

B.V.Sc. & A.H. (Fourth Professional) Examination – 2024

Veterinary Surgery and Radiology Paper-I

Time: Three Hours

Maximum Marks: 100

Weightage: 20

- Unit-1 (Veterinary General Surgery)
- Unit-2 (Veterinary Anaesthesiology)
- Unit-3 (Veterinary Diagnostic Imaging Techniques)
- Unit-4 (Regional Surgery-I)

Instructions:

- 1) Attempt all questions
- 2) Answer of all questions is to be written in the space provided along with the question in question-booklet.
- 3) Overwriting is not allowed in the objective type question.

Q.1 Fill in the blanks.

(20x0.5 = 10)

- 1.1 _____ suture pattern is used for closure of a stump.
- 1.2 Protein deficiency _____ the rate of catgut absorption.
- 1.3 _____ is a clinical condition due to improper treatment of an abscess.
- 1.4 Interaction of the moderate to high energy photon (x-ray) with loosely bound (outer shell) electrons is known as _____.
- 1.5 Ultrasound imaging is based upon _____ principle.
- 1.6 _____ is a localised acute inflammation of the skin and subcutis on the neck of cattle due to constant friction by a yoke.
- 1.7 _____ phase of cell cycle is most sensitive to radiation
- 1.8 _____ is the antidote for alpha-2 agonists.
- 1.9 _____ is the normal IOP of dog.
- 1.10 The surgical technique for the correction of air aspiration into the reproductive tract is _____.
- 1.11 Father of Veterinary Radiology is _____
- 1.12 _____ nerve block causes paraphimosis.
- 1.13 The anterior chamber of the eye lies between _____ and _____.
- 1.14 _____ Is congenital absence of a portion of the iris.
- 1.15 As per heel effect, the thicker body part is placed towards _____ during radiography.

- 1.16 _____ nerve block is done in procedures involving the upper lip.
- 1.17 Protrusion of _____ palate during the rut season is common in male camels.
- 1.18 Inflammation of hard palate is known as _____
- 1.19 Megaesophagus in dog can be easily diagnosed by _____ contrast medium.
- 1.20 _____ is a condition of artificially induced sleep, or a trance resembling sleep, resulting from moderate depression of the CNS from which the patient is readily aroused.

Q.2 Choose the most suitable answer and write the number of the correct answer 1 or 2 or 3 or 4 in the space given against each sub question: (20x0.5 = 10)

- 2.1 Polydioxanone is ()
1. Absorbable
2. Non-absorbable
3. Natural
4. Multifilament
- 2.2 Catgut is absorbed by ()
1. Hydrolysis
2. Enzymatic degradation
3. Oxidation
4. Phagocytosis
- 2.3 Indolent ulcer is ()
1. Acute
2. Healed
3. Chronic
4. Painful
- 2.4 A fistula is ()
1. A non-inflammatory tract
2. Open at one end
3. Leads to a natural cavity
4. Synonym of sinus
- 2.5 Incarcerated hernia is when ()
1. Hernial contents are twisted
2. Blood supply to the hernial contents is reduced
3. Hernial contents have cicatricial adhesions
4. Hernial contents have become very voluminous
- 2.6 Substraction technique is used for ()
1. Thoracic radiography
2. Cerebral angiogram
3. Renography
4. Orthopaedic conditions

- 2.7 Basis of therapeutic ultrasound is ()
1. Reflection
 2. Absorption
 3. Scattering
 4. Refraction
- 2.8 Cystic calculi in ultrasound show ()
1. Comet tail
 2. Acoustic shadow
 3. Reverberation
 4. Mirror image
- 2.9 Doubling the distance from source, reduces the radiation exposure by a factor of ()
1. eight
 2. six
 3. four
 4. two
- 2.10 The urinary bladder is ()
1. Radioresistant
 2. Radiosensitive
 3. Mildly radiosensitive
 4. Moderately radiosensitive
- 2.11 Barium swallow is contraindicated in ()
1. Obstruction
 2. Rupture/perforation
 3. Torsion
 4. Volvulus
- 2.12 Ideally, part-film distance should be _____ ()
1. 90 cm
 2. 100 cm
 3. 10 cm
 4. 0 cm
- 2.13 Ranula is ()
1. Sublingual mucocoele
 2. Cervical mucocoele
 3. Oronasal fistula
 4. Plunging mucocoele
- 2.14 Anticholinergics ()
1. Increase salivary secretions
 2. Reduce heart rate
 3. Reduce respiratory rate
 4. Reduce salivary secretions
- 2.15 Hyovertebrotony is done to correct ()
1. Pneumovagina
 2. Cervical dislocation
 3. Guttural pouch affections
 4. Roaring

- 2.16 Iohexol is ()
1. Water insoluble contrast medium
 2. Negative contrast medium
 3. Water soluble contrast medium
 4. Oily/Viscous contrast medium
- 2.17 Radiation monitoring devices are known as ()
1. Diaphragms
 2. Collimators
 3. Dosimeters
 4. Radiation Filters
- 2.18 Cholecystopaques are excreted via ()
1. Urine
 2. Bile
 3. Respiratory system
 4. Cardiovascular system
- 2.19 Mediastinum in bovines is ()
1. Complete
 2. Incomplete
 3. Perforated
 4. Communicating on both sides
- 2.20 'Sitting on haunches' position is seen in ()
1. Perineal hernia
 2. Inguinal hernia
 3. Diaphragmatic hernia
 4. Umbilical hernia

Q.3 Attempt any ten out of the following twelve questions. Answer of each question should be in 2 to 3 lines. (10x2.0= 20)

3.1 Write in brief about sialocele.

3.2 Composition of Xray film

3.3 Write about the indications for the use of anticholinergics.

3.4 Write in brief about surgical management of Otohaematoma in canines

3.5 Write in brief about the different methods of disbudding in calves

3.6 Define shock.

3.7 Define brachygnathism and prognathism

3.8 Define Heel effect

3.9 Enumerate scatter radiation control techniques

3.10 Write about TIVA with example.

3.11 Write about the symptoms and surgical management of pus in antrum condition in canines.

3.12 Define and classify Brachytherapy

Q.4 Attempt any six out of the following eight questions. Answer of each question should be in 8 to 10 lines. (6 x 6.0 = 36)

4.1 Enumerate the Tennets of Halstead

4.4 Enumerate the general principles of radiation safety

4.5 Enumerate and briefly explain the different methods for the control of intra-operative haemorrhage

4.6 Write in brief about the methods for surgical correction of ectropion and entropion in canines.

4.7 Write in brief about the different local anaesthesia techniques for rumenotomy in bovines.

4.8 Classify barbiturate anaesthetics with examples

Q.5 Answer the following question in 1-2 pages (attempt any two). (2x12.0 = 24)

Long question should preferably have sub divisions. Please indicate weightage of marks for subdivisions in each long question.

- 5.1 Elaborate regarding the surgical management of guttural pouch empyema in horses. (12 marks)
- 5.2 Describe the different steps of radiographic film processing. (12 marks)
- 5.3 a. Define sterilization and disinfection. (02 marks)
b. Elaborate pointwise about the different methods of sterilization with examples of objects suitable for sterilization by that method. (10 marks)

B.V.Sc. & A.H. (Fourth Professional) Examination – 2024

Veterinary Surgery and Radiology Paper-II

Time: Three Hours

Maximum Marks: 100
Weightage: 20

Unit-5 (Regional Surgery-II)
Unit-6 (Orthopaedics and Lameness)

Instructions:

- 1) Attempt all questions
- 2) Answer of all questions is to be written in the space provided along with the question in question-booklet.
- 3) Overwriting is not allowed in the objective type question.

Q.1 Fill in the blanks.

(20x0.5 = 10)

- 1.1 _____ is typically treated with a femoral head ostectomy (FHO) in dogs?
- 1.2 Rupture of Achilles tendon causes dropping of the _____ joint
- 1.3 The best method for repair of mandibular fracture in camel is _____
- 1.4 _____ is a diagnostic technique where a contrast medium is injected into the joint to evaluate cartilage and soft tissue abnormalities.
- 1.5 Suppuration of atlantal bursa is commonly known as _____.
- 1.6 Ossification of lateral cartilage of os pedis is known as _____
- 1.7 Tension-band-wiring is recommended for repair of _____
- 1.8 Inflammation of stifle joint is known as _____.
- 1.9 Rotation and _____ or dropping of third phalanx are the radiological signs of _____.
- 1.10 _____ is an indication of a structural or functional disorder in one or more limbs that is manifested during progression or in the standing position.
- 1.11 Impaction of the omasum and abomasum often results from feeding poor quality _____
- 1.12 _____ is the telescoping of one part of the intestine into another.
- 1.13 Weingarth's set is used for _____.
- 1.14 An abnormal persistence of fetal communication between bladder and umbilicus is termed _____.

- 1.15 _____ is a congenital anomaly observed in calves with absence of anal opening, tenesmus, bulging of the anal area with a distended abdomen.
- 1.16 Liptek test is indicated for the diagnosis of _____.
- 1.17 In diaphragmatic hernia _____ most commonly herniates into the thoracic cavity.
- 1.18 Prostatic hyperplasia is mostly seen in _____ dogs.
- 1.19 Pyloric stenosis in dogs is often treated surgically by performing a _____ procedure.
- 1.20 _____ is the condition where the penis cannot retract into the prepuce.

Q.2 Choose the most suitable answer and write the number of the correct answer 1 or 2 or 3 or 4 in the space given against each sub question: (20x0.5 = 10)

- 2.1 Which of the following is not typically associated with a fracture in animals? ()
1. Swelling and pain
 2. Decreased range of motion
 3. Abnormal positioning of limbs
 4. Excessive muscle tone
- 2.2 The cranial drawer test is primarily used to diagnose which condition in dogs? ()
1. Hip dysplasia
 2. Cranial cruciate ligament rupture
 3. Patellar luxation
 4. Elbow dysplasia
- 2.3 A dog presenting with a "bunny hopping" gait, especially after running, is most likely suffering from which condition? ()
1. Intervertebral disc disease
 2. Hip dysplasia
 3. Patellar luxation
 4. Cranial cruciate ligament rupture
- 2.4 In horses, which of the following is most commonly used to diagnose a tendon injury? ()
1. MRI
 2. X-ray
 3. Ultrasound
 4. CT scan
- 2.5 Which of the following is a primary symptom of a horse suffering from navicular disease? ()
1. Sudden onset of severe lameness in the forelimbs
 2. Lameness that improves with rest but recurs with exercise
 3. Severe back pain
 4. Head bobbing during gait

- 2.6 Which of the following is a common cause of Monday Morning Disease in horses? ()
1. Overexertion after rest
 2. Exposure to cold weather
 3. Poor diet
 4. Infections
- 2.7 What is the first step in the management of a fracture in a cow? ()
1. Administer antibiotics
 2. Immobilize the affected limb
 3. Perform surgery immediately
 4. Apply a splint
- 2.8 Cross pinning of femur is generally done in which of the following fracture? ()
1. Midshaft fracture
 2. Supracondylar fracture
 3. Compound fracture
 4. Comminuted fracture
- 2.9 Application of Modified Thomas Splint is contraindicated in fracture of: ()
1. Metacarpal and metatarsal
 2. Femur and humerus
 3. Tibia and fibula
 4. Radius and ulna
- 2.10 Ring-bone is commonly encountered in: ()
1. Second metatarsal bone
 2. Third metatarsal bone
 3. Fourth metatarsal bone
 4. Phalanges
- 2.11 A purulent sinus opening on the coronet band due to necrosis of the collateral cartilage is known as: ()
1. Gravel
 2. Side-bone
 3. Quitter
 4. Thrush
- 2.12 Anal sac impaction in dogs is managed by: ()
1. Antibiotics
 2. Anal saccullectomy
 3. Manual expression
 4. All of the above
- 2.13 Perineal hernia is common in: ()
1. Intact male dogs
 2. Castrated dogs
 3. Female dogs
 4. Horses
- 2.14 Canine transmissible venereal tumor is best treated by: ()
1. Cryotherapy
 2. Radiotherapy
 3. Chemotherapy
 4. Surgical excision

- 2.15 A third-degree perineal laceration is commonly seen in: ()
1. Mares during foaling
 2. Goats during dystocia
 3. Cows during prolapse
 4. Dogs during defecation
- 2.16 Gut tie is known as ()
1. Hydrocele
 2. Omphalocel
 3. Pelvic hernia
 4. Hysterocele
 - 5.
- 2.17 Common site of obstruction due to calculi in dog is ()
1. Sigmoid flexure
 2. Urinary bladder
 3. Caudal to os penis
 4. Glans penis
- 2.18 Diaphragmatic hernia is common in ()
1. Cow
 2. Buffalo
 3. Goat
 4. Camel
- 2.19 Following which is an external immobilization techniques ()
1. Transfixation pinning and casting
 2. Walking cast
 3. Fiberglass cast
 4. Hanging pin cast
- 2.20 Which of the following is not a typical symptom of GDV (gastric dilation and volvulus) in dogs? ()
1. Non-productive retching
 2. Severe abdominal distention
 3. Diarrhoea
 4. Hypersalivation

Q.3 Attempt any ten out of the following twelve questions. Answer of each question should be in 2 to 3 lines. (10x2.0= 20)

3.1 Arthrodesis

3.2 Monteggia fracture

3.3 Spondylosis

3.4 Navicular Disease

3.5 Carpal hygroma

3.6 Electrocautery

3.7 Thoroughpin:

3.8 Thrush:

3.9 Priapism

3.10 Vasectomy

3.11 Meckel's diverticulum

3.12 Intravenous pyelography

Q.4 Attempt any six out of the following eight questions. Answer of each question should be in 8 to 10 lines. (6 x 6.0 = 36)

4.1 Intervertebral disc protrusion:

4.2 Hanging-pin plaster cast:

Do not write across this line

4.3 Marsupialisation

Handwritten answer for 4.3 Marsupialisation, consisting of approximately 12 lines of text.

4.4 Techniques of external immobilisation of fractures

Handwritten answer for 4.4 Techniques of external immobilisation of fractures, consisting of approximately 12 lines of text.

4.5 Abomasal displacement

Handwritten answer for 4.5 Abomasal displacement, consisting of approximately 4 lines of text.

Please write your Roll Number above this line

4.6 Endoscopy

4.7 Describe different stages of fracture healing

4.8 Write the treatment of upward fixation of patella in camels

Q.5 Answer the following question in 1-2 pages (attempt any two). (2x12.0 = 24)

- 5.1 Distinguish between hip dislocation and hip dysplasia. (3) Describe clinical signs (3) and treatment of hip dysplasia in dogs. (6)
- 5.2 Enlist various affections of the limbs causing lameness in horses. (3) Discuss the aetiology, (2) symptoms, (2) diagnosis, (2) prognosis (1) and treatment of Monday Morning Disease in horses. (2)
- 5.3 Write in details about symptoms, (3) diagnosis (3) and treatment of urinary bladder rupture in bullock. (6)