QUESTIONNAIRE

subject “Clinical laboratory” for IV th course students in specialty "Veterinary Medicine"

1. Subject and tasks of the clinical laboratory.

2. Laboratory vessels - types.

3. Elementary physical and chemical operations in laboratory practice.

4. Factors influencing the clinical - laboratory results; biological factors.

5. Influencing the laboratory results of medical procedures and drugs. Influence of laboratory indicators by factors in the pre-laboratory stage.

6. Basic rules and requirements for taking biological material for clinical and laboratory research.

7. Venous blood collection - procedures.

8. Sources of errors in venous blood collection, storage and transportation to the laboratory.

9. Reference limits (values) - types.

10. Blood color and blood serum.

11. Hematocrit - test methods, clinical significance.

12. ESR - test methods, reference limits, clinical significance.

13. Hemoglobin - test methods, reference limits, clinical significance.

14. Erythrocyte count - test methods, reference limits, clinical significance.

15. Osmotic resistance of erythrocytes. Erythrocyte indices - test methods, reference limits, clinical significance.

16. Morphology of erythrocytes.

17. Anemias - types; selection of clinical and laboratory indicators and their importance.

18. Iron deficiency anemia - changes in the main indicators and their clinical interpretation.

19. Hemolytic anemias - changes in the main indicators and their clinical interpretation.

20. Posthemorrhagic anemias - changes in the main indicators and their clinical interpretation. Laboratory differential diagnosis of anemia.

21. Platelet counting - test methods, reference limits, clinical significance.

22. Leukocyte count - test methods, reference limits, clinical significance.

23. Morphology of leukocytes. Blood smear preparation.

24. Differential blood count - clinical significance.

25. Blood sugar - test methods, reference limits, clinical significance.

26. Total protein and albumin - test methods, reference limits, clinical significance.

27. Urea, creatinine, uric acid - test methods, reference limits, clinical significance.

28. Cholesterol; triglycerides - test methods, reference limits, clinical significance.

29. Metabolism of bile pigments. Bilirubin - test methods, reference limits.

30. Laboratory differential diagnosis of jaundice.

31. Sodium, potassium, chlorides - test methods, reference limits, clinical significance.

32. Calcium - test methods, reference limits, clinical significance.

33. Phosphorus, magnesium - test methods, reference limits, clinical significance.

34. Iron and iron binding capacity - test methods, reference limits, clinical significance.

35. Copper; manganese, selenium, cobalt - test methods, reference limits, clinical significance.

36. Acid-alkaline balance (blood-gas analysis) - regulation indicators.

37. Acid-base balance - methods for determination. Major violations.

38. Fundamentals of clinical enzyme diagnostics. Classification of plasma enzymes. Cholinesterase - test methods, reference limits, clinical significance.

39. Transferases - AST, ALT; test methods, reference limits, clinical significance.

40. Gammaglutamyltransferase, creatine kinase - test methods, reference limits, clinical significance.

41. Lactate dehydrogenase, alkaline phosphatase - test methods, reference limits, clinical significance.

42. Methods of study of carbohydrate and excretory function of the liver - clinical significance.

43. Methods of study of protein and detoxification function of the liver - clinical significance.

44. Collection, storage and transportation of urine. Specific gravity - determination, reference limits, clinical significance.

45. Physical examination of urine - quantity, color, odor, transparency, consistency - clinical significance.

46. Chemical examination of urine. Determination of pH, qualitative detection of protein, glucose, ketones - test methods, clinical significance.

47. Detection of blood, hemoglobin, myoglobin - test methods, clinical significance

48. Detection of bile pigments in urine - test methods and clinical significance.

49. Urine sediment - study of the inorganic component of sediment, clinical significance.

50. Sediment - study of the organic component of sediment - clinical significance.