - part of the total water body in which a drug is able to diffuse
 - part of the body intercellular space where a drug is able to diffuse
 - part of the body's intracellular space where a drug is able to diffuse
- 396.** The concentration at which the first contact with the spatial distribution of the drug is determined by:
- the size of the dose of the drug
 - the delivery rate in the body fluid spaces
 - solubilizing rate of body fluid spaces
- 397.** The degree to which a diluted dose of a drug will depend on the number of compartments that he will penetrate
- true
 - false
- 398.** "True dilution" is:
- the ability of a drug to penetrate the body fluid compartments
 - satisfying the needs of coupling by some of the administered dose
 - satisfying the needs of sequestration and active transport by some of the administered dose
- 399.** 'Apparent dilution' is:
- satisfying the needs of coupling by some of the administered dose
 - satisfying the needs of sequestration and active transport by some of the administered dose
 - the ability of a drug to penetrate the body fluid compartments
- 400.** When a drug leaves the blood plasma to penetrate into other compartments of the body, the fluid concentration will:
- increase
 - decrease
 - remain constant
- 401.** As the drug slows the absorption rate:
- the trend of increasing blood concentration will be compensated
 - the downward trend in blood concentration cannot be compensated
 - the trend of increasing blood concentration cannot be compensated
- 402.** As a drug slows the rate of absorption, the pseudo-equilibrium of distribution will not be affected:
- true
 - false
- 403.** As a drug absorption rate decreases, does the pseudoequilibrium distribution change?
- yes
 - no
- 404.** The mechanisms for disposal may influence lowering plasma levels?
- yes
 - no
- 405.** As the mechanisms of removal may cause lowering plasma levels:
- drugs tend to stay in the volume of distribution
 - drugs tend to revert back to the plasma distribution volume
 - drugs tend to return from the plasma distribution volume

English quiz for IIIrd year Veterinary students

- 406.** Large molecules can exit the plasma space?
a) yes
b) no
- 407.** Polar molecules are limited to:
a) plasma space
b) ECL
c) ICL
- 408.** Drug molecules with lipophilic character may be distributed in:
a) plasma
b) ICL
c) ECL
d) intestinal luminal space
- 409.** Transcellular fluids are separated by interstitial fluid that bathes all cells?
a) yes
b) no
- 410.** Transcellular fluids are represented by:
a) liquids from the intestinal lumen
b) urinary tract
c) glands
d) joint
e) the body cavity
- 411.** Transcellular fluids are important in distributing medicines being considered:
a) excretions
b) secretions
c) water cell
- 412.** The rumen could extract from ECL medicines taken by general?
a) yes
b) no
- 413.** When a drug administered by general way diffuses in body fluids he must overcome all spaces?
a) yes
b) no
- 414.** If an animal of 100 kg was administered I.V., 1g (one gram) of drug (active ingredient), it will distribute the quantity theory in order:
a) intracellular > intravascular > intercellular
b) intracellular > intravascular > intercellular
c) intracellular > intravascular > intercellular
d) intravascular > intercellular > intravascular
- 415.** If the capillary wall, membrane permeable to various drugs the passage will depend on :
a) drugs lipophilicity
b) molecular size of the drug
c) physiological status
- 416.** Do small drug molecules, water-soluble, water, and electrolytes may pass through the walls of the capillaries?
a) yes
b) no
c) only water
d) only electrolytes
e) only water and medicines
- 417.** Large molecules, up to the size of albumin penetrate capillary wall by simple diffusion processes:
a) fast
b) slowly
c) can not pass through this mechanism
- 418.** The differential pressure between the arterial and the venous end of the capillary is connected with the passage of large molecules of the drug?
a) yes
b) no
- 419.** Soluble drug molecules, pass through the capillaries wall at a rate proportional to:
a) the size of the molecules
b) molecular weight
c) partition coefficient
- 420.** Substances coupled to plasma proteins can cross transcapillary?
a) yes
b) no
c) only free forms can pass
- 421.** Transcapillar crossing may be influenced by:
a) changing the drugs permeability
b) the hypovolemia state
c) the presence of tissue metabolites
- 422.** Histamine has the ability to:
a) decrease capillary permeability
b) increase the permeability of capillaries
c) doesn't affect permeability, but vasomotricity
- 423.** Accumulated lactic acid in muscle tissue can diminish following an effort for a drug permeability of capillaries?
a) yes
b) no
- 424.** Lactic acid accumulated in the tissues consecutive effort will:
a) decrease capillary permeability to drugs
b) increase the permeability of capillaries for drugs

English quiz for IIIrd year Veterinary students

- 425.** Noradrenaline in the blood will determine:
- increases permeability through vasodilation
 - increases permeability through vasoconstriction
 - reduce permeability through vasoconstriction
 - vasodilation diminish permeability.
- 426.** Some drugs can switch on the body's own specific receptors, these are:
- parasympathomimetic
 - antihistamines
 - muscle relaxants
 - CNS excitatory
- 427.** Some drugs can switch on the body's own specific receptors, these are the:
- antihistamines
 - beta-blocker substances
 - antivomiting drugs
 - sympathomimetics.
- 428.** Some drugs can switch on the body's own specific receptors, these are:
- antihistamines
 - parasympatholytics
 - muscle relaxants
 - beta-blockers.
- 429.** For therapeutic dosages, when coupled receptors are mainly:
- the coupled substance will act quantitatively
 - will produce passive distribution and aggregation
 - will produce the active drug redistribution.
- 430.** All active small molecule will be filtered at the glomerulus:
- depending on their total concentration
 - according to their concentration in plasma
 - according to their partition coefficient.
- 431.** The amino acids derived from intermediary metabolism can be resorbed in:
- the underside of proximal convoluted tubule
 - upper proximal convoluted tubule
 - renal glomerulus.
- 432.** Acidic drug elimination proximal convoluted tubules is being considered a way:
- the excretory, since the distal part of the segment, this kind of drugs are reabsorbed
 - secretion, as in the distal part of the segment, such drugs are not resorbed.
- 433.** Renal drug distribution parameters can be adjusted:
- physical
 - chemical
 - by active transport processes
 - by passive transport processes
- 434.** Cephalosporins are eliminated by processes:
- acid secretion
 - glomerular excretion
 - the tubular excretion
- 435.** Penicillins can be eliminated by:
- glomerular active excretion
 - active acid secretion
 - passive acid secretion
- 436.** If an active secretion mechanism is involved in the elimination of drugs to another drug, the rate of excretion will be:
- low visibility
 - increased visibility
 - unchanged
- 437.** Acid capacity reduction of secretion consecutive involvement in eliminating this mechanism will determine uricosuric drugs:
- retention of uric acid
 - massive elimination of uric acid
- 438.** Drug membrane transport requires:
- passive mechanisms, without energy
 - active mechanisms, energy consumption
 - active mechanisms, without energy
- 439.** The water will diffuse in and out of cells:
- by random movements
 - without interaction with other molecules
 - due to the selective polarization of membranes
 - due to a transmission system selectively saturated
- 440.** Transportation by 'solvent drag' may occur in substances that penetrate the pores of the aqueous membranes as a result of:
- adequate solubility
 - increase circulation of water
 - competition for substrate
- 441.** The diffusion of drugs limited to electric charges is related to:
- polarity membranes
 - the lipophilicity of the membrane
 - the pH of the membrane

English quiz for IIIrd year Veterinary students

- 442.** The polarity of membranes can determine the selectivity of electrical charges ionized drugs?
 a) **yes**
 b) no
- 443.** Small anions can cross aqueous channels loaded:
 a) **positive**
 b) negative
 c) neutral
- 444.** Cations are excluded by anions able to go through the channels of the aqueous positively charged.
 a) **true**
 b) false
- 445.** In case of a limited diffusion the lipid molecule drug can penetrate only if:
 a) **has an adequate solubility**
 b) **has an appropriate partition coefficient**
 c) exists aqueous pores
- 446.** The drugs facilitated diffusion of is a system:
 a) **selectively**
 b) **saturable**
 c) **subjected to competition between substrates**
- 447.** According facilitated diffusion mechanism, the molecules can combine the carrier:
 a) **reversible**
 b) irreversible
 c) both
- 448.** Transport drugs can oscillate between the two sides of the membrane:
 a) **releasing molecules**
 b) **taking molecule**
 c) none
- 449.** The movement required for the transport of drugs, in case of diffusion facility is:
 a) **poor**
 b) strong
 c) **the thermal agitation**
- 450.** The diffusion of simple and limited medicines are processes that:
 a) require energy consumption
 b) **not proceeding with energy consumption**
- 451.** The diffusion facilitated drug is a process that takes place with :
 a) energy consumption
 b) **without energy**
- 452.** Diffusion limited to electric load and the one limited to lipidic barrier of drugs claim:
 a) energy consumption
 b) **does not require energy**
 c) only the first process needs energy
 d) only the second process needs energy
- 453.** The drive of pharmaceutical solvent ('solvent drag'), requires energy consumption?
 a) yes
 b) **no**
- 454.** The mechanisms for transport of drugs that do not require energy, typically:
 a) lead to concentration gradients
 b) **do not lead to concentration gradients**
- 455.** Drug transport mechanisms that require energy, typically takes place:
 a) according to the concentration gradient
 b) **against the concentration gradient**
- 456.** The substitute diffusion of the drug is a process that takes place:
 a) **energy consumption**
 b) without energy
- 457.** Active transport ("carrier") and pinocytosis process takes place with:
 a) **energy consumption**
 b) without energy only the first process requires energy consumption
 d) only the second process requires energy consumption
- 458.** Types of drug transport mechanisms requiring energy are:
 a) diffusion limited to the electric load
 b) **diffusion exchange**
 c) **pinocytosis**
 d) **active transport**
 e) training by solvent
- 459.** In the transport of drugs through "carrier":
 a) **molecule that enters will combine with a conveyor**
 b) **the carrier will be changed on both sides of the membrane**
 c) **ATP is the energy source**
- 460.** Active transport ("carrier") requires:
 a) **modification of the conveyor in a form with maximum affinity for the molecule transported**
 b) **coupling the carrier macromolecule**
 c) **release the molecule transported after passing through the membrane**

English quiz for IIIrd year Veterinary students

- 461.** Active transport ("carrier") after crossing the membranes:
- will return empty uncoupled
 - engage with another substance and returns
 - neither of these mechanisms
- 462.** In case of diffusion exchange membrane transporter can travel:
- only energy
 - only as complexed
 - only non-complexed form
- 463.** If diffusion parts, conveyor can cross from one side of the membrane to the other:
- any type of molecule
 - only similar molecules
 - molecules form only noncomplexed
- 464.** Pinocytosis is a transport mechanism in which:
- the cell membrane develops invagination
 - occurs embedding active substances and integrated as vesicles
 - consumes energy
- 465.** Protein molecules and lipid levels can penetrate the membrane processes pinocytosis?
- yes
 - no
- 466.** In the process of pinocytosis the substances will be taken in the form of:
- vesicles
 - complexed
 - combining with the carrier
- 467.** Active transport also presents, in addition to energy consumption:
- selectivity
 - saturation
 - competition
- 468.** The drugs will be transported by transport systems:
- if they have similar structure to endogenous substances
 - regardless of their structure
 - unless those systems would block
- 469.** Diuretic drugs may block transport mechanisms?
- yes
 - no
- 470.** The immunoglobulin absorption in the intestinal mucosa of the newly - born is dependent in particular to:
- diffusion
 - active transport
 - pinocytosis
- 471.** Pinocytosis for example can influence the intestinal absorption of immunoglobulins in new - born?
- yes
 - no
- 472.** The degree of ionisation of the drug is dependent on the:
- pH of the aqueous phase
 - pH of the oily phase
 - fluid channels
- 473.** When the pKa of a pharmacon is equal to the pH of the solution, exactly half of the molecules of a pharmacon will be:
- unionised
 - ionised
 - coupled
- 474.** Capable to diffuse through the lipidic membranes and to equalize concentrations on the same sides of membranes are limited for:
- ionised molecules
 - unionised molecules
 - none of these molecules
- 475.** The consequence of the effect of partitioning the difference pH - pK on the effect of diffusion was called:
- dissociation coefficient
 - partition index
 - ionic capture
- 476.** A different pH between the faces of the membrane allows a drug with suitable PKA to develop:
- identical ionization reports in the two liquid phases
 - different ionization ratios of the two liquid phases
- 477.** Even if unionized fraction concentration levels are almost identical the concentration either side of the membrane can be dissociated and undissociated:
- only equal
 - different

English quiz for IIIrd year Veterinary students

- 478.** In the case of liquid insoluble ions they may remain trapped on one side of the membrane.
 a) true
 b) false
- 479.** The total concentration of a drug will only increase in the compartment that has the capability:
 a) greater coupling free pharmacon
 b) greater release coupled pharmacon
 c) both of the above
 d) none of the above
- 480.** The drugs diffuse into the tissues form:
 a) free
 b) a conveyor coupled to
 c) both of the above
- 481.** Drug electivity for a given tissue can lead to:
 a) concentration of the drug
 b) unequal distribution
- 482.** A pH more alkaline nature of a compartment will entail a concentration of the drug:
 a) higher
 b) less
 c) equal to that of the other compartment
- 483.** The distribution of the drug in the body can be produced by:
 a) uniform distribution in all tissues
 b) uneven distribution, selective
 c) uniform initial distribution followed by redistribution
- 484.** Narcotics in the body will distribute:
 a) unequally
 b) selectively
 c) uniformly
- 485.** Calcium will be distributed in the body:
 a) uniformly
 b) unequally, selectively
 c) initially uniformly, then it redistributes
- 486.** Iron is distributed in the body:
 a) uniformly
 b) unequally, selectively
 c) initially uniformly, then it redistributes
- 487.** Iodine is distributed in the body:
 a) uniformly
 b) unequally, selectively
 c) initially uniformly, then it redistributes
- 488.** Organochlorine compounds are distributed in the body:
 a) uniformly
 b) unequally, selectively
 c) initially uniformly, then it redistributes
- 489.** Tiobarbiturates are distributed in the body:
 a) uniform
 b) unequal, selective
 c) initially uniform, then redistributes
- 490.** Organs and tissues that selectively retain drugs are:
 a) blood
 b) thyroid
 c) prostate
 d) adrenal
- 491.** Organs and tissues that selectively retain drugs are:
 a) the uterus
 b) the placenta
 c) bone
 d) fat
- 492.** Organs and tissues that selectively retain drugs are
 a) kidney
 b) retina
 c) teeth and bones
 d) myocardium
- 493.** In chlorpromazine brain concentrations can be achieved by:
 a) 10-fold higher
 b) 20 times
 c) 50-fold higher
 d) 20 times lower
 e) 10 times lower
 f) 50 times lower
- 494.** Distribution equilibrium is called 'steady state'.
 a) true
 b) false
- 495.** Drugs' distribution equilibrium is higher for:
 a) intracellular proteins
 b) serum proteins (albumin)
- 496.** A 'permissive' barrier is the:
 a) blood-brain
 b) blood-ocular
 c) placenta

English quiz for IIIrd year Veterinary students

- 497.** When epithelia are affected by inflammatory processes, barriers can become permeable for the:
- ionised drugs
 - unionised drugs
- 498.** Blood-brain barrier exists into the brain because there are no pores and capillaries are tightly wrapped in glial cells.
- true
 - false
- 499.** Endothelial cells in blood-brain barrier are of:
- "tight" type
 - "gap" type
- 500.** In order for a drug to cross the CNS these will have to cross:
- blood - brain barrier
 - blood - marrow barrier
 - blood - CRL barrier
- 501.** The blood - brain barrier consists of:
- wall of the capillaries
 - a layer of glial cells
- 502.** Blood - CRL barrier is made up mainly of choroid plexus epithelium.
- true
 - false
- 503.** Blood - brain barrier and blood - CRL barrier are two type:
- hydrophilic
 - the amphiphilic
 - lipophilic
- 504.** Which of these substances can pass the barriers faster blood - brain and blood - CRL?
- veronal
 - thiopental
 - acetanilide
- 505.** Can cross the blood - brain and blood - CRL barriers:
- cloralhidrate
 - chloramphenicol
 - penicillin
 - adrenaline
- 506.** Drugs administered I.V. can enter in the brain or CRL to a rate:
- proportional with the partition coefficient
 - inversely proportional to the partition coefficient
 - none of these
- 507.** The drugs that were administered I.V. may penetrate into the brain or cerebrospinal fluid at pH:
- 5.4
 - 6.4
 - 7.4
- 508.** Drugs that have been administered I.V. may penetrate into the brain or cerebrospinal fluid of a pH optimum in terms of:
- dissociation constant and pH = 6.4
 - dissociation constant and pH = 7.4
 - dissociation constant and pH = 5.4
- 509.** Crossing drugs across the blood - ocular is:
- very easy
 - easy
 - hard
 - the place
- 510.** The passage of plasma drug in aqueous chamber of the eye can be achieved by the ciliary body epithelium?
- yes
 - no
 - drugs can not pass this barrier
- 511.** The crossing of the blood – eye barrier is easy because the vasculature is much richer compared to other tissues.
- true
 - false
- 512.** In the case of blood - ophthalmic crossing the medicines will occur difficulties because:
- epithelia are waterproofed by zonulae ocludentes
 - the vasculature is much lower as compared to other tissues
 - if this it happens this barrier is easy crossed
- 513.** Placenta barrier comes from the:
- invagination in the uterus
 - syncytial trophoblast
 - intimate uterine lining
- 514.** In the case of placenta barrier:
- intercellular spaces are present
 - are lacking intercellular spaces
 - transcellular exchanges are absent
 - transcellular exchanges are present
- 515.** Placental membrane permeability is higher or lower than the blood - brain barrier?
- higher
 - equal
 - lower

English quiz for IIIrd year Veterinary students

- 516.** Placental membrane permeability matters in:
- pregnant females
 - products of conception
 - only in pregnant females
 - only products of conception
- 517.** Pharmacons showing central effects (crossing the blood - brain barrier) can enter the fetal circulation?
- no
 - yes, easily
 - yes, only selectively
- 518.** The effect of crossing the placenta consecutive to medication in newborns can be compared with the adults?
- will be short-lived
 - duration will be approximately equal
 - will be long-term
- 519.** Medicinal effects in the newborns, consecutive to the placenta crossing compared with adults will be briefer:
- true
 - false
- 520.** Medicinal effects in the newborns, consecutive crossing placenta compared with adults will be longer since mechanisms for removal are not completed?
- yes
 - no
- 521.** Liposoluble anesthetics can cause depression in newborns?
- there is no connection between anesthetic and respiratory depression in the neonates
 - yes, can cause respiratory depression
- 522.** The placenta acts as a barrier in the way of diffusion of the:
- highly ionised drugs
 - unionised drugs
 - vulnerable to placental enzymes
 - drugs can diffuse completely barrier
- 523.** The placenta barrier is considered:
- very efficient
 - low effective
 - ineffective
- 524.** Embryotoxicity and teratogenicity may be due to the placenta?
- yes
 - no
- 525.** The conditions that must be met by medicinal products to cross the placenta are generally the:
- membrane active diffusion
 - membrane facilitated diffusion
 - passive diffusion through membranes
- 526.** A substance that can cross the placental membrane is crossing:
- according to the concentration gradient
 - against the concentration gradient
- 527.** Sulfamides will cross the placenta?
- well
 - hard
 - not crossing
- 528.** Antibiotics will cross the placenta:
- difficult
 - easy
 - not crossing
- 529.** Chemotherapeutics will cross the placenta:
- hard
 - easy
 - no
- 530.** Analgesics will cross the placenta:
- easy
 - at all
 - hard
- 531.** Sulphathiazole and sulfamethazine easily diffuses through the placenta, fetal blood being found compared to the native sulphamidemia in a proportion of:
- 25%
 - 50%
 - 75%
 - 100%
- 532.** The skin barrier:
- allows easily the drugs penetration
 - does not allow the drug penetration
 - allows the drug penetration
- 533.** Thiopental may result in return of anesthesia?
- yes, because of the transfer of less vascularized tissues in the brain
 - no
- 534.** The blood-brain balance can restore the dissemination of the product:
- back from CNS in blood
 - from blood in the CNS

English quiz for IIIrd year Veterinary students

- 535.** To create a new blood - brain balance, CNS drugs will diffuse back into the blood.
 a) true
 b) false.
- 536.** A tissue study can demonstrate whether a drug or antimicrobial had achieved an adequate therapeutic concentration?
 a) yes
 b) no
- 537.** The concentration of a drug present in the tissues at known time intervals after the last administration is essential to determine the:
 a) therapeutic time
 b) distribution time
 c) the withdrawal period
 d) the elimination period
- 538.** The withdrawal period defines:
 a) the time elapsed after the last administration to the drug's total elimination from the body
 b) the time to concentration extrapolated from the average daily consumption of meat of a man could release dangerous amounts of drug without side effects.
 c) the time to reach the therapeutic concentration
 d) the time to reach the toxic concentration
- 539.** When the coupling capacity or to sequester drugs in other places than those of action is considerable than will be necessary:
 a) lower starting dose of drug
 b) unchanged starting dose
 c) higher starting dose.
- 540.** A competitive antagonist increases the concentration of active receptor agonist so it will lose its effectiveness.
 a) true
 b) false.
- 541.** A competitive antagonist is characterized by:
 a) blocking a part of the receptor population
 b) the loss of agonist efficiency
 c) antagonist efficiency exacerbation.
- 542.** The antagonist may be a drug that, when administered before or simultaneously with the agonist will:
 a) abolish its response
 b) reduce its response
 c) increase its response.
- 543.** In competitive antagonism, agonist and antagonist compete:
 a) for the same receptor
 b) by chemical reaction
 c) to change the functional capacity of the cell.
- 544.** The antagonism may be:
 a) competitive
 b) non-competitive
 c) functional
 d) chemical.
- 545.** The chemical antagonism is characterized by the:
 a) reaction modification of the cell functional capacity
 b) chemical reaction between parts
 c) antagonism reactions for the same receptor
- 546.** Functional antagonism is a competition for occupying the same receptor?
 a) yes
 b) no
- 547.** Modification of the cell functional capacity is the result of the:
 a) non-competitive antagonism
 b) competitive antagonism
 c) functional antagonism
 d) the chemical antagonism.
- 548.** Non-competitive antagonism may be considered the antagonism where the antagonist and the specific (or non-specific) sites forms an irreversible bound?
 a) yes
 b) no
- 549.** Histamine and norepinephrine on blood pressure, acting through:
 a) identical capacity, at the same points of the cell
 b) functional capacities in different points of the cell
 c) various effects, but at the same organ.
- 550.** If agonist concentration reduces or exceeds the antagonism then is called:
 a) temporarily
 b) reversible
 c) competitive.
- 551.** When a drug reduces other drug's effect by inducing a contrary response or by activating another type of receptors, we speak about:
 a) chemical antagonism
 b) non-competitive antagonism
 c) physiological antagonism.

English quiz for IIIrd year Veterinary students

- 552.** The physiological effects of histamine can be achieved also by adrenaline?
 a) **yes**
 b) no
- 553.** In a non-competitive antagonism:
 a) affinity is altered
 b) **affinity is unaltered**
 c) Increased agonist effectiveness is apparent
 d) **apparent efficacy of the agonist is reduced.**
- 554.** Calcium ions are considered secondary messengers involved in coupling?
 a) **yes**
 b) no
- 555.** The Clarks "occupation" theory is about the:
 a) intensity of effect is the resultant of speed coupling on receptors
 b) pharmacodynamic effect is produced by converting receptor from the "inactive" in the "active" form.
 c) **intensity of effect is the resultant of speed coupling on receptors**
 d) **pharmacodynamic effect is produced by converting receptor from the "inactive" in the "active" form.**
- 556.** The "speed" Paton's theory relates that:
 a) the pharmacodynamic effect is produced by the conversion of the inactive form of the receptor in the active
 b) the intensity of drug effect depends on the number of receptors occupied.
- 557.** Paton's theory is the:
 a) activation theory
 b) **speed theory**
 c) employment theory.
- 558.** Clark's theory is called the:
 a) activation theory
 b) speed theory
 c) **occupation theory**
- 559.** The "occupation" theory (Clark's) is the:
 a) **intensity of drug effect depends on the number of occupied receptors**
 b) intensity of the effect of the drug depends on its rate of coupling with the receptor
 c) the intensity of the effect depends on the transformation of drug receptors in the active form from the inactive one.
- 560.** In Clark's theory:
 a) **the filling of all available receptors = maximum effect**
 b) **a proportionally lower occupancy = less effect**
 c) **the effects are directly proportional to the receptor occupancy (because the rate of occupancy and stimuli are added together).**
- 561.** Other places of coupling and sequestration of drugs are called:
 a) **loss sites**
 b) **acceptance of the drug**
 c) **silent receptors.**
- 562.** A high local concentration of a pharmacon can produce:
 a) **unwanted changes**
 b) **side effects**
 c) **toxic effects.**
- 563.** Nitrofurantoin in excess can cause on dog:
 a) retinal dystrophy
 b) yellowing teeth and mucous membranes
 c) **toxic effects.**
- 564.** Cloroquines in excess can determine:
 a) **retinal dystrophy**
 b) will not cause any undesired effect
 c) yellowing teeth
 d) toxic effects.
- 565.** The coupling capacitances of one side of a membrane are:
 a) equal
 b) **different.**
- 566.** Body compartments that supply blood flow can influence the time to achieve balance?
 a) **yes**
 b) no
- 567.** Term of pharmacological receptor was introduced by:
 a) JN Langley
 b) AJ Clark
 c) **P Ehrlich**
 d) WDM Paton.
- 568.** A pharmacological receptor is a infrastructural cells formation that has the ability to bind more or less specifically to:
 a) **drug molecules**
 b) **endogenous substances**
 c) **toxic substances.**
- 569.** Pharmacoceptors can be identified in:
 a) **the cell membrane**
 b) **within the cell.**
- 570.** Receptors may have active (s) center (s)?
 a) **only one**
 b) **more.**

English quiz for IIIrd year Veterinary students

- 571.** Active groups of a drug substance will be set at:
- hydrophilic groups
 - lipophilic groups
 - active centers.
- 572.** In the pharmacodynamic effect concur:
- interaction of active centers - active group
 - the interaction active center - active center
 - interaction active group - active group.
- 573.** Structure of pharmacological receptors is:
- monoclinal
 - two-dimensional
 - tridimensional.
- 574.** The formation of drug-receptor complex is a reverse level of:
- pharmacokinetics
 - pharmacodynamics.
- 575.** The interaction that occurs between the substance and the receptor, with the final effect of the drug after biophysics, biochemical and physiological changes of the substance is :
- pharmacodynamic
 - pharmacokinetic.
- 576.** Changes in biophysical, biochemical and physiological on the substance that are fixed receptors will determine:
- formation of the drug - receptor
 - the conduct of the drug - receptor interaction
 - dissolution of drug receptor complex.
- 577.** The receptor is actually a negative mark in a drug substance.
- true
 - false.
- 578.** In the pattern of drug action type "key - lock", "key" is the :
- drug
 - receptor
 - responsible enzyme.
- 579.** In the pattern of drug action type "key - lock", "lock" is the:
- receptor
 - drug
 - responsible enzyme.
- 580.** In case of the drug action the antagonist is :
- a medicine unable to enter the "lock"
 - a drug capable to enter in the "lock" and trigger the response
 - a drug able to enter the "lock" but that does not trigger the response.
- 581.** An antagonist is a drug able to:
- trigger therapeutic responses
 - unable to trigger therapeutic responses
 - take the place of a more specific drug for the receiver.
- 582.** The connections that characterize the medicines that have a long action are:
- covalent bonds
 - hydrogen bonds
 - coordinative bonds
 - ionic bonds.
- 583.** The connections that characterize the drugs which have a short duration of action are:
- coordinative bonds
 - ionic
 - hydrogen bonds.
- 584.** Coupling of a drug to the receptor can be characterized as:
- low affinity and low capacity
 - low affinity and high capacity
 - high affinity and reduced capacity.
- 585.** The sites at which drugs couple but do not produce any associated effect are called:
- "mute" receptors
 - "acceptable" receptors
 - intracellular receptors.
- 586.** When a receptor- drug complex dissolves, medicine molecules:
- are rapidly eliminated
 - are returned in biphasic
 - receptor-drug complexes are not removable.
- 587.** A drug molecule from the receptor may disengage when has:
- reduced kinetic energy of thermal collisions
 - increased kinetic energy of thermal collisions
 - the kinetic energy due to collision energy exceeds thermal coupling.
- 588.** Neuromuscular junctions containing receptors at the cell surface are in a number:
- low
 - moderate
 - high.
- 589.** In the presence of an agonist the conformation of coupling sites is modified to:
- decrease affinity for agonist
 - increase affinity for agonist
 - the coupling sites are not modified in the presence of agonist.

English quiz for IIIrd year Veterinary students

- 590.** On the course of active phase, ion gate will be:
- open
 - closed.
- 591.** In the active phase can a physiological response be installed? But pharmacological?
- yes
 - only the physiological
 - only the pharmacological.
- 592.** Reduction or absence of response following the coupling in the presence of an agonist is called:
- hyporesponsive
 - desensitization
 - inertia.
- 593.** With the removal of the agonist coupling sites will return to:
- the status of rest
 - coupling phase.
- 594.** If an antagonist inhibits the action of a group of medicines by blocking its receptor, the tissue will respond:
- only if it is given a drug that activates other receptors
 - by the absence of pharmacological effect
 - by adverse pharmacological effects undesirable type.
- 595.** Various enzymes that can catalyze the same reaction are called:
- additional enzymes
 - reactive enzymes
 - isoenzymes.
- 596.** Induction of shape changes on an enzyme, after coupling to another site than the active substrate with a different substance is commonly called alosterism:
- true
 - false.
- 597.** Combining the so - called allosteric site can produce:
- allosteric activation
 - inhibition of the enzyme.
- 598.** "In vitro" drugs are capable of inhibiting enzymes?
- yes
 - no
- 599.** Enzyme inhibition by drugs can be achieved:
- by blocking the active site of an irreversible antagonist covalently bound
 - reversible inhibition by using physiological substrate structurally similar agents but relatively slowly dissociates enzyme
 - structural degradation and loss of function by direct biochemical interaction.
- 600.** Are there drugs that can be converted by targeted enzymes in the irreversible compounds that will inhibit the same enzyme?
- yes
 - no
- 601.** Drugs can interfere:
- synthesis of enzymes, inhibiting them
 - action of essential cofactors
 - high enzymatic systems.
- 602.** Agonists are substances that:
- stimulate receptors
 - inhibit the receptor.
- 603.** An agonist is actually a drug that can be coupled to a receptor and cause:
- a positive response from the tissue where the receptors are located
 - a negative response from the tissue in which the receptors are located
 - a change in cell properties.
- 604.** An agonist able to achieve maximum tissue responses is called:
- full agonist
 - strong agonist.
- 605.** A maximum response is considered that of which:
- amplitude can not be overcome by subsequent administrations of agonist
 - intensity can not be overcome by subsequent administrations of agonist
- 606.** The potent agonists are characterized by a.
- low speed coupling - decoupling
 - high speed coupling - decoupling
 - irreversible stability of coupling.
- 607.** A competitive antagonist:
- binds reversibly to the same receptors
 - is reversibly bound to different receptors
 - irreversibly binds to the same receptors
 - binds irreversibly to different receptors.

English quiz for IIIrd year Veterinary students

- 608.** Clark's theory assumes that each coupling of any medicine with any receptor:
- will be equally effective in producing a response
 - will have increased effectiveness in producing a response
 - will have low efficiency in the production of a response.
- 609.** After Ariens, the intrinsic activity is the one that determines the ability of a drug - receptor unit to generate a response:
- true
 - false.
- 610.** After Ariens theory:
- a partial agonist can handle the expense of a full agonist receptors and, because of this stimulus will be submaximal
 - a partial agonist can handle the expense of a full agonist receptors and, because of this stimulus will be minimal
 - a partial agonist can handle the expense of a full agonist receptors and, because of this stimulus will be absent.
- 611.** After Stephenson's theory for some drugs:
- a maximum effect can be achieved by a proportion of the occupancy rate of 100%
 - a maximum effect can be achieved by a proportion of the occupancy of less than 100%
- 612.** After Stephenson's theory:
- an poor effective drug can produce maximum response after occupying only a portion of the receptor population
 - a highly effective drug may produce maximal response by filling only a portion of the receptor population
 - a highly effective drug can produce maximum response after the occupation of the total population of receptors.
- 613.** The concept of effectiveness, whose value expresses the relative ability of the receptor occupied by the product in question to "donate" a biological stimulation of the cell unit, was set out by:
- Clark
 - Ariens.
- 614.** The term "efficacy" is found in whose theory:
- Ariens
 - Clark
 - Stephenson.
- 615.** The free receptor population, unoccupied by a high efficacy drug has been called by Stephenson:
- partial receptors
 - reserve receptors
 - free receptors
 - unoccupied receptors.
- 616.** After Paton's theory, for an agonist:
- the rate of decoupling complexes is the one which determines the potency
 - the release rate dictates the rate at which it can achieve the new complex
 - antagonist quick coupling and decoupling will take place slowly.
- 617.** According to the theory of "activation" the continuity of a response requires degeneration and blocking the receptor:
- true
 - false.
- 618.** In the theory of "activation" the continuity of a response will require:
- release of receptors
 - regeneration of the receptors
 - blocking the receptor.
- 619.** After activation theory, populations of receptors could have:
- variable number
 - different locations
 - varying affinities.
- 620.** For all receptor theories is common:
- an agonist drug is combined with the receptor site
 - the receptor will be activated, thereby obtaining cellular response
 - the receptor will be functionally inactivated
 - when the drug disappears, the receptor becomes inactive again (that regenerates).
- 621.** Some medicines can adjust the number of receptors.
- yes
 - no
- 622.** Some medicines can adjust the receptors number:
- upward
 - downward.
- 623.** The loss of efficacy of a product used for a long time can be the cause of:
- depletion of receptors
 - receptor desensitization.

English quiz for IIIrd year Veterinary students

- 624.** Receptors are types.
- the cytosol
 - coupled to the pore
 - coupled enzymes.
- 625.** Receptors have different mechanisms of producing effects at cellular level, these are:
- depolarization of the membrane
 - selective permeability changes
 - increase / decrease intracellular regulators.
- 626.** Chemical messengers act:
- extremely fast (milliseconds) but have very short duration of action
 - quickly (seconds) but short-acting
 - the average time (minutes) but longer duration of action
 - a long time (hours) but extended duration of action.
- 627.** The absorption of drugs is a process in that occurs:
- increasing the concentration of pharmacoon
 - maintenance of the concentration levels of pharmacoon
 - reducing the concentration of pharmacoon.
- 628.** Drug metabolism is a process in which occurs:
- reducing the concentration of pharmacoon
 - maintenance of the concentration levels of pharmacoon
 - increasing the concentration of pharmacoon.
- 629.** Physiological factors (pharmacokinetic) that influence drug metabolism are:
- renal blood flow
 - plasma protein binding
 - feeding
 - genetic factors
 - enzyme induction.
- 630.** Physiological factors (pharmacokinetic) that influence drug metabolism are:
- solubilisation of the ultrafiltered
 - the circadian rhythm
 - urine pH.
- 631.** Physiological factors (pharmacokinetic) that influence drug metabolism are:
- stress factors
 - genetic factors
 - individuality
 - enzymatic inhibition.
- 632.** Hydrophilic drugs are excreted in urine compared to those with lipophilic character:
- much easier, unaltered
 - more easily, in altered state
 - likewise
 - more difficult.
- 633.** Drug precipitation in convoluted tubules can happen when:
- a metabolite is more soluble than the parental pharmacoon in the acid ultrafiltrate concentrate from the proximal convoluted tubule
 - a metabolite is less soluble compared to the parental pharmacoon in the acid ultrafiltrate concentrate from proximal convoluted tubule
 - a metabolite accumulates in large amounts in the renal glomerulus.
- 634.** Detoxification term refers to modifying a highly active substance for the purposes of:
- increase the effect intensity
 - decrease in the intensity of the effect.
- 635.** A primary inactive drug that becomes active only after the cyclization step or metabolic transformation can cause poisoning:
- true
 - false.
- 636.** The conjugation of a drug containing amine, carboxyl, etc. With glucuronic acid will:
- increase liposolubility
 - decrease liposolubility
 - increase water solubility
 - decrease water solubility.
- 637.** A drug with a weak acid character will eliminate much better when the urine is:
- alkaline
 - neutral
 - acidic.
- 638.** A drug with weak basic character will eliminate much better when the urine is:
- acid
 - alkaline
 - neutral.
- 639.** When elimination is reduced due to an unfavorable pH:
- will activate metabolic processes to make the compounds more soluble substances
 - will drop the rate of conjugate
 - increase the rate of conjugated compounds.

English quiz for IIIrd year Veterinary students

- 640.** The longer will be the half-life of a product as the medicinal product accomplishes:
- a low percent of coupling
 - coupling a high percentage
 - does not couple.
- 641.** Coupled drugs to plasma proteins may be metabolized?
- yes
 - no
- 642.** Drugs as free fraction may be metabolized?
- yes
 - no
- 643.** Enzyme inducers speed up metabolism by:
- activation of biochemical processes
 - increasing the rate of coupling
 - increase the rate of enzymatic synthesis.
- 644.** Between chemical structure and inductive effect:
- can be a correlation
 - can not establish a correlation.
- 645.** Some drugs after repeated dosing may stimulate their own metabolism:
- true
 - false.
- 646.** Among the drugs that work by stimulating the metabolism of other drugs the most common are:
- modifying CNS
 - analgesics
 - anti-inflammatory
 - antihistamines
 - the steroid hormones.
- 647.** Long-term administration of an insecticide would result in an:
- exacerbation of hepatic microsomal enzyme
 - pronounced inhibition of hepatic microsomal enzymes.
- 648.** In mammals can be observed differences in speed of metabolism and biotransformation pathways or conjugation
- yes
 - only metabolic pathways
 - only biotransformation or conjugation
 - no
- 649.** Differences in species metabolism are those relating to:
- quantitative aspects
 - nature of enzyme systems.
- 650.** The rate of drug metabolism can be influenced by the:
- animal size
 - animal species
 - type of nervous activity.
- 651.** In old animals will be slowed processes like:
- dealkylation
 - conjugation
 - hydrolysis.
- 652.** The volume in old animals in which the drugs difuses compared to adult is:
- less
 - higher
 - unchanged.
- 653.** In older animals, the conjugation process will be slow compared to adult.
- true
 - false.
- 654.** In neonates chloramphenicol can cause cardiovascular collaps and cyanosis due to:
- accumulation
 - conjugation deficit
 - elimination delay.
- 655.** Drug sensitivity is the result of:
- too low metabolic capacity
 - exacerbated metabolic capacity
 - enzymes depletion (especially microsomes).
- 656.** Females metabolise drugs:
- faster and are susceptible to poisoning
 - as males
 - slower and can be susceptible to poisoning.
- 657.** The differences in drug metabolism of sex seems to be due to the:
- presence / absence of testosterone and folicullin
 - differences of cytochromes that catalyze microsomal hydroxylation.
- 658.** The administration of most drugs in pregnant animals is:
- indicated
 - contraindicated
 - prohibited
- 659.** The metabolic capacity is lowered by the:
- low protein intake
 - deficiency states
 - minerals and vitamins excess.

English quiz for IIIrd year Veterinary students

- 660.** In the liver disease, the first enzymes that are reduced are:
- esterases
 - hydrolases
 - oxidases.
- 661.** Chloramphenicol administered in liver disease (cirrhosis) due to deficiencies of glucuronide conjugation can affect the:
- nervous system
 - vision
 - hematopoiesis
 - hearing
 - kidneys.
- 662.** Genetic sensitizer factors were found especially in the:
- rustic breeds
 - improved breeds.
- 663.** The metabolism is the most active in:
- morning
 - at noon
 - evening
 - night.
- 664.** The metabolism is the slowest in:
- morning
 - at noon
 - evening
 - night.
- 665.** The drugs effect during sleep is related to:
- the type of animal nervous activity
 - dietary factors
 - medicines coupling rate.
- 666.** Chemical compounds (e.g. insecticides, additives) ingested by animals, after repeated contact may produce an enzymatic induction and:
- increase the metabolic rate by 1-2 times
 - increase the metabolic rate by 2-10 times
 - decrease the metabolism rate.
- 667.** Stress on animal organisms can:
- decrease the activity of microsomal
 - increase the adrenal ascorbic acid
 - block the pituitary-adrenal reflex arc.
- 668.** Stress on animal organisms:
- increases the microsomal activity
 - decreases the adrenal ascorbic acid
 - stimulates the pituitary-adrenal reflex arc.
- 669.** The ionizing radiation can act as stressors:
- decreasing the activity of microsomal enzyme systems
 - increasing the activity of microsomal enzyme systems
 - reducing the rate of drug metabolism
 - increasing the rate of drug metabolism.
- 670.** There are drugs that can leave the body by elimination without undergoing any transformation process.
- true
 - false.
- 671.** In general, the metabolism processes purpose is to:
- increase the polarity
 - increase the water solubility
 - increase the rate of elimination
 - increase the tubular absorption
- 672.** Polar compounds can be excreted:
- renally
 - by bile
- 673.** CH₃ COOH group oxidation will make drugs to be:
- more easily excreted
 - more difficult excreted
 - non-dischargeable
- 674.** The drugs metabolism can be achieved in:
- one step
 - two-steps
 - three stages
 - four steps
- 675.** Biotransformation is a:
- physical process
 - chemical process
 - synthesis process
- 676.** Within drug biotransformation, molecules:
- will increase them size
 - will reduce them size
 - their dimensions are the same
- 677.** The chemical processes that occur in the biotransformation are:
- oxidation
 - reduction
 - hydrolysis
- 678.** Conjugation is a:
- physical process
 - chemical process
 - synthesis process

English quiz for IIIrd year Veterinary students

- 679.** Conjugation is a process of synthesis in which the substance molecule is:
- increased by the binding of a compound or radical
 - diminished by the binding of a compound or radical
- 680.** Part of prime metabolism is the process of:
- biotransformation
 - conjugation
 - both processes
 - none of the processes
- 681.** Biotransformation occur under influence of :
- liver enzymes
 - gastric enzymes
 - hydrochloric acid
- 682.** Biotransformation occur under influence of:
- pancreatic juice
 - bile
 - blood esterases
 - digestive microflora and fauna.
- 683.** The blood esterases will catalyze the metabolism of medicines especially by:
- hydrolysis
 - reduction
 - oxidation.
- 684.** Biotransformation process can occur in the skin and mucouse?
- yes
 - only the mucous
 - no
- 685.** In the spleen and lungs may occur drug biotransformation processes?
- yes
 - only in the lung
 - no
- 686.** The introducing of a hydroxyl radical to an aromatic cicle is called:
- epoxidation
 - N-hydroxylation
 - aromatic hydroxylation.
- 687.** Acyclic hydroxylation (aliphatic) of a drug refers to the:
- introducing a hydroxyl radical to an aromatic cicle
 - hydroxylation of the amine
 - oxidation of the side chains to the corresponding alcohols
 - the hydroxylation of aromatic compounds.
- 688.** Alicyclic hydroxylation is also known as aliphatic hydroxylation?
- yes, are the same
 - no, the acyclic is also called aliphatic.
- 689.** Epoxidation relates to intermediates compounds of the aromatics hydroxylation:
- yes
 - no
- 690.** N-hydroxylation is a process relating to:
- the oxidation of the side chains
 - introducing a hydroxyl radical to an aromatic cycle.
- 691.** Aromatic amines N-hydroxylation refers to:
- amino group conjugation
 - amino group hydroxylation
 - side chains oxidation.
- 692.** Secondary and tertiary amines are the:
- S-oxides
 - N-oxides
 - N-hydroxyls.
- 693.** Desulphurization is identical to S-oxidation?
- yes
 - no
- 694.** The dealkylation is a process that removes the alkyl groups by:
- O-alkylation
 - S-dealkylation
 - C-dealkylation
 - N-dealkylation.
- 695.** Microsomal reduction reactions occur under the action of:
- esterases
 - reductases
 - oxidases.
- 696.** The reduction is the catalyzed reduction of the microsomal groups:
- azo
 - nitro
 - hydroxy
 - halogen.
- 697.** Reductive dehalogenation is a metabolic process in which Cl, Br and I ions are broken and replaced with ions of:
- oxygen
 - hydrogen
 - nitrogen
 - sulfur.

English quiz for IIIrd year Veterinary students

- 698.** Amidases are microsomal enzymes which may trigger the hydrolysis in:
- blood
 - liver
 - kidney
 - lung.
- 699.** Dehydrogenases can catalyze the non-microsomal oxidation?
- yes
 - no
- 700.** Aldehydes can be oxidized to carboxylic acids?
- yes
 - no
- 701.** Histamine is:
- non-microsomially oxidatively deaminated
 - microsomially oxidatively deaminated
 - dehalogenated
 - desulphurised.
- 702.** Non-microsomal hydrolysis of drugs is a process of:
- oxidation
 - reduction.
- 703.** Biotransformations under the influence of drugs are mostly digestive processes of:
- reduction
 - hydrolysis.
- 704.** Drug conjugation reactions are:
- acetylation
 - methylation
 - sulpho-conjugation
 - dehalogenation.
- 705.** Drug conjugation reactions may be considered the:
- glucuronide conjugation
 - peptide conjugation
 - mercaptation
 - hydroxylation.
- 706.** Acetyl-coenzyme, involved in the drug acetylation will:
- transfer acetyl groups
 - accept acetyl groups.
- 707.** By methylation reactions are metabolized to:
- phenols
 - amines
 - thiols
 - sulphonamides
 - other endogenous compounds.
- 708.** Aromatic amines by sulfoconjugation are metabolized in:
- acetyls
 - sulphamates
 - glucuronide conjugates
 - peptide-conjugates.
- 709.** Among the most important routes of the conjugation, in animals, the most important is:
- glucuronidation, excepting the cat
 - mercaptation
 - acetylation
 - methylation
 - peptide-conjugation.
- 710.** For the carboxylic acid, the most common conjugation mean is the proces of:
- acetylation
 - peptide-conjugation
 - mercaptation.
- 711.** Peptide-conjugation binding for aminoacids involves the presence of coenzyme A:
- true
 - false.
- 712.** Mercaptation is a conjugation that is happening in:
- lung
 - blood
 - kidney
 - the liver.
- 713.** Mercapturic acids occur in the mercaptation process by conjugating drugs with:
- cysteine
 - glutathione
 - glucuronic acid.
- 714.** Nitrofurans are conjugated by processes of:
- acetylation
 - methylation
 - mercaptation
 - peptide-conjugate.
- 715.** The measure of the speed of a drug elimination is called:
- renal elimination time
 - excretion time
 - half-life.
- 716.** The period elapsed until the amount of substance in the body drops to half of the original amount is called renal clearance.
- true
 - false.

English quiz for IIIrd year Veterinary students

717. Plasma volume (ml) of a drug excreted for a settled period (of 1 minute) through the kidneys is called biological half-life.

- a) true
- b) false.

718. The half-life plasma time $t_{1/2}$, is the rate constant of an exponentially process?

- a) yes
- b) no

719. The half-life of a drug can be influenced by:

- a) plasma proteins
- b) the rate of tissue storage
- c) the rate of metabolism.

720. Renal clearance is expressed in:

- a) ml
- b) urine volume/minute
- c) mg%.

721. The expressions of clearance is possible for:

- a) kidney
- b) liver
- c) lung.

722. Soluble substances are eliminated by tubular excretion relatively easy due to the passage leading to permanent reabsorption:

- a) true
- b) false.

723. Liposoluble substances will be eliminated by the kidney:

- a) more easy
- b) more difficult
- c) equal to hydrosoluble.

724. In the case of a powerful drug binding to the serum albumins, the glomerular filtration rate will remain at a:

- a) high level
- b) low level.

725. Due to the characteristics of hydrophobic molecules, a good portion of the filtered drug can undergo a reverse diffusion process at tubular level?

- a) yes
- b) no

726. Substances that are well removed by the kidneys, can achieve low blood levels in case of renal insufficiency installing.

- a) true
- b) false.

727. Renal insufficiency determines at some drugs that are renally excreted:

- a) increased blood levels
- b) low blood levels
- c) does not influence the renal elimination rate.

728. In kidney disease are useful drugs with:

- a) high renal clearance
- b) low renal clearance

729. Drugs with increased renal clearance are indicated in the treatment of renal disease:

- a) true
- b) false.

730. The half-life is shorter, when the interval:

- a) of drugs administration will be longer
- b) of drug administration will be shorter
- c) of drug elimination will be shorter.

731. Excretion of a drug will be very quick when he or its metabolite is present in the blood in ionized form, heavily polarized

- a) true
- b) false.

732. Elimination of a drug will be slower when he or its metabolite in the blood are in an unionized and unpolarized form.

- a) true
- b) false.

733. Excretion of drugs is hampered by the active transport systems.

- a) true
- b) false.

734. Excretion of drugs is accelerated by active transport systems?

- a) yes
- b) no

735. Airway is considered a:

- a) major pathway for disposal
- b) minor pathway of elimination.

736. Some drugs can focus on specific place elimination and can cause poisoning:

- a) true
- b) false.

737. A volatile or gaseous substance administered by the respiratory route will be:

- a) poorly absorbed and eliminated hard
- b) rapidly absorbed and eliminated hard
- c) rapidly absorbed and eliminated quickly
- d) poorly absorbed and eliminated quickly.

English quiz for IIIrd year Veterinary students

- 738.** The form in which a drug is eliminated is linked to the transformations that undergo in the body?
a) **yes, it is bound**
b) is not unrelated.
- 739.** From urine can be recovered the active form of:
a) **penicillin**
b) **streptomycin**
c) **oxytetracycline.**
- 740.** The sulphonamides can acetylate and thus precipitate as sharp microcrystals that will damage the renal tubules; a process that occurs due to the:
a) alkaline urine environment
b) **acid urinary environment**
c) smaller sulphonamide pH comparative to the urinary environment.
- 741.** The half-life of a drug from extracellular fluid when removal takes place exclusively by glomerular filtration is of:
a) 15-30 minutes
b) 30-60 minutes
c) **60-90 minutes**
d) 90-120 minutes.
- 742.** If excretion occurs in renal tubules and is limited to the renal blood flow, the half-life will be of:
a) **10-15 minutes**
b) 30-60 minutes
c) 90-120 minutes.
- 743.** If a drug is not metabolized by renal elimination the half-life is:
a) short
b) medium
c) **long.**
- 744.** If a drug is not metabolized by the renal elimination the half-life time will be:
a) 20-30 minutes
b) 20-30 hours
c) **20-30 days**
d) 20-30 months.
- 745.** The half-life of the same drug reabsorbed and excreted at tubules level and limited to the renal blood flow, will be shorter than an unabsorbed drug:
a) true
b) **false.**
- 746.** A drug having a good distribution to all parts of the body and is secreted by the renal tubules, generally has a half-life of:
a) 15 minutes
b) 30 minutes
c) **60 minutes**
d) 90 minutes.
- 747.** The total elimination of a drug is called:
a) apparent elimination
b) complete elimination
c) **real removal**
d) massive removal.
- 748.** The total elimination of a drug is called apparent elimination:
a) true
b) **false.**
- 749.** Partially incomplete elimination of a drug is called real elimination.
a) true
b) **false.**
- 750.** In new-borns the lipophilic drugs will excrete much faster than in the adults.
a) **true**
b) false.
- 751.** Excretion of basic drugs will decline by acidification of urine and will increase by alkalifying.
a) true
b) **false.**
- 752.** Between weak acids (for acid transport mechanism) and weak bases there is a competition between carrying mechanism of alkalis.
a) **true**
b) false.
- 753.** The drugs renal elimination will be slowed by preventing tubular reabsorption
a) true
b) **false.**
- 754.** Drug elimination via the kidney will be accelerated by:
a) **increased diuresis**
b) **adjusting the pH**
c) increased tubular reabsorption.

English quiz for IIIrd year Veterinary students

- 755.** Renal drug elimination can be accelerated by increasing the urine output and by preventing the reabsorption?
 a) **yes**
 b) no
 c) by simple diuresis increasing
 d) by preventing reabsorption.
- 756.** The most important way to dispose medicines is by:
 a) glomerular secretion
 b) **tubular excretion**
 c) tubular reabsorption
 d) glomerular filtration
- 757.** The active transport processes in the tubular excretion are energy dependent?
 a) **yes**
 b) no
- 758.** Probenecide is a substance that is eliminated by the same mechanism like for penicillin, this one:
 a) urging its elimination
 b) **slowing down its disposal**
 c) **extending the action in the body.**
- 759.** Medicinal products metabolised in the body are eliminated easier because are readily converted into fat soluble compounds?
 a) yes
 b) **no**
- 760.** By the metabolic changes, before the elimination, the polarity of the molecules will:
 a) **increase**
 b) decrease
 c) will remain unchanged.
- 761.** In case of renal insufficiency the elimination rate of streptomycin will:
 a) **decrease**
 b) increase
 c) remain unchanged.
- 762.** Plenitude of the digestive tract affects the renal excretion of a drug?
 a) **yes**
 b) has no influence.
- 763.** Methenamine cleavage in formaldehyde can be useful to kidney and body?
 a) **yes**
 b) no
- 764.** The concentration of a drug found in the urine of an animal may be higher than of the same drug in the plasma values?
 a) **yes**
 b) no
- 765.** Urotropin cleavage will cause in the urinary tract:
 a) cristalization
 b) drug nephritis
 c) **formaldehyde.**
- 766.** Halogens are eliminated through:
 a) **the gastric mucosa**
 b) biliary excretion
 c) **saliva.**
- 767.** Factors that increase / decrease elimination through the gastric mucosa are linked to gastric secretion / local circulation.
 a) **yes**
 b) only related to gastric secretion
 c) only connected with local circulation
 d) no
- 768.** Glandular stomach mucosa in bird species behaves similarly to the intestines?
 a) **yes**
 b) no
- 769.** Prestomach mucosa behaves for the medicines from the blood plasma as a:
 a) **semi-permeable membrane**
 b) permeable membrane
 c) impermeable membrane
- 770.** The amount of drug that can be found in faeces will be composed of:
 a) drug absorbed
 b) **unabsorbed drug**
 c) **the drug recircled in the intestine.**
- 771.** The emergence of drugs in saliva is generally:
 a) active, in all cases
 b) **passive, with few exceptions.**
- 772.** Through the bile are mainly eliminated:
 a) low molecular weight drugs
 b) **high molecular weight drugs**
 c) **medicines containing aromatic cycles.**
- 773.** Biliary excretion is primarily in the:
 a) biotransformed form
 b) **conjugated form.**

English quiz for IIIrd year Veterinary students

- 774.** Biliary excretion is a minor pathway of drug elimination?
a) yes
b) no
- 775.** Biliary excretion is a pathway of:
a) minor elimination
b) major elimination
- 776.** Pancreatic fluid may play a role in the parenteral drugs elimination?
a) yes
b) no
- 777.** The increased proportion of a drug in bile is beneficial in all situations?
a) yes
b) no, only for anthelmintics
c) not at all.
- 778.** In some cases, bile concentrations can become higher to serum?
a) yes
b) no
- 779.** Which of the following active substances can be eliminated by colon?
a) calcium
b) iron-containing compounds
c) heavy metal salts.
- 780.** Generally in faeces are found insoluble drugs administered orally.
a) true
b) false.
- 781.** There are drugs that can be absorbed by the small intestine and removed by respiratory route?
a) gaseous narcotics
b) respiratory antiseptics
c) pulmonary antihelmintics.
- 782.** In the vein can be administered same drugs like for the IM way?
a) no
b) yes
- 783.** There are drugs that may be partially oxidized to carbon dioxide and pulmonary excreted?
a) yes
b) no
- 784.** Cutaneous elimination is based on:
a) sweat glands
b) sebaceous glands
c) other appendages.
- 785.** Griseofulvin is eliminated through the:
a) sweat glands
b) epidermal stratum corneum
c) sebaceous glands
d) hair or other appendages.
- 786.** Elimination of sulfonamides in milk showed concentrations that were:
a) one quarter of the blood level
b) half the blood level
c) equal to the blood level
d) two times higher than blood levels.
- 787.** To stop a product from consumption for a period in EU it is used the term of:
a) waiting period
b) withdrawal period
c) prohibition period.
- 788.** The term of "prohibition period" refers to the prohibition of use of an antibiotic for a determined period?
a) yes
b) no
- 789.** The diffusion of drugs into the egg is:
a) only in albumen
b) only in yolk
c) in both egg parts.
- 790.** The higher drug concentration in egg will be in:
a) albumen
b) yolk
c) similar in both formations.
- 791.** The highest drugs concentrations are found in the yolk?
a) yes
b) no
- 792.** The drug will persist in eggs more time in:
a) albumen
b) yolk
c) both parties.
- 793.** The persistence of a drug will be longer in albumen.
a) true
b) false.
- 794.** The theoretical process called medicines availability includes:
a) absorption of drugs
b) distribution of drugs
c) drug metabolism
d) excretion of drugs.

English quiz for IIIrd year Veterinary students

- 795.** The concentration of a drug at the site of reaction can be easily quantified.
- true
 - false.
- 796.** Quantified values obtained from blood and urine tests may give information about the:
- excretion rate
 - distribution volume
 - coupling rate.
- 797.** In the open-monocompartment model the administered pharmacon will reach the central compartment and then in the second.
- true
 - false.
- 798.** The term "open" for mono-compartmental model is referring to the:
- continous loss of the drug
 - the body "opening" causes drug molecules decoupling and thus the conclusion of the drug action.
- 799.** The intensity of a drug response, in the open-monocompartment model does not depend on the amount of pharmacon present on receptors but to the unlinked faction of elimination kinetics.
- true
 - false.
- 800.** In case of open-monocompartment model the drug response intensity depends on the:
- amount of coupled drug eliminated
 - amount of free drug eliminated.
- 801.** The two-compartment model describes the behavior of a pharmacon that after administration:
- will deliver up to steady state
 - in blood diffuses extracellular being excreted
 - binds to cell membranes and circulates in the blood and extracellular.
- 802.** In I.M injectable forms, the pharmacon goes directly into the blood, but before must pass the pulmonary barrier.
- true
 - false.
- 803.** Drugs may be associated in a single preparation but can be administered separately aiming to:
- enhance the action of a drug
 - extend the action of a drug
 - restrict or cancel the action of a drug.
- 804.** The of "good associations" are called the:
- antagonist
 - atenuation
 - synergistic
 - indifferent.
- 805.** Synergistic associations have no any disadvantages.
- true
 - false.
- 806.** Potentiation effect of drugs with CNS depressant activity is a disadvantage of the combination:
- atenuation
 - synergistic
 - indifferent.
- 807.** The synergism can be:
- indirect
 - direct
 - unilateral
 - bilaterally.
- 808.** In the addition combination, the associated drugs:
- do not influence each other
 - influence each other
 - fixing rate on receptors is not equal
 - fixing rate on receptors is equal.
- 809.** The addition association may cause:
- final effects can be no greater than the algebraic sum of partial effects of two drugs associated
 - final effects can be higher to the algebraic sum of partial effects of two drugs associated
 - final effects which may be lower than the algebraic sum of partial effects of two drugs associated.
- 810.** The cummulation is typical for active substances:
- unrelated as action that exercise their morphological effect on the same target
 - related to the mode of action which exerts on the same morphological target
 - related to the mode of action which exerts on different morphological targets
 - mode of action unrelated and exercise different effect on morphological targets.

English quiz for IIIrd year Veterinary students

- 811.** Which of these associations are resulting direct synergy?
 a) **suzotril + ametosulfin**
 b) adrenaline + atropine
 c) sulfadoxine + trimethoprim
 d) **albendazole + levamisole**
 e) pilocarpine + magnesium sulphate.
- 812.** Expanding the spectrum of the antibiotics is considered as:
 a) **direct synergism**
 b) indirect synergism
 c) potentiation
- 813.** The the most intense therapeutic effects are obtained by:
 a) **indirect association**
 b) direct association
- 814.** Potentiation is a:
 a) **indirect synergism**
 b) superadditive
 c) cummulation
- 815.** Potentiation is an association characteristic to:
 a) drugs in the same therapeutic class with similar effects
 b) medicines in various therapeutic classes with different effects
 c) drugs in the same therapeutic class with different effects
 d) **medicines in various therapeutic classes with similar effects.**
- 816.** Potentiation of some drugs, e.g. sulphonamides with potentializators (trimethoprim sulfadoxine + 5:1) leads to an increased antibacterial activity of:
 a) 1-5 times
 b) **5-10 times**
 c) 10-15 times
 d) 15-20 times
 e) 20-30 times compared to the activity of each component.
- 817.** Potentiation may increase the effects of a component through another component of the association?
 a) **yes**
 b) no
- 818.** Penicillins may be potentiated in their activity by sulfonamides.
 a) **true**
 b) false.
- 819.** The combination of atropine with adrenaline is a:
 a) direct association
 b) **indirect association**
 c) potentiation.
- 820.** The combination of rafoxanid and thiabendazole generates a:
 a) indifferent association
 b) atenuation association
 c) **to increase the spectrum**
 d) potentiation association.
- 821.** Combination of ampicillin + cloxacillin is an association:
 a) atenuation
 b) indifferent
 c) antagonistic
 d) potentiating
 e) **spectrum enhancing.**
- 822.** Pilocarpine association with magnesium sulfate is:
 a) summative
 b) of addition
 c) of activity increase.
- 823.** The association oxiclozanid + tetramisole is an association type:
 a) indirect synergism
 b) potentiation
 c) superadditive.
- 824.** Induced direct synergy effects are stronger than those induced by indirect synergy?
 a) yes
 b) **no**
- 825.** Droperidol and fentanyl associated have cummulative effects?
 a) yes
 b) **no**
- 826.** Neuroleptics potentiate narcotics?
 a) **yes**
 b) no
- 827.** By potentiation, usually the doses of drug may be:
 a) **low**
 b) increased
 c) **unchanged.**

English quiz for IIIrd year Veterinary students

- 828.** The combination of atropine and papaverine causes identical effects at the usual therapeutic doses even at:
- 25-40% of a therapeutic average dose atropine 25 - 40% of a therapeutic dose of papaverine
 - 50% of a therapeutic average dose atropine and 50% of a therapeutic dose of papaverine
 - 50% of a therapeutic average dose atropine 25-40% of a therapeutic dose of papaverine
- 829.** The antagonism of an essential biosynthesis metabolic component can be following of:
- cummulation
 - indirect synergism
 - superaddition.
- 830.** The potentiating association may be a result of mechanisms of:
- inhibition of some drugs inactivation
 - antagonizing the biosynthesis of essential metabolic components
 - raising substrate from further drugs activities
 - accelerating the drugs inactivation.
- 831.** Clinical synergism is the cumulative effect of all drugs administered to an animal:
- only with the same mechanism of action
 - with different mechanisms of action
 - effective in animal treating
 - effective or not in treating the animal.
- 832.** Attenuation is an association of type:
- summative type
 - indirect synergism
 - superaddition type.
- 833.** A too brutal action of a drug will be mitigated by a combination of type:
- indifferent type
 - synergistic type
 - potentiation type
- 834.** A too brutal action of a drug can be mitigated by a combination of:
- synergistic type
 - additive type
 - antagonist type
 - attenuation type
 - indifferent type.
- 835.** The purgative intense activity of croton oil will be potentiated by ricin oil.
- true
 - false.
- 836.** In indifferent associations the drugs will affect each other.
- true
 - false.
- 837.** The drug associations are most commonly encountered in standardized preparations?
- yes
 - no
- 838.** The indifferent associations are not important in therapeutics.
- true
 - false.
- 839.** Antagonism is the opposite of the two medicines who can:
- amplify their action
 - totally cancel their action
 - partially cancel the action
 - embezzle the action.
- 840.** Drug antagonism needs the presence of an agonist and an antagonist?
- yes
 - only one agonist
 - only one antagonist
 - no
- 841.** Antagonistic drug interactions can interfere:
- the coupling of receptors
 - enzymatic processes
 - elimination of the drug.
- 842.** Medicinal indirect antagonism is when two or more substances act in the opposite to the same morphological objective.
- true
 - false.
- 843.** Pilocarpine and adrenaline are directly antagonistic association.
- true
 - false.
- 844.** Pilocarpine dilates pupil by acting on radial muscles of the iris while adrenaline by stimulating the iris circular muscle contraction.
- true
 - false.
- 845.** Drug antagonism can be:
- direct
 - indirectly
 - indifferent
 - unilateral
 - bilateral
 - additive.

English quiz for IIIrd year Veterinary students

- 846.** Direct antagonism is the one between:
 a) atropine and eserine
 b) sulfonamides and procaine
 c) pilocarpine and epinephrine.
- 847.** Unilateral antagonism is when one of the antagonistic substances:
 a) has increased pharmacodynamic activity
 b) has low pharmacodynamic activity
 c) have equal pharmacodynamic activity.
- 848.** Two drugs can be both antagonistic and synergistic?
 a) yes
 b) no
- 849.** When agonist and antagonist act on the same effector receptor it is an antagonism:
 a) non-competitive
 b) competitive
 c) non-functional
 d) physiological.
- 850.** Narcotine and morphine are:
 a) synergistic in the respiratory center
 b) antagonist in the center of pain.
- 851.** The non-competitive antagonism is:
 a) specific
 b) reversible
 c) mutual.
- 852.** Non-competitive antagonism has no specificity, between agonist and antagonist there is no structural similarity.
 a) true
 b) false.
- 853.** Allosteric inhibition is a characteristic of antagonism:
 a) non-competitive
 b) competitive
 c) physiological
 d) functional.
- 854.** Fixing through covalent bonds and stimulants inhibition are characteristic for functional antagonism.
 a) true
 b) false.
- 855.** Functional antagonism is characterized by:
 a) agonist - antagonist action on the same receptors in the same organ
 b) agonist - antagonist action on different receptors in the same organ
 c) agonist - antagonist action on different receptors in different organs.
- 856.** Fixing through covalent bonds is a type of reversible non-competitive antagonism.
 a) yes
 b) yes, but with irreversible character
 c) no
- 857.** Papaverine antagonizes histamine, serotonin and acetylcholine by:
 a) relaxation of contracted smooth muscle
 b) contracting muscle flaccidity
 c) interfering specific receptors.
- 858.** Papaverine antagonizes histamine, serotonin or acetylcholine by non-competitive antagonism inhibiting:
 a) allosteric
 b) stimulants
 c) by covalent bond.
- 859.** The changes taking place around the receptor consecutively changing their structural conformation is called:
 a) allosteric inhibition
 b) stimulants inhibition
 c) covalent bond.
- 860.** Toxic adverse reactions occur in the administration of :
 a) overdosed drugs and lower chemotherapeutic index
 b) the primary effect of drugs exceeding expected
 c) drugs to individuals with low tolerance of species
 d) drugs to individuals with low functionality, metabolism and elimination organs.
- 861.** Herxheimer reaction may occur in the absence of bacterial infection?
 a) yes
 b) no.
- 862.** The emergence of the Herxheimer reaction (release of endotoxins produced by the action of antibiotics on microorganisms) causes immediate cessation of treatment.
 a) true
 b) false.
- 863.** Bacterial endotoxins caused by antibiotics can lead to:
 a) allergic sensitization
 b) poisoning
 c) carcinogenesis.

English quiz for IIIrd year Veterinary students

- 864.** Broad spectrum antibiotics can cause superinfection or infectious diseases outbreak?
 a) true
 b) false.
- 865.** Which of these produce neurotoxic effect?
 a) streptomycin
 b) kanamycin
 c) neomycin
 d) polymyxin
 e) chloramphenicol.
- 866.** Barbiturates derivatives may have strong depressant activity on CNS by:
 a) action on the respiratory center in bulb
 b) decrease oxygen consumption
 c) action on thermoregulation center in the bulb.
- 867.** Phenothiazines (e.g. chlorpromazine) may:
 a) reversibly inhibit acetylcholinesterase
 b) irreversibly inhibit acetylcholinesterase
 c) potentiate the hypnotics toxic effects.
- 868.** Medullar and bulbar excitatories can induce adverse reaction such as:
 a) excitation of medullar reflectivity
 b) inhibition of bone marrow reflectivity
 c) lowering the excitability limit and seizures triggering
 d) increase the excitability limit and seizures triggering.
- 869.** Narcotic analgesics can have as side effects:
 a) light excitation followed by depression of the respiratory center and hypothermia
 b) strong excitation, followed by exciting the respiratory center and hypothermia
 c) inhibition, followed by respiratory center excitation and hyperthermia.
- 870.** Salicylic acid derivatives may cause side effects as:
 a) initial depressant activity followed by a depression of CNS
 b) initially, CNS stimulating activity, followed by a depressing action
 c) a predominantly exciting activity
 d) a predominantly inhibitory activity.
- 871.** Hematotoxic changes, as adverse reaction, can cause the following medications:
 a) chloramphenicol
 b) streptomycin
 c) novobiocin
 d) rifampicin
 e) ristocetin.
- 872.** Extrapyramidal syndrome, as adverse reaction may be given by:
 a) rezerpines
 b) butyrophenones
 c) tranquilizers
 d) benzodiazepines.
- 873.** Initially cortical stimulants are powerful CNS stimulants. but can also induce exhaustion?
 a) true
 b) false.
- 874.** Methemoglobin action as an undesirable effect is the most stronger for:
 a) phenacetin
 b) paracetamol
 c) phenylbutazone.
- 875.** Hemorrhagic diathesis, as adverse reaction can be caused by:
 a) nitrofurantoin
 b) furazolidone
 c) diazepam.
- 876.** Sulfamides can induce unwanted dermatotoxic effects identified clinically in:
 a) 1-7 days
 b) 7-14 days
 c) 14-21 days
 d) 21-28 days.
- 877.** Antibiotics as hepatotoxic effect, can cause:
 a) cytolysis
 b) steatosis
 c) cholestasis.
- 878.** Hypnotics can cause respiratory effects by:
 a) hyperventilation progressing to apnea
 b) hypoventilation evolving to polipnee
 c) hypoventilation evolving to apnea.
- 879.** Phenothiazines can cause respiratory toxic effects by a:
 a) depression of the respiratory center and traqueo-bronchial paralysis
 b) excitation of respiratory center and the excitation of traqueo-bronchial
 c) depression of the respiratory center and traqueo-bronchial excitation.
- 880.** Polypeptides nephrotoxic effects, can result in an increased renal level over the blood level (thus changing the glomerular ultrafiltration and tubular reabsorption) by:
 a) 0-5 times
 b) 5-10 times
 c) 10-50 times
 d) 50-100 times

English quiz for IIIrd year Veterinary students

881. Cilindruria, clinical albuminuria and the most nephrotoxicity may be caused by:

- a) kanamycin
- b) neomycin
- c) bacitracin
- d) polymyxin
- e) gentamicin.

882. Barbituric derivatives in excess can induce renal failure, and could lead to death by respiratory failure.

- a) true
- b) false.

883. Abacterial nephritis by associating the bacterial factor can become bacterial?

- a) yes
- b) no

884. Following the alpha-adrenolytic activity, may occur:

- a) tachycardia
- b) bradycardia
- c) hypotension
- d) hypertension.

885. Carbamates tranquillizers may become cardiovascular toxic, producing:

- a) hypertension
- b) hypotension
- c) depression of hematopoiesis
- d) increased cardiac functionality.

886. Antidotes may be classified in:

- a) local antidotes
- b) general antidotes
- c) specific antidotes.

887. Idiosyncratic adverse reactions correspond to a:

- a) congenital intolerance
- b) drug overdose
- c) humoral intolerance
- d) photoreactive intolerance.

888. Changes of intolerance is the expression of biological dissipation.

- a) true
- b) false.

889. Idiosyncrasy is actually an expression of drug allergies.

- a) true
- b) false.

890. In case of idiosyncrasy we deal with:

- a) antigen – antibody type of allergic reaction
- b) the amount of degenerative somatic properties
- c) reaction to a substance, even from his first administration
- d) reaction to a substance after the sensitization phase.

891. Symptoms caused by idiosyncrasy intoxication are very similar to those allergic.

- a) true
- b) false.

892. Idiosyncratic type incompatibility is caused by enzyme deficiencies.

- a) true
- b) false.

893. Idiosyncratic toxicities are related in their expression to the age?

- a) yes
- b) no

894. Grau syndrome is caused especially by:

- a) chloramphenicol
- b) sulfonamides
- c) nitrofurans
- d) polymyxins
- e) cephalosporins.

895. High chloramphenicol toxicity in newborns is related to:

- a) coupling
- b) absorption
- c) elimination
- d) diffusion.

896. Numerous active substances, although not antigens, can cause:

- a) idiosyncratic reactions
- b) allergic reactions
- c) tolerance type reactions.

897. A drug allergy is actually an altered response to a drug, which is the result of previous exposure.

- a) true
- b) false.

898. Allergic reactions can cause which of the following drugs:

- a) drugs with protein structure
- b) drugs capable of coupling to protein
- c) drugs able to couple to erythrocytes.

English quiz for IIIrd year Veterinary students

899. Group drug allergy is actually replacing primary hapten and reactivation of modified active substances or their metabolites:

- a) true
- b) false.

900. Allergic drug reactions are followed by release of:

- a) serotonin
- b) histamine
- c) acetylcholine.

901. Allergic reactions can be identified after the clinical signs:

- a) only appear in some treated individuals
- b) occur in all the individuals treated
- c) side effects recorded are different from the usual ones
- d) reaction is triggered suddenly violent.

902. In terms of clinical features, drug allergy may be identified by:

- a) skin reactions
- b) asthmatic phenomena
- c) febrile reaction
- d) anaphylactic shock.

903. Clinically penicillins may cause:

- a) generalized urticaria
- b) anaphylactic shock
- c) hemolytic anemia
- d) thrombocytopenia
- e) agranulocytosis.

904. Humoral, drug allergies are characterized by identifying:

- a) cell antibodies
- b) circulating antibodies.

905. The severity of allergic drug reaction is in order:

- a) cutaneous > i.m. > i.v.
- b) i.v. > i.m. > cutaneous
- c) conduct and triggering of the allergic drug reaction is identical regardless of administration route.

906. The distinctive sign of a drug allergy is fever:

- a) true
- b) false.

907. Symptoms associated with drug allergies can occur:

- a) immediately
- b) after 7-14 days
- c) after 14-21 days.

908. Antigen- antibody complexes potentially pathogenic occur when the:

- a) antigens and antibodies are in equivalent amounts
- b) amounts of antigen are lower than antibodies
- c) antigens are in greater amounts than antibodies.

909. Allergic reaction to an antibiotic is determined mainly by:

- a) the dose of the drug
- b) duration of treatment
- c) repeated treatment.

910. The majority of allergic sensitization reactions to antibiotics are following:

- a) specific toxicity of antibiotics
- b) the toxicity metabolites that arise
- c) the impurities from the manufacturing process.

911. Anaphylactic shock is treated with:

- a) antihistamine
- b) cortisones
- c) noradrenaline
- d) oxygen.

912. Photoallergy is the result of:

- a) a prohaptene under light action turns into haptene, which will be combined with a protein and becomes antigen
- b) a prohaptene is combined with a protein to form a proallergen under the light action acting as antigen
- c) a haptene is combined with a protein that will decompose under the light influence in a prohaptene acting as antigen.

913. The phototoxic mechanism is based on photochemical effects that increase skin reactivity at wavelengths between:

- a) 900 - 2900 Å
- b) 2900 - 7900 Å
- c) 7900 - 9900 Å.
- d) no matter the wavelength.

914. Drugs with an aromatic structure are less active compared with the aliphatic structure medicines.

- a) true
- b) false.

915. In general, molecules which are able to induce photosensitivity are:

- a) colorless crystalline substance
- b) colored substances
- c) phosphorous substances.

English quiz for IIIrd year Veterinary students

916. Microbes, viruses and fungi can cause allergic skin manifestations in contact with various medicines:

- a) yes
- b) no
- c) only microbes
- d) only viruses
- e) only fungi.

917. Photoallergic drug reactions occur in animals with dark hair.

- a) true
- b) false.

918. Photoallergic reactions in animals have an incubation period.

- a) yes
- b) no

919. Photoallergic reactions in animals can be detected clinically.

- a) after the first exposure
- b) after multiple exposures
- c) away from the irradiated area
- d) after their residual pigmentation.

920. Some drugs can cause mutations, definitive genotype changes by:

- a) interfering with DNA replication
- b) change in the chromosomes pattern
- c) cracking chromosomes.

921. Parbendazole, cambendazole and albendazole administration to the pregnant can cause birth defects :

- a) yes
- b) no
- c) only parbendazole
- d) only cambendazole
- e) only albendazole.

922. Drugs administration can cause teratogenic and mutagenic effects especially when are given:

- a) in the first months of gestation
- b) the middle of gestation
- c) in the last months of pregnancy
- d) prior to calving.

923. Sulphonamides may have teratogenic effect

- a) yes
- b) no

924. Glucocorticoids in high doses and for a long time may have teratogenic effect?

- a) yes
- b) no

925. Phenacetin can cause cancer in:

- a) ureters
- b) urinary bladder
- c) intestine
- d) the liver.

926. Some medications (eg alkylating agents, phenylbutazone, organochlorinated) may favor the proliferation of the cancerous process through their action:

- a) at the injection site
- b) in the liver
- c) systemic.

927. Adverse reaction tolerance is a reduced sensitivity to some drugs, situations requiring the same effect:

- a) lowering the dose of drug
- b) increasing drug doses
- c) coupling the receptor to a detectable clinically active concentration.

928. Tolerance to drugs can be:

- a) congenital
- b) acquired
- c) delayed
- d) fast
- e) evolutionary.

929. Congenital tolerance is caused by repeated administration, which in time will lead to minor pharmacodynamic responses.

- a) true
- b) false.

930. Acquired tolerance is identified and is the result of:

- a) the less effect, which is due to decreased receptor responsiveness
- b) interaction of the enzymatic systems
- c) receptors dimmed action (due to the compensatory reflexes).

931. Tolerance to drugs in animals may occur at:

- a) sympathicomimetic
- b) colinergics
- c) hypertension medication
- d) antiparasitic.

932. Tachyphylaxis is a process of:

- a) congenital tolerance
- b) acquired tolerance
- c) allergic nature
- d) idiosyncratic nature.

English quiz for IIIrd year Veterinary students

933. The process of tachyphylaxis is:

- a) irreversible
- b) reversible**
- c) stationary.

934. Drug habituation is a phenomenon similar to the drug cummulation, but governed by other mechanisms.

- a) true
- b) false.**

935. Drug habituation is common in animals.

- a) true
- b) false.**

936. Tachyphylaxis is a drug tolerance of :

- a) congenital type
- b) fast type**
- c) slow type type
- d) evolutive type.

937. The change of the route of administration of a drug does not lead to loss of tolerance to that drug.

- a) true
- b) false**

938. Cross-tolerance is known also in the veterinary pharmacology?

- a) yes
- b) no**

939. Eufomania is a state of dependency?

- a) yes
- b) no**

940. Side effect like dependency is often accompanied by tolerance.adverse reactions?

- a) yes**
- b) no.

941. Pharmaco-tezaurosismosis is an:

- a) adverse reaction
- b) accumulation of the active substance in the tissues and organs
- c) drug which can be dangerous to the animal.

942. Generally pharmaco-tezaurosismosis occurs in tissues like:

- a) skin and appendages**
- b) fat**
- c) kidney**
- d) liver**
- e) spleen**
- f) nervous system.**

943. Which of these reports are correct?

- a) addiction > toxicomania > eufomania
- b) toxicomania > addiction> eufomania
- c) eufomania > toxicomania > addiction

944. Interactions within parenteral solutions, those relating to incompatibility:

- a) can be noticed immediately**
- b) cannot be noticed immediately.**

945. Alkaline solutions can not be administered with alkaloids because it generate precipitation.

- a) true**
- b) false.

946. Ampicillin can be administered in a unique combination with vitamin C.

- a) true
- b) false.**

947. The components of an injectable association may fix some drugs and the effect can be:

- a) inactivation**
- b) antagonizing effect**
- c) side effect.**

948. Electrolytes and macromolecular solutions can be effectively used as diluents for drugs.

- a) true
- b) false.**

949. Plasma, protein hydrolysates and the sodium bicarbonate solution may be used as diluents for pharmaceuticals?

- a) yes
- b) no**

950. Poly-drug combinations are not very recommended when administering on:

- a) cutaneous way
- b) s.c. way
- c) i.m. way
- d) i.v. way**

951. Iatropathy is a state of suffering caused to animal and appears:

- a) outside the body**
- b) inside the body.**

952. Drug interactions can be classified into:

- a) prior to the absorption**
- b) pharmacokinetic**
- c) pharmacodynamic.**

English quiz for IIIrd year Veterinary students

953. The bioavailability increase in biophase can be driven mainly by pharmacokinetic interactions as a:

- a) protein coupling alteration
- b) blocking of the metabolism
- c) change of the excretion rate.

954. Phenobarbital potentiates the antifungal griseofulvin by:

- a) increased intestinal absorption
- b) the decrease of intestinal peristalsis
- c) inhibition of bile.

955. Vitamins A, D, E, K have a much better absorption in anionic associations with affinity for acid molecules.

- a) true
- b) false.

956. Saline purgatives:

- a) decrease the absorption rate
- b) increase the absorption rate
- c) do not alter the absorption rate.

957. Penicillin, chloramphenicol, oral sulphonamides, neomycin derivatives, etc. may increase the effect of anticoagulants?

- a) yes
- b) no

958. Anticoagulants may be enhanced by oral sulfamides through:

- a) hemotoxic mechanism sulphamides specific
- b) the destruction of flora producing vitamin K.

959. Subcutaneous medication will be quickly absorbed by the co-administration of:

- a) vasoconstrictors
- b) vasodilators
- c) hyaluronidase.

960. The increase in absorption may be realised (medicines which are administered IM or SC) by adding macromolecular solutions.

- a) true
- b) false.

961. Polyvinyl-pyrrolidone can be found in formulations where is needed the:

- a) speeding up absorption
- b) slowing down the rate of absorption
- c) the derivative effect.

962. Estrogens given by s.c. or i.m. way will lead to the increasing of hyaluronic acid of the basic substance and, following, will:

- a) increase the absorption rate of the associated drug
- b) decrease the absorption rate of the associated drug
- c) maintain the normal absorption rate of the associated drug.

963. To potentiate a drug effect it can be made:

- a) a competitive combination capable of moving one of the drugs that will decrease the free plasma concentration of one of the associated drugs.
- b) a competitive combination capable of moving one of the drugs that will increase the plasma concentration of one of the associated drugs.
- c) a combination capable of holding one or all drugs from the combination, will result in increasing the associated drugs.occupancy rate

964. The affinity for plasma proteins of a drug may be changed by a drug combination?

- a) yes, it can
- b) no, affinity is a resilient property

965. Fixing reversible in the coupling phase is a mandatory condition for the therapeutic action of a drug?

- a) yes
- b) no

966. Anticholinesterases antagonize the action of depolarizing curarizes.

- a) true
- b) false.

967. The adrenergic receptors are:

- a) stimulated by antagonists
- b) block the agonist.

968. The adrenergic receptors are:

- a) stimulated by agonist
- b) inhibited by antagonists.

969. Blocking histamine (eg with promethazine) will be followed by:

- a) inhibiting or reducing bronchodilation
- b) inhibiting or reducing bronchoconstriction
- c) hypotension
- d) high blood pressure

English quiz for IIIrd year Veterinary students

- 970.** Following the enzymatic induction occurs the intensification of the metabolism with the appearance of metabolites, that generally, are:
 a) less active
 b) very active
 c) inactive.
- 971.** Antihistamines increase the phenylbutazone biotransformation rate causing the:
 a) reduction of the half-life
 b) increase of the half-life
 c) to keep a constant half-life.
- 972.** The induction of drugs is common compared to the blocking the enzymatic synthesis:
 a) often
 b) rare
 c) equally.
- 973.** The combination of furosemide with salicylic acid derivatives causes the renal elimination competition and will determine:
 a) a slower elimination of furosemide
 b) a faster elimination of furosemide
 c) intoxication.
- 974.** An acidic drug in terms of metabolic acidosis becomes:
 a) more ionized
 b) less ionized
 c) more penetrable intracellular
 d) less penetrable intracellularly.
- 975.** In case of respiratory depression with barbiturates it will:
 a) facilitate the renal elimination
 b) alkalize the internal environment
 c) acidify the internal environment.
- 976.** The effect of a drug from a pharmacodynamic point of view will be:
 a) principal
 b) secondary
 c) stimulant
 d) depressing
 e) toxic
 f) direct
 g) indirect
 h) elective.
- 977.** The sedative effect of antibiotics is a main effect?
 a) yes
 b) no
- 978.** The side effects are usually in veterinary practice:
 a) adjuvant
 b) harmful
 c) indifferent.
- 979.** Blocking or reducing an inhibitory function is considered a:
 a) direct stimulating effect
 b) indirect stimulating effect
 c) depressant effect.
- 980.** Report plasma concentration / intracellular concentration for weak acid medicinal drugs is comparatively to weak base:
 a) high
 b) low
 c) equal.
- 981.** A depressing effect is achieved by drugs that have the ability to:
 a) reduce operational state of an organ or system
 b) excite an inhibitory function
 c) abolish a function of an organ or system.
- 982.** The direct effect is an effect that occurs when drugs act in a particular way on just one organ or function:
 a) true
 b) false.
- 983.** Cortical excitation of nerve centers by caffeine is considered an effect:
 a) direct
 b) indirect
 c) elective.
- 984.** The elective effect is frequently in veterinary medicines?
 a) yes
 b) no
- 985.** Caffeine may reduce diuresis by:
 a) stimulating the vasomotor center of the bulb
 b) reducing kidney diuresis
 c) acting on the cardiovascular system.
- 986.** The local effect is an identifiable effect, affecting:
 a) injection site
 b) areas adjacent to administration
 c) the system by entering the local circulation.
- 987.** General acting drugs can act locally.
 a) true
 b) false.

English quiz for IIIrd year Veterinary students

- 988.** The rational therapy in veterinary medicine is considered the:
- symptomatic
 - antipathogenic
 - ethiotrope.**
- 989.** For rapid administration (i.v) of a drug ,the lungs intervention can determine in the heart:
- a direct coronary irrigation**
 - lowering the concentration**
 - increasing the concentration.
- 990.** Ethiotrop effect is the result of:
- pathogenic mechanisms of disease
 - drugs intervention on the symptoms of a disease
 - response to immunosuppressive processes.
- 991.** Taking polidin, iodisept, tissue extracts etc. It is considered an:
- ethiotrop therapy
 - antipathogenic therapy
 - symptomatic therapy.**
- 992.** Antiparasitic or antibiotic medication are considered:
- ethiotrop**
 - antipathogenic
 - symptomatic.
- 994.** Symptomatic effect is an intervention followed by an:
- increased body resistance**
 - combat to the cause of a disease
 - combat to the action of an etiologic agents.
- 995.** The pharmacodynamic effect is related to:
- numerical distribution of receptors on which a drug can be fixed**
 - the duration of the receptor fixation**
 - the intrinsic properties of drugs**
 - dose.
- 996.** A drug can be connected to several types of receptors whose stimulation will lead to effects:
- similar
 - opposite**
 - different**
 - cancellation of the action.
- 997.** Administration of different doses of Radix Ipecacuanhae may cause effects:
- eupeptic**
 - tonics**
 - ruminative**
 - vomiting.**
- 998.** The effective dose is the amount of drug that takes effect only at the cellular level?
- yes
 - no**
- 999.** The effective dose is:
- equal to the threshold dose
 - less than the limit dose
 - higher than the limit dose.**
- 1000.** The maximum dose is the dose that:
- causes toxic phenomena
 - determining lethal effect
 - produces useful pharmacodynamic effect.
- 1001.** The limit dose is dose that produce effects at:
- visible level
 - only at the cellular level**
 - tolerated.
- 1002.** As the safety index is higher, a drug is:
- safe**
 - unsafe.
- 1003.** The interval between the effective dose and the maximum dose is named the.
- therapeutic index
 - limit index
 - maniable area.**
- 1004.** Dose of attack will initially be used to:
- antibiotics**
 - antihelmintics
 - chemotherapeutics**
 - narcotics
- 1005.** The safe inhibited concentration of bacterial metabolism can be achieved with the attack dose?
- yes**
 - no
- 1006.** Safety index is a notion identical to therapeutic index:
- yes**
 - no
- 1007.** For a 10 kg dog, extrapolating the dose from a 70 kg human it will be:
- equal**
 - less
 - higher.

English quiz for IIIrd year Veterinary students

1008. Compared to the oral route, the dosage administered i.m it will be:

- a) increased by 25-50%
- b) decreased by 25-50%**
- c) equal.

1009. Doses administered intraperitoneally (ip) compared to the doses administered orally are:

- a) higher by 50%
- b) less than 50%**
- c) higher by 25%
- d) less than 25%.

1010. Doses concerning quantities are in order:

- a) attack dose < maintenance dose < limit dose
- b) attack dose > maintenance dose > limit dose**
- c) limit dose < maintenance dose < attack dose.**

1011. The three-compartment model covers the:

- a) plasma space
- b) intracellular space
- c) extracellular space
- d) all three.**

1012. Analysis of drug distribution in the body is based on:

- a) determining serum concentrations.
- b) assignment of concentration to other compartments plasma levels
- c) the apparent volume of distribution.**

1013. Thiopental accumulates in the fatty tissues. Three hours after its administration will be found in this tissue in a proportion of:

- a) 100%
- b) 70%**
- c) 50%
- d) 25%
- e) 0%

1014. Bateman's function consider as constants the:

- a) constant of absorption (Invasion)**
- b) diffusion constant
- c) elimination constant (evasion)**
- d) coupling constant.

1015. Bateman's function may be applicable to the administration:

- a) p.o.
- b) in deposits**
- c) i.m.**
- d) s.c.**

1016. When the absorption speed is too low or the rate of elimination is too large, in order to achieve the required plasma level, the dosage will be:

- a) reduced
- b) increased**
- c) unchanged.

1017. Bateman's dominant measure of cumulative function are the:

- a) dose**
- b) absorption constant**
- c) diffusion constant.**

1018. After stopping the treatment for two days, resuming administration will determine blood levels identical to the original:

- a) immediately
- b) 24 hours
- c) after 24-48 hours
- d) more than 96 hours.**

1019. Transforming into a biological effect the administration of a drug is closely related to the pharmacon binding sites:

- a) specific**
- b) nonspecific.**

1020. A portion of the resorbed pharmacon in the intestine is retained before entering the great circulation by:

- a) liver**
- b) kidney
- c) lung**
- d) fat.

1021. The power effect of the drug shows a dynamic compared to the concentration that is:

- a) lower
- b) parallel**
- c) higher
- d) are not comparable values.

1022. Adipose tissue and animal fat cover their role in drug metabolism?

- a) yes
- b) no**

1023. The large doses administered to large ruminants, compared with horses will be:

- a) decreased by 20%
- b) increased by 20%**
- c) equal.

1024. Genetic sensitizers factors will be more common for nonimproved races.

- a) true
- b) false.**

English quiz for IIIrd year Veterinary students

1025. In case of using common medications for human and veterinary, human dose for equine species will be increased:

- a) 8 times
- b) 10 times
- c) 16 times**
- d) 20 times.

1026. In case of using common medications for human and veterinary, human dose, in the species pigs, sheep and goats will be increased:

- a) 2 times
- b) 3 times**
- c) 4 times
- d) 5 times.

1027. If in veterinary therapy, the subject treated is an overactive, the doses used will be reduced?

- a) yes**
- b) no

1028. Using in drug therapy the model "shotgun" or "polypharmacy" is, in veterinary medicine, a method:

- a) very good
- b) unwanted
- c) uncertain**
- d) usual.

1029. A single dose of medicine will have the action time determined by:

- a) the size of the dose**
- b) elimination rate constant**
- c) the apparent volume of distribution**
- d) the required concentration for therapeutic effect.**

1030. Where necessary a constant therapeutic effect, this requirement may be best by using:

- a) i.m.
- b) s.c.
- c) p.o.
- d) i.v.**
- e) i.p.

1031. In a correct way, a dose of attack is calculated knowing the :

- a) maintenance dose**
- b) elimination rate constant**
- c) dosing interval.**

1032. Daily Intake (ADI = acceptable daily intake) is a clue to the:

- a) animals risky exposure to chemicals
- b) exposure of humans to hazardous chemicals**
- c) persistence of dangerous drugs in animal tissues.**

1033. Veterinary Pharmacovigilance is an operation of registration, evaluation and systematic follow of :

- a) the period of prohibition of drugs
- b) adverse drug experiences to consumers**
- c) new drugs introduced into practice
- d) iatrogenic intoxication in animal products.

1034. The rate constant defines the concentration at the administration site and influences the gradients size of the central compartment:

- a) true
- b) false.**

1035. The fraction of drug that is absorbed from the injection site per unit of time is:

- a) dose
- b) rate constant**
- c) the diffusion rate
- d) temporal resorbed fraction.

1036. In case of a difficult to treat disease, the most powerful remedy from a number of drugs will be most effective and convenient:

- a) true
- b) false.**

1037. The time that elapses after the end of dosing and when the drug concentration at the site of action is large enough for the drug to take characteristic effect is called:

- a) waiting period
- b) subliminal period
- c) latency period**
- d) pre-therapeutic period.

1038. In the time of action of a pharmacon the forces that tend to increase drug concentration are:

- a) biotrasformations of inactivation
- b) storing in the tissue
- c) excretion.

1039. In the time of action of a pharmacon the forces that tend to decrease drug concentration are:

- a) absorption
- b) activating biotransformations
- c) coupled drug release.

1040. Oxytetracycline has a half-life ($t_{1/2}$) of:

- a) 10 hours in the dog and 6 in horse
- b) 6 hours in the dog and 1 hour in horse
- c) 6 hours at dog and 10 hours in horse**
- d) 1 hour in the dog and 6 hours to horse.

English quiz for IIIrd year Veterinary students

1041. Adrenaline can be given:

- a. oral
- b. injection**
- c. transcutaneously.

1042. Pharmacometry is studying ways to measure the intensity effects of drugs.

- a. true**
- b. false.

1043. The drug is a substance:

- a. biologically active**
- b. used in the diagnosis of diseases**
- c. entering the body's metabolism.**

1044. The standardization of medicine is a system that gives recommendations for the:

- a. size of the dose in use**
- b. frequency of administration of the drug**
- c. identity and purity of the active substances**
- d. ways of association of components.

1045. Name of owner = official name = name approved?

- a.yes
- b. no**

1046. Clinician will characterize a drug based on:

- a. the chemical structure
- b. the effect recorded**
- c. the symptoms stemming from indications.**

1047. A purgative = intestinal stimulating = membrane depolarizing = choline derivative?

- a. true**
- b. false.

1048. Sublingual route has the advantage that absorption is rapid and the drug goes directly into general circulation bypassing the liver barrier.

- a. true**
- b. partly
- c. false.

1049. In veterinary medicine buccal absorption matters only in:

- a. birds
- b. pigs
- c. large ruminants**
- d. small ruminants.**

1050. Policompartiment stomach of ruminants acts as a "ionic trap" for drugs with character :

- a. acid
- b. base**
- c. none.

1051. The extent to which an orally administered drug can escape is the vomiting reflex that will determine the pH of the environment into which they are introduced

- a. true**
- b. false.

1052. When a drug is administered orally in a solid conditioning, the low disintegration and solubilization rate will reduce absorption by:

- a. increasing available dose fraction
- b. modifying pK
- c. increasing the fraction of the dose at any time of absorption.**

1053. A "closed" pylorus after feeding will cause the:

- a. absorption amplifying
- b. absorption blocking
- c. selective absorption**

1054. The delayed absorption of a drug will be found in an animal:

- a. satiated**
- b. with fever**
- c. with enteritis.**

1055. The stomach mucosa is primarily an absorptive mucosa and not a secretory one .

- a. true
- b. false.**

1056. The absorption of a drug may be hastened or delayed?

- a.yes**
- b. no

1057. Co-administration of isotonic solution at body temperature will:

- a. decrease the absorption rate
- b. increase the absorption rate**
- c. entails by solvent the solutions.**

1058. The saponins and bile salts cause gastric mucosal hyperemia, so the absorption will:

- a. increase**
- b. decrease
- c. be blocked
- d. be unaffected.

1059. Co-administration of a drug with milk will:

- a. increase the absorption rate due to protein coupling
- b. lowers the rate of absorption due to the coupling of the protein.**

English quiz for IIIrd year Veterinary students

1060. Substances covered with layers of keratin, gluten, salol, gelatin, formalin are usually disintegrated in:

- a. intestine
- b. stomach
- c. the oral cavity.

1061. A weak acid drug, in the stomach will be:

- a. 99.9% unresolved and absorbs
- b. 99.9% dissociated and absorbed
- c. 99.9% dissociated and is not absorbed
- d. 0.1% ionized and is not absorbed.

1062. Modification of gastric pH by antisecretory substance or antacids will reduce the absorption of weak acids through:

- a. decrease in the degree of ionization
- b. increasing the degree of ionization.

1063. The increased gastric pH will cause:

- a. high absorption of weak bases
- b. high absorption of weak acids
- c. low absorption of weak bases
- d. low absorption of weak acids.

1064. Gastric mucosa hyperemia will decrease the absorption;

- a. true
- b. false.

1065. The absorption rate for the same drug in the stomach and intestine is:

- a. equal
- b. variable
- c. zero in stomach
- d. zero in the intestine.

1066. When the pH is higher than the pK's of an acidic drug, this will be:

- a. highly ionized
- b. weakly ionized
- c. unionized.

1067. Alkaloids are alkalines will:

- a. strongly ionize in the stomach
- b. be poorly absorbed in the stomach
- c. ionize strongly in the intestine
- d. be well absorbed in the intestine.

1068. In the small intestine (alkaline pH) is increased ionization of weak bases and thus alkaloids will hardly be absorbed.

- a. true
- b. false.

1069. In the small intestine with an alkaline pH, ionization of weak bases is prevented, so alkaloids will be rapidly absorbed.

- a. true
- b. false.

1070. The most important veterinary medication absorption surface is:

- a. oral mucosa
- b. stomach mucosa
- c. intestine mucosa
- d. rectum mucosa

1071. Oesophageal mucosa by its structure absorbs drugs:

- a. always
- b. when it has a lesion
- c. never.

1072. The intestinal mucosa, relating to the absorption capacity of the drugs, acts as a membrane:

- a. hydrophilic
- b. lipoid
- c. with pores and transportation systems.

1073. The intestinal absorption occurs only in:

- a. duodenal area
- b. colon area
- c. over the entire length of the intestine.

1074. Barbiturates have close pK values and molecular weight, having rates of absorption:

- a. identical
- b. similar
- c. different.

1075. Occasionally, the rate of absorption of a drug is less than that measured. This may be due to inadequate perfusion rate.

- a. true
- b. false.

1076. Due to inadequate perfusion, to remove the product from the place in which he crossed the membrane, the absorption will be:

- a. higher
- b. lower
- c. unchanged.

1077. Diffusion of a drug will be suspended when concentration levels of ionised fraction on both sides of the membrane are:

- a. different
- b. equal.

English quiz for IIIrd year Veterinary students

1078. The intestinal mucosa is the preferred site for drug absorption because:

- a. has villi and microvilli
- b. possesses rich vascularity
- c. possesses numerous lymph vessels.

1079. The intestines do not absorb only the drugs, but can store them.

- a. true
- b. false.

1080. Depending on the drug, intestine may be:

- a. absorptive
- b. impermeable
- c. concentrator.

1081. The intestine may be impermeable to many drugs.

- a. true
- b. false.

1082. The intestinal barrier is easily crossed by:

- a. undissolved particles
- b. hidrosoluble particles
- c. with high molecular weigh particles t
- d. strongly ionized particles.

1083. The drugs that cross the desmosomial intestinal barrier to vessels will not meet any obstacles.

- a. true
- b. false.

1084. Mechanisms of absorption through intestinal mucosa are passages:

- a. unsaturated passages
- b. saturated passages
- c. by pinocytosis.

1085. Most of the drugs are absorbed by active diffusion against gradient concentration.

- a. true
- b. false.

1086. Most of the drugs are absorbed by passive diffusion, in the gradient concentration sense.

- a. true
- b. false.

1087. Intestines absorb especially medicines:

- a. with a pKa of less than 8, weak base
- b. with a pKa more than 3, organic acids
- c. with PKA over 8, strong bases.

1088. If we observe the salicylic acid and piramidon absorption we find that:

- a. the first is better absorbed in the intestine, the second in stomach
- b. the first is absorbed better in the stomach, the second in the intestine
- c. Both are well absorbed in the intestine
- d. Both are well absorbed in the stomach.

1089. Piramidon (basic PKA = 5) will have in the stomach:

- a. a very low absorption
- b. a very high absorption
- c. will not be absorbed.

1090. In intestinal mucosa the best absorbed inorganic ions are:

- a. monovalent
- b. bivalent
- c. polyvalent.

1091. Organic drug substances are absorbed well as:

- a. indissociable hydrosoluble form
- b. indissociable liposoluble form
- c. dissociable

1092. A strong basic substance (pKa > 10) will be absorbed in the intestine:

- a. weak
- b. well
- c. not at all
- d. very good.

1093. A sulphonamide (pH=13) will be absorbed:

- a. not at all
- b. very little
- c. much
- d. very much

1094. Oral neomycin will be absorbed in the intestine:

- a) hard
- b) easy
- c) very easy.

1095. An intestinal mucosal lesion will absorb medicines:

- a. selective
- b. nonselective
- c. absorption is zero.

1096. A massive anthelmintic crossing a lesion can produce intestinal mucosa:

- a. therapeutic effect
- b. no effect, will eliminate faster
- c. intoxication.

English quiz for IIIrd year Veterinary students

- 1097.** Vasoconstrictor substances increase absorption.
a. true
b. false.
- 1098.** Vasodilating substances are linked to an absorption:
a. slow
b. fast
c. stopped.
- 1099.** Intestinal absorption does not influence the mode of action of drugs.
a. true
b. false.
- 1100.** Streptomycin administered orally to dogs will be absorbed in the intestine between:
a. 0-5%
b. 5-10%
c. 10-20%
d. 20-50%
e. 50-70%
f. 70-100%.
- 1101.** Streptomycin administered orally to pigs may be used in this way for generalized infections.
a. true
b. false.
- 1102.** Tetracyclines administered orally with the salts of iron, will have absorption:
a. high
b. Low
c. none.
- 1103.** Drug substances that get absorbed in the stomach and intestine and via the portal circulation get to the liver where they meet hepatic barrier:
a. only those absorbed in the stomach
b. only those absorbed in the intestine
c. true
d. false.
- 1104.** In the liver, most of the drug is metabolised and then eliminated.
a. true
b. false.
- 1105.** Most likely to enter the enterohepatic circuit are medications:
a. water-soluble
b. amphiphiles
c. fat-soluble
d. all of which have passed the live barrier r .
- 1106.** Rectal mucosa is considered a way:
a. external
b. Internal
- 1107.** Absorption through rectal mucosa will result in a:
a. delay in drug metabolism
b. speeding of the drug metabolizing
c. blocking drug metabolism
- 1108.** Through the mucosa of rectum are absorbed, normally residues of drugs which have not been absorbed by the small intestine.
a. true
b. false.
- 1109.** The rectal mucosa absorbs with predilection drugs with:
a. high molecules
b. small molecules
c. both.
- 1110.** Cloralhydrate in horse can be given as an enema.
a. true
b. false.
- 1111.** Rectal administrations follow:
a. to be an alternative to the oral route
b. a local effect
c. a general effect.
- 1112.** In general, the doses used rectally, compared with the oral route, must be:
a. higher
b. equal
c. lower.
- 1113.** Rectal doses used are smaller than those known up to:
a. 10-30%
b. 30-50%
c. 50-70%
d. 70-100%.
- 1114.** a drug intestinal absorption depends on:
a. galenical form and availability
b. particle size
c. the degree of dissociation of acids and bases
d. the portion of the intestine.
- 1115.** The degree of blood supply and the transit speed of the intestinal tract have a role in the timing of contact of the drug with the mucosa.
a) yes
b. only the degree of blood supply
c. only speed transit
d. no.

English quiz for IIIrd year Veterinary students

- 1116.** The "first pass effect" is the liver passage after absorption.
 a. true
 b. false.
- 1117.** The "first pass effect" is the specific process that defines:
 a. the passage of the stomach
 b. passage of intestine
 c. the passage of the colon.
- 1118.** The transport does not take place through the portal circulation for:
 a. sublingual mucosa
 b. esophagus mucosa
 c. the stomach mucosa
 d. intestine mucosa
 e. rectum mucosa
- 1119.** After rectal administration, blood levels:
 a. are predictable
 b. not predictable.
- 1120.** After rectal administration of drugs, their concentration in the blood will be in most cases:
 a. more than needed
 b. that required
 c. less than necessary.
- 1121.** If a drug is quickly decomposed in the liver, it can appear significant differences between:
 a. sublingual and enteral route
 b. rectal and enteral
 c. there are no differences.
- 1122.** From orally administering should be excluded all drugs that:
 a. are stable in the digestive tract
 b. are not stable in the digestive tract
 c. are distorted by ubiquitous bacteria.
- 1123.** Enteral drug absorption is not affected at all by the ubiquitous bacteria.
 a. true
 b. false.
- 1124.** Absorption of gaseous or volatile narcotics is a process:
 a. slow
 b. average
 c. fast.
- 1125.** Through airway route we can administer medication as:
 a. gas
 b. liquid
 c. powder
 d. microtablets.
- 1126.** The respiratory mucosa is a mucous with:
 a. high sensitivity
 b. average sensitivity
 c. small sensitivity.
- 1127.** Physiological stimulator of the respiratory center is:
 a. O₂
 b. CO₂
 c. NO₂
 d. H₂O
- 1128.** Carbogen mixture contains:
 a. CO₂ (95%) + O₂ (5%)
 b. CO₂ (50%) + O₂ (50%)
 c. CO₂ (5%) + O₂ (95%)
 d. None of these mixtures.
- 1129.** As erine pharmaceutic form is administered the:
 a. eucalyptol
 b. gomenolum
 c. cyclopropane
 d. ether
 e. halothane.
- 1130.** The pulmonary absorption is influenced by:
 a. state of ionization of the drug
 b. partial pressure of the gaseous mixture
 c. an average particle size.
- 1131.** The drug substances administered by respiratory route are reaching the general circulation, with high concentrations in:
 a. the right heart
 b. left heart
 c. the coronary vessels.
- 1132.** Intratracheal injections are considered administrations in:
 a. oral tract
 b. respiratory tract
 c. intestines.
- 1133.** The bronchodilator effect can be given by:
 a. pilocarpine
 b. arecoline
 c. eserine
 d. ephedrine
 e. vasoperif
 f. atropine.
- 1134.** Bronchoconstrictor effect can be given by:
 a. atropine
 b. arecoline
 c. eserine
 d. ephedrine.

English quiz for IIIrd year Veterinary students

1135. Identical medicines but deposited on different apparent mucosa will absorb:

- a. the same
- b. different
- c. not absorbed
- d. selective.

1136. Conjunctival mucosa is for medicines:

- a. slightly permeable
- b. hard permeable
- c. impermeable.

1137. Eye use substances must be:

- a. neutral
- b. hipotonic
- c. isotonic
- d. hypertonic.

1138. Administration in the nasal mucosa have a:

- a. local purpose
- b. general purpose

1139. Retrohypophysis powder, in the treatment of insipidus diabetes in dogs, is administered through:

- a. conjunctive mucosa
- b. Sublingual mucosa
- c. nasal mucosa
- d. rectum.

1140. Genito-urinary mucosa is a frequently used route for drug absorption.

- a. true
- b. false.

1141. Uterine mucosa can absorb medicines especially during:

- a. antepuerperium
- b. puerperium
- c. postpuerperium

1142. Antibiotics administered by teat canal most often absorb:

- a. local
- b. partly
- c. general.

1143. High sebaceous secretion will increase the rate of absorption of fat-soluble substances through the skin.

- a. true
- b. false.

1144. There are retard ophthalmic formulations in glaucoma therapy of dogs with the ability to behave as a double membrane.

- a. no
- b. yes
- c. these are single membrane therapeutic systems.

1145. The penetration of drugs through the dermis is facilitated by:

- a. lipophilicity
- b. sebaceous gland secretion
- c. the presence of hair follicles.

1146. Local therapy is considered the administration:

- a. per os , medicinal coal in enteritis
- b. intraarticular glucocorticoids
- c. ivermectin in parasites
- d. cloxacillin in mastitis
- e. tripaflavine vaginitis.

1147. Drugs penetrate the skin:

- a. easy
- b. hard
- c. not at all
- d. differently.

1148. The main mechanism for passage of drugs through the skin is pinocytosis.

- a. true
- b. false.

1149. The main mechanism for passage of drugs through the skin is:

- a. active transport
- b. passive transport
- c. pinocytosis.

1150. Passive diffusion is:

- a. transepidermal
- b. transfollicular
- c. pinocytosis.

1151. Transepidermal way is less important than the transfollicular.

- a. yes
- b. the same importance
- c. no.

1152. Transepidermal or transcellular way is important for the absorption of drugs due to their large surface area.

- a. true
- b. false.

English quiz for IIIrd year Veterinary students

- 1153.** The lipid film of the skin will be best crossed by small particle medicines which are:
 a. ionized by a factor of division over 1
 b. unionized, with a partition coefficient of about 1
 c. ionized with a partition coefficient of less than 1
 d. unionized, with a partition coefficient above 1.
- 1154.** Transepidermic passage is most favorable for substances with molecular weight (MW) of:
 a. 10-49
 b. 50-99
 c. 100-499
 d. 500-1000.
- 1155.** Through hydrated pores in transepidermic passage, the most favored drugs are those in angstroms diameter that ranges between:
 a. 1-3
 b. 4-8
 c. 9-13
 d. 14-20
- 1156.** Convective absorption is known for:
 a. respiratory
 b. digestive
 c. intestinal
 d. conjunctival
 e. skin.
- 1157.** The transfollicular way is called:
 a. transcellular
 b. Intercellular
 c. intracellularly.
- 1158.** Transepidermal way is called:
 a. transcellular
 b. transfollicular
 c. Intercellular
 d. intracellularly.
- 1159.** The transfollicular way is achieved by the epithelium of:
 a. hair follicle
 b. sebaceous glands
 c. sweat glands.
- 1160.** Water soluble substances are dissolved in the sebum, and then penetrate the sebaceous glands, or hair follicle walls in the vascular bed.
 a. true
 b. false.
- 1161.** Through intact skin can penetrate:
 a. fat-soluble vitamins
 b. hormones
 c. nicotine
 d. salicylic acid
 e. organophosphorus insecticides.
- 1162.** Some excipients may increase the rate of percutaneous penetration, hydrate the corneum stratum and then destroy it (by dissolving lipoprotein). These are:
 a. dimethylsulfoxide (DMSO)
 b. dimethylformamide (DMFA)
 c. dimetilolpropionate (DMPA)
 d. dimetillactamid (DMLA)
 e. dimetilnaftalat (DMNP).
- 1163.** An excipient with great penetrating power, dehydrates *stratum corneum* and combine with lipoproteins, thus increasing absorption.
 a. true
 b. false.
- 1164.** An excipient with great penetrating power hydrates the corneum layer and then destroys it by dissolving lipoproteins.
 a. true
 b. false.
- 1165.** Parenteral drugs should be absorbed:
 a. selective
 b. nonselective
 c. entirely
 d. not at all.
- 1166.** A solution for injection so as not to be irritating to the tissue must be:
 a. acid
 b. base
 c. neutral.
- 1167.** A solution for injection so as not to be irritating to the tissue must be:
 a. hypotonic
 b. isotonic
 c. hypertonic
 d. neutral
 e. adjusted osmolarity.
- 1168.** The most rapid therapeutic response following administration is achieved by:
 a. oral administration
 b. respiratory
 c. injection
 d. rectal
- 1169.** After reaching saturation levels, intravenous perfusion:
 a. is interrupted because it reached constant blood level
 b. continues adjusting the perfusion rate depending on elimination
 c. continues increasing the perfusion rate
 d. continues decreasing the perfusion rate.

English quiz for IIIrd year Veterinary students

1170. All parenteral routes eliminate the need to cross a mucosa as a first step in absorption.

- a. true
- b. false.

1171. Technically, a few techniques imitate perfusion. These are:

- a. deposit i.m injection.
- b. s.c injection of deposits
- c. application of the plasters
- d. administering orally retard type products.

1172. The substances administered i.p are absorbed as fast as:

- a. i .v
- b. i.a.
- c. i.c.

1173. I.m administered drugs are absorbed:

- a. very fast
- b. fast
- c. slow
- d. not absorbed.

1174. In the body hormones bind to:

- a. plasma proteins
- b. tissue proteins
- c. none.

1175. Protein complexes of the medicinal substances and plasma proteins can cross the biological membranes.

- a. true
- b. false.

1176. In blood the drugs can be in form :

- a. coupled
- b. free
- c. activated.

1177. Only a coupled drug can cross biological membranes.

- a. true
- b. false.

1178. The coupling is reversible?

- a. yes
- b. no

1179. The drugs bind proteins by the interaction of groups:

- a. non-ionizing
- b. ionizing
- c. polar
- d. nonpolar
- e. apolar

1180. The drugs bind to proteins through links of:

- a. hydrogen
- b. ionic
- c. non-ionic
- d. covalent
- e. oxygen.

1181. The covalent link is achieved between ions of opposite electronics.

- a. true
- b. false.

1182. Ionic links have the energy of 20-100 kcal / mol, giving very stable complex.

- a. true
- b. false.

1183. Hydrogen links have energy 5kcal / ml and are proportionate to the size and the square of the distance between the centers of the particles.

- a. true
- b. false.

1184. The increasing order of stability to a drug is:

- a. hydrogen - covalent - ionic
- b. covalent - hydrogen - ion
- c. ion - hydrogen - covalent
- d. hydrogen - ion - covalent
- e. covalent - ionic - hydrogen.

1185. A covalent link is stronger than the ionic one is by:

- a. 2 times
- b. 10 times
- c. 50 times.

1186. An ionic bond is stronger than the hydrogen one is by:

- a. 2-times
- b. 5-times
- c. 10 times.

1187. A hydrogen bond is stronger than the covalent one by:

- a. 2-times
- b. 5-times
- c. 10 times
- d. 50 times.

1188. Individually, it seems that all types of chemical links are too weak for coupling medicines.

- a. true
- b. false

English quiz for IIIrd year Veterinary students

- 1189.** Interactions between more points in which are present covalent bonds will achieve complexes drug - protein:
a. reversible
 b. irreversible.
- 1190.** Covalent bonds determine reversible drug - protein complex.
a. true
 b. false.
- 1191.** The chemical structure of a drug affects the affinity of organic molecules to proteins.
a. true
 b. false.
- 1192.** The long acting sulphonamides link to proteins in:
 a. small proportions
 b. average proportions
c. high proportions
 d. not at all.
- 1193.** Small changes in the chemical structure of a drug can produce large changes in the coupling of proteins.
a. true
 b. false.
- 1194.** Blocking carboxyl function will influence the protein binding capacity through:
 a. amplifying
b. reducing
 c. blocking.
- 1195.** The coupling of proteins to drugs is made with predilection on the:
a. peptide chains of lower weight
 b. heavy peptide chains
 c. globulins.
- 1196.** Drugs can bind to groups that consist of albumin aminoacid residues oriented on surface:
a. R-COO-
b. R-O-
c. R-S-
- 1197.** The aminoacid residues of albumin enter into interaction with polar molecules of the drugs.
a. true
 b. false.
- 1198.** Depending on the group that binds ions the medicine affinity is :
 a. high
 b. low
c. different
 d. none.
- 1199.** The reactive groups of proteins are sensitive to small amounts of the active substance, when this:
 a. its antagonistic conformation
b. complements its conformation
 c. when the reactive groups are modified electric.
- 1200.** Serum albumin coupling has more places for drugs:
 a. acid
b. base
 c. neutral.
- 1201.** The binding of acidic drugs to serum albumin , at coupling places is at most:
 a. 8 places
 b. 6 places
 c. 4 places
d. 2 places.
- 1202.** The drug's free fraction in the body will be:
a. diffused
b. biotransformed
c. excreted.
- 1203.** The body responds to increasing doses of medicine by emphasizing processes like:
a. biotransformation
 b. coupling
 c. direct.
- 1204.** Globulins versus albumins have great importance for drugs coupling.
 a. true
b. false.
- 1205.** Few drugs have affinity for globulins.
a. true
 b. false.
- 1206.** When binding capacity of medicines on globulin is saturated, the rest of medicine will:
 a. lead to poisoning
 b. be removed quickly
c. is fastened to the albumin.
- 1207.** Participation of the protein fractions to coupling medicines is:
 a. impossible
b. habitual
 c. rare.
- 1208.** Transferine is the essential globulin for the transport of:
a. iron
 b. copper
 c. calcium.

English quiz for IIIrd year Veterinary students

1209. Ceruloplasmin is the essential globulin for the transport of:

- a. calcium
- b. copper**
- c. iron.

1210. Lipoproteins fixing the:

- a. calcium
- b. iron
- c. vitamins**
- d. hormones**
- e. antigen.

1211. α and β lipoproteins fix drug substances such as:

- a. cholesterol**
- b. fat-soluble vitamins**
- c. steroid hormones**
- d. cortisol
- e. thyroxine.

1212. Gammaglobulin fixes many drugs.

- a. true
- b. false.**

1213. Gammaglobulins attaches:

- a. vitamins
- b. cholesterol
- c. antigens**
- d. hormones.

1214. Biotransformation decreases with the amount of drug identified in plasma.

- a. true
- b. false.**

1215. Drugs extensively coupled with plasma proteins:

- a. have long duration of action**
- b. are rapidly cleared
- c. are slowly eliminated**
- d. have short activity.

1216. Coupled phenylbutazone will be eliminated:

- a. slow**
- b. fast
- c. very fast.

1217. Drugs removal can occur only in the forms:

- a. coupled forms
- b. free forms**
- c. both.

1218. The duration of action of a drug is determined by the extent to which this one is coupled and it is direct proportional.

- a. true**
- b. false.

1219. Drugs extensively coupled to plasma proteins have:

- a. short action
- b. average action
- c. long action**

1220. Saturation of binding capacity will:

- a. decrease in free fraction
- b. increase in free fraction**
- c. rapid metabolization**
- d. slow metabolism
- e. the rapid elimination**
- f. slow elimination.

1221. Phenylbutazone plasma concentration of 10 mg / 100 ml will have:

- a. 2% mass free, 98% bound**
- b. 50% free substance, 50% bound
- c. 98% free substance, 2% bound.

1222. The plasma concentration of 25 mg/100 ml of phenylbutazone will have:

- a. 2% free substance, 98% coupled
- b. 98% free substance, 2% coupled
- c. 88% free substance, 12% coupled.

1223. Phenylbutazone at a concentration of 25 mg / 100 ml versus the 10 mg / 100 ml, the rate of metabolism will be:

- a. lower
- b. higher**
- c. equal.

1224. Hypoproteinemia status will result in:

- a. slower saturation of the coupling capacity
- b. rapid saturation of the coupling capacitance**
- c. the danger of toxic effects.**

1225. If the serumalbumines have a value below 2.6 mg / 100 ml, the side effects can install up to:

- a. 53%**
- b. 47%
- c. 15%
- d. 85%.

English quiz for IIIrd year Veterinary students

1226. If serumalbumine values are more than 2.6 mg / 100 mL, in humans, the side effects can be installed in a proportion of:

- a. 15%
- b. 47%
- c. 53%
- d. 85%.

1227. In neonates, the amount of plasma proteins is reduced, therefore, the free fraction of the drug will be higher than in adults.

- a. true
- b. false.

1228. Iatrogenic intoxication danger in infants is due to unbound drug.

- a. true
- b. false.

1229. In pregnant the quantity of blood unbound drug is:

- a. more
- b. less
- c. as well as other adult animals.

1230. The capacity of drug coupling plasma protein in gestation is affected by endogenous compounds.

- a. true
- b. false.

1231. A coupling of plasma proteins to endogenous compounds will lead to:

- a. increase unbound
- b. decrease in unbound
- c. the danger of poisoning

1232. To fill the same place of coupling retard sulfamides will be displaced by:

- a. salicylic acid
- b. phenylbutazone
- c. dicoumarol
- d. penicillins
- e. oxyphenbutazone.

1233. Corticosteroids present in plasma are coupled to:

- a. albumins
- b. globulins
- c. free.

1234. Corticosteroids present in the plasma are able to move anti-inflammatory substances (e.g. phenylbutazone), carrying out their therapeutic effect.

- a. true
- b. false.

1235. In neonates, serum albumins are found in quantities:

- a. high
- b. low
- c. are missing.

1236. On newborns the acid sites for coupling are usually saturated with bilirubin.

- a. true
- b. false.

1237. Treatments with salicylates in neonates can cause:

- a. moving bilirubin
- b. drug jaundice
- c. intoxication.

1238. Diffusion of a drug is considered completed once has crossed the total vascular wall.

- a. true
- b. false.

1239. Cellular compartment responsible for distribution of medicines is:

- a. intracellular
- b. vascular
- c. extracellular.

1240. Availability of medicines and occurrence of side effects in special compartment is regulated by passage through these compartments.

- a. true
- b. false.

1241. Barriers can be considered:

- a. the blood brain barrier
- b. aqueous humor
- c. placenta
- d. endolymph of the inner ear.

1242. The morphological border between the extracellular and blood plasma compartment is represented by:

- a. endothelium
- b. two endothelials
- c. three endothelials
- d. four endothelials.

1243. On the basis of the blood-brain barrier and peripheral nerves are sawed endothelials.

- a. true
- b. false.

1244. Endocrine organs and intestinal capillaries present *zonulae ocludentes* that realises between cells continuous junctions.

- a. true
- b. false.

English quiz for IIIrd year Veterinary students

1245. In terms of kinetic extracellular and plasma compartments are considered:

- a. single
- b. separated.

1246. Osmotic diuretics are drugs :

- a. strict watersoluble
- b. strict liposoluble
- c. amphiphiles.

1247. Since the drug enters the bloodstream, its active concentration tends to:

- a. decrease
- b. increase
- c. maintain.

1248. Balancing the concentrations of plasma and LEC will occur most quickly in:

- a. brain
- b. kidney
- c. liver
- d. heart.

1249. Acidic drugs in general, tend to accumulate in phase whose pH is:

- a. acid
- b. base
- c. neutral.

1250. The basic drugs, in general, tend to accumulate in phase whose pH is:

- a. low
- b. high
- c. neutral.

1251. Drug active transport mechanisms cause unequal distribution between compartments.

- a. true
- b. false.

1252. Coupling of a drug to proteins will determine in any compartment, compared with solubilizing, concentrations:

- a. lower
- b. equal
- c. greater.

1253. Coupling of drugs in circulation is in the highest proportion at:

- a. figurative elements
- b. glycoprotein
- c. albumin.

1254. Minimum inhibitory concentration (MIC) of an antibiotic on microorganisms is considered the minimum amount of:

- a. coupled
- b. free
- c. the vascular bed.

1255. The volume of distribution of a particular drug is considered part of the total amount in which is able to diffuse in:

- a. water
- b. blood
- c. extracellular compartment.

1256. The concentration of drug at first contact is determined by:

- a. the size of the dose
- b. solubilization rate
- c. dissemination rate.

1257. The degree to which a drug dose is diluted depends on:

- a. the concentration of drug
- b. number of compartments crossed
- c. pH of the drug
- d. pK of the drug.

1258. When a drug leaves the plasma to penetrate in other compartments of the body of water, its concentration in blood tends to:

- a. grow
- b. lower
- c. remain unchanged.

1259. The rumen has the ability to extract from LEC drugs administered by:

- a. local route
- b. general route
- c. topical.

1260. Transcellular fluids are separated from interstitial fluids by epithelia.

- a. true
- b. false.

1261. Interstitial fluids are considered liquids present in:

- a. the intestinal lumen
- b. the urinary tract
- c. glands
- d. joint
- e. the body cavity.

English quiz for IIIrd year Veterinary students

1262. Transcellular fluids are considered liquids present in:

- a. the intestinal lumen
- b. CNS
- c. glands
- d. joint.

1263. The way in which solubilized active substances are crossing barriers is:

- a. common
- b. different.

1264. The walls of capillaries are crossed most easily by soluble molecules weighing up to:

- a. 1000 D
- b. 800 D
- c. 600 D
- d. 400 D.

1265. The capillaries permeability is reduced by:

- a. Lactic acid
- b. noradrenalin
- c. histamine.

1266. Transcellular fluids are liquids present in:

- a. the intestinal lumen
- b. the urinary tract
- c. glands
- d. joint
- e. SNC.

1267. In an animal of 100 kg, which is administered i.v 1 g of the drug, theoretically, this will reach in the blood a concentration of:

- a. 1 mg / 100 ml
- b. 2 mg / 100 ml
- c. 3mg / 100 ml.

1268. In an animal of 100 kg, which is administered IV, 1 g of the drug, theoretically, this will reach in the blood a concentration of:

- a. 5 mg/100 ml
- b. 10 mg/100 ml
- c. 20 mg/100 ml.

1269. In a therapeutic dosage, when receptors are mainly coupled the coupled substance has the role:

- a. of contratransmitting
- b. quantitatively, causing passive distribution
- c. quantitatively producing active distribution.

1270. The mobility of surface receptor components is due to:

- a. pK's values
- b. electrical charge
- c. phospholipid fluidity

1271. Hemicholine favors choline transport to cholinergic nerve terminals.

- a. true
- b. false.

1272. Active reabsorption of sodium ions from the renal ultrafilter is amplified by diuretics?

- a. true
- b. false.

1273. Beta-lactams are transported in the renal ultrafilter by a specialized system for active excretion of :

- a. weak bases
- b. strong bases
- c. weak acids
- d. of strong acids.

1274. The equation of Henderson - Hasselbach shows that, when pKa of a pharmacon is equal to the pH of the solution, then the non-ionized molecules of pharmacon will be in the *ratio* of:

- a. 0
- b. 50
- c. 100.

1275. Ampicillin may have a pKa of:

- a. 2.5
- b. 5.2
- c. 7.2.

1276. Adrenaline may have PK of:

- a. 5.2
- b. 8.7
- c. 10.2.

1277. Drugs that have more than one group capable of dissociation will be:

- a. acid
- b. alkaline
- c. both.

1278. Reabsorption of organic acidic and basic medicines will be made in:

- a. vessels associated
- b. efferent vessels
- c. glomerulus
- d. proximal convoluted tubule
- e. distal convoluted tubule.

English quiz for IIIrd year Veterinary students

- 1279.** The difference in pH between the faces of the membrane allows a drug with the right PKA to develop in two phases:
 a. different ratios of ionization
 b. identical ionization
 c. will not allow ionization.
- 1280.** Drug ions will remain "trapped" on one side of a membrane if:
 a. develop equal ionization reports
 b. develops unequal ionization reports
 c. ions can not remain "captive"
 d. the ionization tendency is greater in one of the phases.
- 1281.** "ionic trap" will have effects on:
 a. speed of absorption
 b. absorption rates
 c. dissociation rate.
- 1282.** The total concentration (in the balance of diffusion) will rise in the compartment that will have the ability:
 a. the smallest coupling free pharmacon
 b. the highest coupling free pharmacon
 c. equal coupling for ionised and unionized pharmacons.
- 1283.** Drugs distribution in the body can be made:
 a. uniform
 b. unequal
 c. initially uniformly, after which they redistribute.
- 1284.** Vitamin A can accumulate selectively in:
 a. thyroid
 b. prostate
 c. placenta
 d. uterus
 e. retina
 f. myocardium.
- 1285.** Bone tissue selectively retains:
 a. thiols
 b. calcium
 c. phosphorus
 d. tetracyclines
 e. griseofulvin.
- 1286.** Chlorpromazine concentrations in the brain are smaller than in plasma:
 a. 10-times
 b. 5-times
 c. the concentrations are equal.
- 1287.** Plasma chlorpromazine is lower compared to brain concentrations for:
 a. 5-times
 b. 10 times
 c. 50 times
 d. 100 times.
- 1288.** Short-acting barbiturates diffuse in:
 a. only in the brain
 b. blood only
 c. in brain, then blood, and then in fatty tissues
 d. in the fatty tissues.
- 1289.** Fixing the drugs to protein structures will be in:
 a. reversible
 b. irreversible.
- 1290.** Reversible fixed drugs are eliminated:
 a. suddenly in active form
 b. progressively in active form
 c. only inactivated form is eliminated.
- 1291.** Irreversible drug fixing is frequent and beneficial.
 a. true
 b. false.
- 1292.** When epithelia are affected by inflammatory processes, medicinal ionized barriers can become:
 a. impervious
 b. temporarily permeable
 c. they are physiologically permeable at all times.
- 1293.** Blood-brain barrier is seriously impaired in:
 a. trauma
 b. meningeal infections
 c. osmotic changes.
- 1294.** The passage of plasma drug to aqueous chamber of the eye is performed by the epithelium of the ciliary body:
 a. easy
 b. hard
 c. does not happen
- 1295.** Sulfathiazole administered to pregnant cows is found in fetal blood concentrations of:
 a. 0%
 b. 50%
 c. 100%.
- 1296.** Vitamins high local concentration can cause the:
 a. teeth yellowing
 b. death
 c. dystrophy of the retina
 d. are only excreted.

English quiz for IIIrd year Veterinary students

- 1297.** An antagonist is a substance that stimulates pharmacological receptors.
a. true
b. false.
- 1298.** An antagonist will have towards a receptor a structure:
b. antagonic
c. complementary.
- 1299.** Active reversal of a drug can be obtained by a connection of type:
a. ionic
b. covalently.
- 1300.** The spatial structure of the receptor is:
a. mono-dimensional
b. two-dimensional
c. three-dimensional.
- 1301.** At the active sites of receptor are fixed groups of drug substances:
a. polar
b. active
c. ionized.
- 1302.** The affinity of the receptor molecules of the drug are based on:
a. complementary structures
b. chemical attraction between the active groups
c. selectivity of molecular medicines.
- 1303.** The concentration of a drug in biological structures in which are specific receptors is due to the:
a. drug;s kinetics
b. receptor selectivity
c. the receptor's attraction force.
- 1304.** The coupling process is a:
a. pharmacokinetic process
b. pharmacodynamic process.
- 1305.** The pharmacodynamic effects of adrenaline will be recorded only forms:
a. dextrorotatory
b. levorotatory
c. racemic.
- 1306.** An antagonist is a drug able to couple the receptor and trigger a therapeutic response.
a. true
b. false.
- 1307.** Immediate reversal of action is characteristic for the drug-links:
a. ionic
b. hydrogen
c. covalently
d. dipole - dipole
- 1308.** Receptors "silent" are sites at which drugs:
a. couple and produce effect
b. not couple, only discrete effects
c. couples but does not take effect.
- 1309.** A drug molecule will decouple the receptor when its kinetic energy will be enhanced by random thermal collisions at a level which can:
a. overcome the coupling energy
b. cancel coupling energy
c. decrease coupling energy.
- 1310.** Coupling of a drug to receptor is:
a. low affinity and low capacity
b. high affinity and high capacity
c. high affinity and low capacity.
- 1311.** When the complex drug - receptor loosens, the drug molecule will return to biophase.
a. true
b. false.
- 1312.** Neuromuscular junctions contain receptors for drugs and are located:
a. at the cell surface
b. the cell interior.
- 1313.** The affinity of drugs for coupling sites:
a. is constant
b. it is not constant.
- 1314.** The decrease or absence of an pharmacological effect to an agonist is called:
a. cancellation effect
b. desensitization
c. reversibility.
- 1315.** Coupling sites may return to the rest status only after:
a. antagonist removal
b. agonist removal
c. coupling antagonist
d. coupling agonist.
- 1316.** Presence of antagonists can stabilize a large fraction of receptors at rest.
a. true
b. false.

English quiz for IIIrd year Veterinary students

1317. Presence of agonists can stabilize a large fraction of receptors at rest.

- a. true
- b. false.**

1318. Motor terminal neurons specific receptors are:

- a. nicotinic**
- b. muscarinic
- c. glial.

1319. The term "mobility" refers to the individual receptors present on:

- a. membrane surface**
- b. within the cell.

1320. Receptors at which activating results in altered enzyme activity may:

- a. move into membrane**
- b. couple to receptor**
- c. modify enzyme efficiency.**

1321. Antiestrogen substances may favour the replacement of specific receptors for these hormones.

- a. true
- b. false.**

1322. A classic cell surface receptor is a lipoprotein that:

- a. it is included in the plasma membrane**
- b. totally penetrates the plasma membrane.**

1323. A false substrate can be coupled with an enzyme, which then separates at a rate:

- a. higher than the substrate
- b. below the substrate**
- c. equal to the substrate
- d. process does not occur.

1324. Enzymes that can catalyze the same reaction for drugs are called:

- a. holoenzyme
- b. isoenzymes**
- c. morphoenzymes.

1325. The combination to an allosteric site will produce:

- a. allosteric activation**
- b. allosteric blocking
- c. activation of the enzyme
- d. inhibition of the enzyme.**

1326. A drug that inhibits *in vitro* will inhibit the enzyme *in vivo* also.

- a. true
- b. false.**

1327. An active site can be irreversible blocked by the covalent bonds of an:

- a. antagonist**
- b. agonist
- c. both.

1328. "Reversible inhibition" of a drug is achieved by the use of a structural similar layer with the physiological and that dissociates from the enzyme:

- a. fast
- b. slow**
- c. not dissociate.

1329. A "*suicide inhibitor*" requires his conversion by the target enzyme in compounds that after will irreversibly inhibit the enzyme.

- a. true**
- b. false.

1330. The drugs can inhibit enzymes by:

- a. interfering with their synthesis**
- b. removal of essential cofactors**
- c. interfering ATP synthesis sites.**

1331. For triggering the pharmacological response it will be required:

- a. to achieve a number of sites connected**
- b. coupling of a number of receptors / unit of time**
- c. decoupling a number of sites / unit of time.

1332. There are substances whose "intrinsic activity" is partial agonist and partial antagonist.

- a. true**
- b. false.

1333. The antagonism of a drug towards the generation capacity of another drug response is:

- a. a positive response
- b. a negative response**
- c. a permanent response
- d. a irreversible response.

1334. Competitive or noncompetitive reduction of the response to agonist response are types of antagonism.

- a. physiologically
- b. physical
- c. pharmacologically**
- d. chemical.

1335. Muscarinic receptors have a structural heterogeneity. Their izoreceptors have:

- a. 2 variants
- b. 4 variants**
- c. 6 variants
- d. 8 variants.

English quiz for IIIrd year Veterinary students

- 1336.** Drug substances coupled to plasma protein fractions will become available only after the dissolution of links.
a. true
 b. false.
- 1337.** The volume of dissemination of drugs in older animals is:
a. lower
 b. higher
 c. equally as adults.
- 1338.** Any change to the functionality ,secretory and metabolic liver, kidney and lung will lead to blood levels:
 a. low
b. high
 c. unchanged.
- 1339.** The half-life of a drug in the body is influenced by:
a. plasma protein
b. storage tissue
c. the rate of metabolism.
- 1340.** Aminoglycoside concentrate at the disposal site, where they can touch local toxic concentrations.
a. true
 b. false.
- 1341.** The half-life of a drug identified in the extracellular fluid, where it is excreted exclusively by glomerular filtration will be:
 a. 10-15 minutes.
 b. 15-30 min
 c. 30-60 min
d. 60-90 min
 e. 90-120 min.
- 1342.** The half-life of a drug at which the tubular excretion occurs (limited to blood flow) will be:
a. 10-15 min
 b. 15-30 min
 c. 30-45 min
 d. 45-60 min.
- 1343.** If a drug is reabsorbed, its half-life can reach up to two weeks.
a. true
 b. false.
- 1344.** In the event that a drug with reduced renal elimination is not metabolised, its half-life can reach:
 a. 10-20 days
b. 20-30 days
 c. 30-40 days.
- 1345.** A drug having a good distribution to all parts of the body and is secreted by the renal tubules will have a half-life of:
 a. 15 min
 b. 30 min
c. 60 min
 d. 90 min.
- 1346.** If, for various reasons, removing a drug is incomplete, we will talk about an:
 a. real (true) elimination
b. apparent elimination
 c. fractional elimination
- 1347.** In young and newborn animals,the blood flow and glomerular filtration (compared to the adult) will be:
 a. 15-30%
b. 30-50%
 c. 50-75%
 d. 75-90%.
- 1348.** Drug elimination by the kidney can be slowed by:
 a. amplifying diuresis
 b. Urinary pH change
 c. preventing tubular reabsorption.
- 1349.** A hydrosoluble drug administered to an animal before feeding it will be removed by:
 a. 5 min
b. 10 min
c. 30 min.
- 1350.** Anthraquinone purgatives are absorbed:
a. in the small intestine and removed in the large intestine
 b. removed through the large intestine
 c. in the small intestine and excreted in bile
 d. removed through the small intestine.
- 1351.** Reaching a constant blood drug level is the result of choosing the optimal value of :
a. pro dosis
b. the size of the dosing interval
c. time for drug elimination.