Question bank

Choose the correct answer

(The correct answer is given in bold letters)

1. A concentration of 0.01 % is equivalent to how many parts per million (ppm)?
    a. 1 ppm
    b. 10 ppm
    c. **100 ppm**
    d. 1000 ppm
    e. 10,000 ppm
2. A blood lead concentration reported as 80g / dl is the same as:
    a. 0.08ppm
    b. **0.8 ppm**
    c. 8ppro
    d.80ppm
    e. 800 ppm
3. If the toxic level of a drug in feed is 100 ppm for a 20-kg pig, what is the estimated toxicity of the drug on a milligram per kilogram of body weight basis? Assume the feed is air dried and the pig eats feed at the rate of 6% of its body weight daily.
    a. 2 mg/kg
    b. 4 mg/kg
    c. **6 mg/kg**
    d. 8 mg/kg
    e. 10 mg/kg
4. Induction of emesis is recommended as a detoxification procedure in dogs ingesting any of the following except:
    a. Antifreeze (ethylene glycol)
    b. Acetaminophen
    c. **Kerosene**
    d. Liquid aspirin
    e. Chocolate
5. The antidotal agent N-acetylcysteine is indicated for treatment of poisoning with:
    a. Cholecalciferol rodenticides
    b. **Acetaminophen**
    c. Brodifacoum
    d. Chlorpyrifos
    e. Copper
6. Inorganic arsenic toxicosis is manifested clinically as,
    a. Icterus, anemia, and hemoglobinuria
    b. Anurosis, incoordination, and constipation
    c. Cardiomyopathy, hydrothorax, and ascites
    d. Photosensitization, dermatitis, and hair loss
    e. **Vomiting, gastroenteritis, diarrhea, and dehydration**

7. Which combination a/mineral additives is most useful in preventing chronic copper toxicosis in sheep?

a. Selenium and molybdenum
b. Selenium and sulfate
c. Zinc and molybdenum
d. **Sulfate and molybdenum**
e. Arsenic and sulphate

8. Deficiency of which element in the sow predisposes baby pigs to toxicosis by injectable iron preparations?

a. Copper
b. Chromium
c. Magnesium
d. **Selenium**
e. Zinc

9. Selenium absorption by crop plants is favoured by soil that is:

a. Acidic, wet and poorly drained
b. Acidic, semi-arid, and well drained
c. **Alkaline, well aerated and well drained**
d. Alkaline, wet and poorly aerated
e. Acidic or alkaline, wet and poorly aerated

10. In ruminants. urea toxicosis is characterized by:

a. **Ruminal alkalosis, systemic acidosis and elevated blood ammonia levels**
b. Ruminal acidosis, systemic alkalosis and elevated blood ammonia levels
c. Ruminal alkalosis, systemic alkalosis and elevated blood ammonia levels
d. Ruminal acidosis, systemic alkalosis and decreased blood ammonia levels
e. Ruminal alkalosis, systemic alkalosis and elevated blood urea nitrogen levels

11. In cattle chronic fluoride toxicosis causes:

a. Diarrhoea, pale hair coat, lameness and hoof overgrowth
b. Icterus, haemoglobinuria and photosensitization
c. Emaciation, hair loss and lameness
d. Rumen stasis, nephrosis and constipation
e. **Lameness, exostosis, and excessive dental wear**

12. Which organic synthetic herbicide is often considered dangerous because it induces accumulation of nitrites in some weed species?

a. Paraquat
h. Glyphosate
c. Lindane
d. **2,4 -dichlorophenoxy acetic acid**
e. Pentachlorophenol

13. Which category of insecticidal compounds presents a problem of persistent residues in fatty tissues of animals?

a. Carbamates
b. **Organochlorines**
c. Organophosphates

d. Pyrethrins
e. Juvenile hormones

14. If acute organophosphate insecticide poisoning is suspected, what is the best initial sample to obtain from a live animal for initial diagnostic testing?
a. Serum
b. **Whole blood**
c. Urine
d. Stomach contents
e. Fat biopsy

15. Cholinesterase inhibitor pesticides typically cause all of the following except:
a. Salivation
b. Miosis
c. Dyspnoea
d. **Blindness**
e. Bradycardia

16. When applied to organophosphate insecticide poisoning, the term aging refers to:
a. Loss of insecticidal activity with time
b. Isomerization of the organophosphate to a more toxic chemical form
c. Hydrolysis of the cholinesteraseorganophosphate bond induced by oxime drugs
d. **A chemical change that increases the stability of the organophosphate-cholinesterase bond**
e. Altered toxicity of organophosphates from spontaneous hydrolysis of ester groups

17. Newer anticoagulant rodenticides, also known as second-generation anticoagulants, are important in veterinary medicine because they:
a. Have been developed to be toxic in rats but not in other classes of mammals
b. Have effects that are readily treated by synthetic vitamin K injection
c. **Are more potent or longer acting than first generation anticoagulants, requiring prolonged therapy**
d. Are more readily detected by chemical analysis than first-generation rodenticides
e. Do not interact with other drugs or chemicals

18. A group of swine shows paralysis, hoof (corollary band) and hair lesions, and lesions of focal symmetric poliomyelomalacia. The most likely cause of these signs is toxicosis involving:
a. Arsenic
b. Copper
c. Lead
d. **Selenium**
e. Zinc

19. Overheated Teflon-coated frying pans release vapours that are especially toxic to;
a. Cats
b. Dogs
c. Gerbils
d. **Parakeets**
e. Reptiles

20. Which clinicopatlhologic value is least likely to be abnormal 2to 24 hours after a dog is bitten by a rattlesnake?

a. **Serum amylase activity**
b. Serum creatine phosphokinase activity
c. Serum -y-glutamylnansferase activity
d. Platelet count
e. Prothrombin time

21. The avian toxicant 4-aminopyridine is toxic to dogs and causes clinical effects similar to those of

a. Arsenic
b. Ethylene glycol
c. Lead
d. Organophosphates
e. **Strychnine**

Define

1. Toxicology
2. Clinical toxicology
3. Nutritional toxicology
4. Environmental toxicology
5. Analytical toxicology
6. Occupational toxicology
7. Ecotoxicology
8. Regulatory toxicology
9. Developmental toxicology
10. Toxicoepidemiology
11. Mutagenicity
12. RfD
13. NOEAL
14. Lethal concentration
15. Safety factor
16. Toxic concentration

17. Residue
18. Withdrawal time
19. Enterotoxin
20. Radiation
21. Cyanogenetic glycosides
22. Resinoids
23. Pyrethroids
24. Rodenticides
25. Peat scour
26. Venom
27. Blind staggers
28. Alkali disease
29. Toxicity
30. Sui or Sutari poisoning

Differentiate between

1. Toxin and Venom
2. Sub acute and chronic poisoning
3. Toxicokinetics and Toxicodynamics
4. Exposure related factors and Animal related factors which modify toxicant action
5. Blind staggers and alkali disease
6. Ionising and non-ionising radiation
7. Risk and Hazard
8. Bracken fern toxicity in ruminant and non-ruminant
9. Treatment of OPC and carbamate poisoning

10. Natural hazards and man-made hazards
11. Phase I and Phase II metabolism with relation to toxicokinetics
12. Elapid venom and crotalid venom
13. Clinical signs of lead poisoning in cattle and horses

Write short notes on

1. Classification of poisons
2. Chroniciy factor
3. Clinical evidences for diagnosis of poisoning
4. Distribution of toxicants
5. Universal antidote
6. Gastric lavage
7. Copper poisoning
8. Molybdenum poisoning
9. Treatment of cyanide poisoning
10. Treatment of nitirite poisoning
11. Treatment of OPC poisoning
12. Industrial toxicity
13. Withdrawal time
14. Risk management
15. Residue analysis
16. Abrus poisoning
17. Castor bean poisoning.
18. Nerium poisoning
19. Acceptable daily intake

20. Preservatives in animal feed.
21. Minamata disease
22. Describe lethal synthesis with an example
23. When will you use gastric lavage and when will you use emetics
24. Chelators in veterinary practice
25. Enzootic haematuria
26. Clinical signs associated with botulinum poisoning
27. What causes a pH of more than 8.5 in ruminant and how will you treat this case
28. An animal comes after being drenched in insecticide. What are some general considerations for dermal decontamination?
29. What are sources of thiaminase affecting horses?
30. What are the most common clinical signs of bufo toad poisoning?
31. What are the proper samples to be sent to a laboratory to rule out cholinesterase inhibitors?
32. What is the mechanism of action of carbamate insecticides?
33. What is the most common cause of death due to bufo toad poisoning?
34. Why is zinc phosphide less toxic on an empty stomach?

Give detailed answers for the following

1. Explain the common causes of poisoning in animals.
2. General approaches for diagnosis of poisoning.
3. Give a detailed account of toxicokinetics
4. Explain the various mechanisms by which toxicants act.
5. Explain how various factors modify the action of toxicants.
6. Give an account of the general line of treatment in a case of poisoning.
7. Explain how the specific antidotes produce their action and give a detailed account of the various specific antidotes available for veterinary practice.

8. Give an account of the sources, mechanism of toxicity, absorption and fate, clinical symptoms and treatment of arsenic poisoning.

9. Give a detailed account of lead poisoning.

10. How is selenium poisoning occurring. Explain its mode of action, clinical signs and treatment.

11. Explain in detail how iron causes toxicity.

12. Explain the various aspects of nitrite poisoning.

13. Give an account of urea toxicity.

14. What are the various sources of cyanide poisoning? Explain how toxicity occurs how it could be treated.

15. Mention the various groups of alkaloids that are toxic and give an account of any three alkaloidal toxicity.

16. Write a detailed account of aflatoxins.