

Q1: Answer (two only)

- A. Mention twelve equipments of basic clinical pathology laboratory.
- B. Mention ten media for bacterial differentiation (biochemical tests) and three basic media for bacterial isolation.
- C. Mention the general consideration (notes) for the collection of specimens and mention the types of pathological specimens. (15 marks)

Q2: Mention with specimens, stains and morphological characteristics the rapid diagnostic methods of the following diseases: (4 only)

(strangles , Vibriosis , campylobacteriosis, Nocardiosis, brucellosis and theileriasis) (15 marks)

Q3: A. 1. Mention for chemical kits used in clinical chemistry.

2. Write briefly on three tests used for diagnosis of liver diseases.

B. Define (4) the followings: DM , Ketone bodies , Jaundice , Pyelonephritis and BUN. (20 marks)

Q4: Answer (two only) (25 marks)

- A. what are causes of lymphocytosis?
- B. What are the causes of Iron deficiency anemia? Explain the role of Molybdenum poisoning on hemoglobin synthesis.
- C. Discuss the technique and diluting fluids commonly used for indirect platelets counting .

Q5: A. Mention the type of Anemia in the following: (5 only) (25 marks)

1. Radiation injuries.
2. Niacin spirosis.
3. Leptospirosis
4. Leukemia
5. Acute and subacute hemorrhage
6. Copper deficiency
7. Subacute and chronic inflammatory diseases.

B. What are the differences between hemophilin A and B?



Good Luck

Female fertility:

Q 1 – Answer ONE of the followings: (5 Marks)

- A- Enumerate the functions & importance of cervix in reproduction.
B- Put **(T)** in front of the true statement & **(F)** in front of the false statement.
- 1- () The uterus has an endocrine function represented by the production of uterine milk.
 - 2- () Puberty is characterized by manifestation of estrus behavior & ovulation.
 - 3- () Ovulation is usually occur from the ovulation fossa in equine during estrus.
 - 4- () The utero-tubal junction is situated between the uterus & vagina.
 - 5- () Gonadotrophic hormones are produced & secreted from the hypothalamus.

Q 2 – Discuss ONE of the followings: (5 Marks)

- a- Infertility in the mare.
- b- Estrus signs & behaviors in the she camel.

Q 3 – Write about ONE of the following cases: (5 Marks)

- a- White heifer disease.
- b- Endometritis in the cow.

Artificial insemination:

Q4 - (6 Marks)

A- Stallion artificial insemination (THREE only):

1. Shaking of equine semen should be
2. Semen used for insemination within.....minutes after collection.
3. Sperm remain fertile forhours if cooled gradually at 4 C°.
4. Semen dilute with sterilized

B- Camel Artificial insemination (TWO only):

1. The mating time duration could be from.....to.....minutes.
2. The long mating increasing the rate of; and
3. Male camel could be breed females during breeding season.

C. Give 4 functions of the cow cervix.

A- Enumerate only **THREE** of the followings:

1. Normal and abnormal individual movement of sperm.
2. Parts of end piece of sperm tail.
3. Macroscopically evaluating tests of semen.
4. Methods of semen collection.

B- Complete **TWO** of the following sentences:

1. In bulls, the time for spermatozoa from appearance in seminiferous tubules to appearance in the ejaculate is approximately.....
2. Each primary spermatocyte formed spermatids.
3. The process of releasing of spermatids from sertoli cells is called

Q6 - Answer **FIVE** of the following questions:

(5 Marks)

1. Compare between testicular degeneration and testicular hypoplasia.
2. Define TWO of the followings: **Asthenospermia, Priapism, Sexual stress.**
3. Write briefly about the limiting step of caprine artificial insemination.
4. Enumerate only the consequent steps of copulation process.
5. Write briefly about the steps of deep freezing preservation of semen.
6. Complete the following sentence; seminal Alkaline phosphatase (ALP) originates from in the dog, and it is a marker of presence of in the ejaculation, and the normal seminal ALP concentration is should be rather than U/L and the low levels of seminal ALP is an indication of presence ofin the



Good Luck

Q1-(a). Define four of the followings:

- 1-Cold sterilization.
- 2-Cryosurgery.
- 3-Penrose drain.
- 4-Hypovolemic shock.
- 5-Chromic catgut.

(b). Two years old stallion is referred to clinic with 30 cm. long lacerated wound ,occurred since 36 hours ,mention in serial steps how to treat the wound?

Q2-What are the differences between:

- 1-Primary bone healing and secondary bone healing.
- 2-Closed reduction and open reduction.

Q3-Underline the incorrect word or words in the followings.

- 1-F.F.D means the distance between the focus spot and the Organ.
- 2-To get rid of the primary beam , grids are used .
- 3-Treatment of acute abscess is by surgical removal.
- 4-Treatment of hematoma is by opening the swelling and evacuate it immediately .
- 5-X- ray is long and straight electro-magnetic waves and cannot penetrate the body.

Q4-(a). Discuss in details, the classification of Arthritis?

(b). Mention briefly, the main steps of the treatment of Infectious Arthritis?

Q5-(a). Define the following:

1. Grain founder
2. Complementary lameness
3. Plain side bone
4. Chronic Sesamoditis

(b). Explain in a diagram with drawing, the mechanism of 3rd phalanx rotation in chronic laminitis?

Q6-(A). Put ✓ for correct sentences and × for wrong sentences (choose 4 only).

- 1- The CNS action of the benzodiazepines can be effectively antagonized by the administration of Flumazenil (romazicon).
- 2- Detomidine mechanism of action similar in action to Morphine, its effect as mu- receptor partial agonist and kappa receptor agonist.
- 3- Neuroleptanalgesia examples: like combination of Xylazine and Morphine, or Xylazine and Butorphenol, or Droperidol and Fentanyl, or Oxymorphone and acepromazine, or acepromazine and Fentanyl.
- 4- Prior administration of Hexamethonium or Atropine sulphate prevents and blood pressure changes could happen when Suxamethonium used.
- 5- D-Tubocurarine causes a case of release of histamine.
- 6- Flaxedil (muscle relaxant) is the drug of choice in cat.

Q6-(B). Choose the wright mechanism of action

	Drug		Mechanism of action
1-	Diazepam	a-	An agonist for mu-opiate receptors on nerves and inhibits release of neurotransmitters involved with transmission of pain stimuli (such as substance P).
2-	Fentanyl	b-	Acts on specific benzodiazepines receptor site located on postsynaptic nerve endings located within CNS.
3-	Pentazocaine	c-	Alpha 2 agonists decrease release of neurotransmitters from the neurons, the proposed mechanism whereby they decrease transmission is via binding to presynaptic alpha 2 receptor (-ve feedback receptor).
4-	Romifidine	d-	Its effect as mu - opiate receptor partial agonist and a kappa - receptor agonist.

N.B: Q1.5marks Q2.5 marks Q3.5marks Q4.4marks Q5.4marks
Q6.7 marks.



Good Luck



Q 1 :

A : Complete (5) of the followings with suitable sentences.

1 ; There are many types of jaundice according to causes as :

1;

2;

3;

2 ; Bottle jaw is a clinical sign of many disease conditions as :

1,

2,

3 ; Salivation in cattle is a sign of many disease conditions as :

1,

2,

3,

4 ; The basis of treatment of ruminal acidosis in cattle includes :

1,

2,

3,

5 ; Toxemia means

6 ; Septicemia means

7 ; Diagnosis of traumatic reticulopericarditis is achieved by :

1,

2,

3,

4,

B : How can you treat a case of simple indigestion ?

Q 2 : Answer (3) of the followings :

A : Enumerate the common causes of pruritis in cattle and sheep.

B : Write about the etiology of primary photosensitization and urticaria.

C : Mention the treatment of Impetigo and pityriasis .

D : Describe the clinical findings of hyperkeratosis and alopecia .

Q 3 : Answer (2) of the followings :

A : Define : auto intoxication , dysphagia , anoxic anoxia ,epistaxis ,and allergic rhinitis .

B : Define pneumonia and pleuritis and mention their causes in cattle .

C : Mention the etiology of enteritis in animals .

A- Enumerate only **THREE** of the followings:

1. Normal and abnormal individual movement of sperm.
2. Parts of end piece of sperm tail.
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B- Complete **TWO** of the following sentences:

1. In bulls, the time for spermatozoa from appearance in seminiferous tubules to appearance in the ejaculate is approximately.....
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(5 Marks)

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عدد الاسئلة (10) الاجابة عن (8)

Q1: Explain the clinical signs of brucellosis in cattle.

Q2: Mention the cause, methods of transmission and four (4) characteristic signs of Anthrax.

Q3: What are the diseases that caused by *Clostridium perfringens* types A, B, C & D. Mention the exotoxin(s) of each and treatment of one of them.

Q4: What are the causes, methods of transmission and treatment of Anaplasmosis?

Q5: Explain the pathogenesis of Braxy in sheep.

Q6: List the complications of strangles (four points).

Q7: Mention the etiology and two main clinical signs of the following disease

A- Pseudorabies

D- Scrapie

B- Bovine virus diarrhea

E- Akabane disease

C- Glanders

F- Rinderpest

Q8: Mention the etiology & two methods of transmission of louping-ill. List two other diseases that confused with it.

Q9: A- laboratory diagnosis of rabies can be achieved by: (4 points).

B- Draw a diagram of the pathogenesis of rabies

Q10: What are the clinical signs of the following diseases?

- Epizootic lymphangitis
- Winter dysentery
- Ulcerative lymphangitis



Good Luck

Q1- What are the causative agents and how do you diagnose both diseases.

- a- Infectious Bronchitis.
- b- Infectious Laryngotracheitis diseases.

Q2- mention the causative agent and diagnosis of the following

- a- Fowl pox
- b- Avian tuberculosis
- c- Marek disease

Q3- Write in point about the following:

- a- Diagnosis of Trichomoniasis.
- b- Prevention and Control of Internal Parasites in chickens.



Good Luck