

Domain Knowledge Test for recruitment of Assistant Professor in DUVASU, Mathura

Subject: Veterinary Surgery & Radiology

- Q. No. 1** Which of the following is incorrect? MRI compared to CT scan is
- Expensive
 - Quick
 - Produces clearer images
 - More sensitive to detect skeletal metastasis
- Q. No. 2** For relaxation of bulls' penis, pudic nerve block is preferred over
- Distal paravertebral block
 - Anterior epidural anaesthesia
 - Caudal epidural nerve block
 - Inverted L block
- Q. No. 3** Which of the following nerve and eye muscle combination(s) is wrong
- Abducent n. and lateral rectus m.
 - Oculomotor n and ventral rectus m
 - Trochlear n. and ventral oblique m.
 - Abducent n. and retractor bulbi m.
- Q. No. 4** Escape of blood through intact blood vessel is termed as
- Margination
 - Pavementing
 - Chemotaxis
 - Diapedesis
- Q. No. 5** Interpret acid-base status of the surgical patient with pH=7.2, pCO₂=76, HCO³⁻ = 30 (Reference normal values pH = 7.35-7.45, pCO₂=35-45, HCO³⁻ = 22-26)
- Uncompensated metabolic acidosis
 - Partially compensated metabolic acidosis
 - Partially compensated respiratory acidosis
 - Uncompensated respiratory acidosis
- Q. No. 6** The physical status of the dog with femur fracture and fever is classified as _____ for the assessment of anaesthetic risk
- Category III
 - Category II
 - Category IV
 - Category I
- Q. No. 7** Antidote of Diazepam
- Flumazenil
 - Naloxone
 - Yohimbine
 - N- acetyl cysteine

- Q. No. 8 Which statement is incorrect concerning cortical and cancellous screw**
- The pitch of the cortical screw is fine while it is coarse in cancellous screw
 - The cancellous screw has more thread depth than cortical screw
 - The core diameter of the cancellous screw is more than the cortical screw
 - Cortical screws are stronger than cancellous screws
- Q. No. 9 Which statement is correct concerning Navicular disease condition in equines?**
- Younger equines aged less than 5 years are most commonly affected
 - The condition is not reported in ponies and donkeys
 - Hind feet are most commonly affected
 - The condition is mostly unilateral
- Q. No. 10 What is the minimum loss of blood volume that leads to shock**
- 25%
 - 35%
 - 45%
 - 55%
- Q. No. 11 The pH at the site of fracture favourable for mobilization of Ca from bone into blood is**
- Acidic
 - Alkaline
 - Neutral
 - It is not related to pH
- Q. No. 12 Ethibond is a suture material**
- Nylon
 - Silk
 - Polyester
 - Cotton
- Q. No. 13 What is first step emergency intervention to save the cow suffering from choke**
- Rumen trocarization
 - Oxygen supplementation
 - Fluid and electrolyte therapy
 - Esophagotomy
- Q. No. 14 Use of diagnostic nerve blocks are contraindicated in a horse with.**
- Laminitis
 - Navicular disease
 - Solar abscess
 - Bone fragment in fetlock joint
- Q. No. 15 In which animal, endotracheal intubation is easier and done blindly**
- Dog
 - Cat
 - Horse
 - Buffalo

- Q. No. 16 Anotia is termed as**
- Absence of external ear
 - Bud like cholea in internal acoustic canal
 - Absence of eyeball
 - Congenital presence of cataract
- Q. No. 17 Which organ in dogs appears most echogenic on ultrasound**
- Liver
 - Prostate
 - Spleen
 - Renal Cortex
- Q. No. 18 Most common site of diaphragmatic herniation in buffaloes is on the**
- Left side
 - Right side
 - Central diaphragm
 - Dorsal third of diaphragm
- Q. No. 19 Which of the following is a poor surgical judgement**
- Surgical repair of ventral hernia in a 7.5 month pregnant cow
 - Surgical removal of sharp foreign body in 8 month pregnant buffalo
 - Chronic teat fistula repair in 7.5 month pregnant cow
 - Diaphragmatic herniorrhaphy in 8 month pregnant buffalo
- Q. No. 20 Which nerve block will be most diagnostic in horses suspected with sub-solar lesions in the heel region of hoof?**
- Low four point block
 - High four point block
 - Palmer/planter digital block
 - Abaxial sesamoid block
- Q. No. 21 Which of the following is not related to cruciate ligament tear in dogs?**
- Imbrication
 - Osteoarthritis
 - Fat pad sign
 - Lateral meniscus
- Q. No. 22 The most common type of tumour of the undescended testicles in dogs is**
- Seminoma
 - Leydig cell tumour
 - Sertoli cell tumour
 - Adenoma
- Q. No. 23 Thickening of the severed cord develop due to chronic infection after castration.**
- Epididymitis
 - Orchitis
 - Scirrhus cord
 - Salpingitis

- Q. No. 24**is a condition in which testes are placed other than scrotum
- Ectopia lentils
 - Ectopia testes
 - Ectopia orificium
 - Ectopia cordis
- Q. No. 25** A 6 year old lame horse raises his head as he places weight on the left forelimb and drops it when placing on the right forelimb? Which limb is most likely affected?
- Right forelimb
 - Left forelimb
 - Left hindlimb
 - Right hindlimb
- Q. No. 26** Suturing of urethra with skin in urolithiasis cases
- Urethrotomy
 - Urethrostomy
 - Urothosomy
 - Urethroscopy
- Q. No. 27** Which is incorrect regarding Sertoli cell tumor in dogs
- Most common testicular neoplasm
 - Symmetrical alopecia
 - Myelotoxicity
 - Squamous metaplasia of prostate
- Q. No. 28** Which of the following is not effective in treating canine transmissible venereal tumor
- Vincristine
 - Doxorubicin
 - Cisplatin
 - Radiation therapy
- Q. No. 29** Uterine stump covered with a fold of omentum & sutured together in cases of pyometra.
- Plication
 - Marsupialization
 - Hysteropexy
 - Omentalization
- Q. No. 30** Typhlectomy is
- partial or complete removal of canine caecum
 - partial or complete removal of canine prostate
 - partial or complete removal of canine jejunum
 - partial or complete removal of canine Pancreas

- Q. No. 31 Which of the following pair is false**
- Dorsal displacement of soft palate – Staphylectomy
 - Laryngeal hemiplegia – emergency surgery
 - Ectropion – VY Plasty
 - Haemorrhagic septicaemia - Tracheotomy
- Q. No. 32 What will be the recommended oxygen flow rate (L/min) for dog weighing 30 Kg on a partial rebreathing circuit?**
- 0.5
 - 1.5
 - 2.5
 - 3.5
- Q. No. 33 Major cause of death in extensive burn is due to**
- Haemorrhage
 - Respiratory failure
 - Neurogenic shock
 - Hemoconcentration
- Q. No. 34 Sodium bicarbonate injection can be administered only when pH level falls belowin shocked patient.**
- 7
 - <6
 - 8
 - 1-3
- Q. No. 35 Which of the following is not a part of Peterson nerve block**
- Infraorbital
 - Retrobulbar
 - Auriculopalpebral
 - Supraorbital
- Q. No. 36 Ortolani sign is pathognomonic to disease condition in dog.**
- Coxa magna
 - Hip dysplasia
 - Greater trochanter fracture
 - DJD
- Q. No. 37 According to AO/ASIF classification of fractures, the femur is indicated by _____ number**
- 1
 - 2
 - 3
 - 4

- Q. No. 38 Osteoarthritis and exostosis of distal extremity of large metacarpus and proximal extremity of os-suffraginis is**
- Ring bone
 - Pedal osteitis
 - Pyramidal disease
 - Osselets
- Q. No. 39 Following gastric dilatation and volvulus surgery in dog, gastropexy involving _____ is done to prevent further recurrence**
- Pyloric antrum to right body wall
 - Pyloric antrum to left body wall
 - Fundus to right body wall
 - Fundus to left body wall
- Q. No. 40 Double intussusception has**
- 7 layers
 - 6 layers
 - 5 layers
 - 4 layers
- Q. No. 41 used for prevention of recurrence intussusception**
- Enteroplication
 - Marsupialisation
 - Colopexy
 - Omentalization
- Q. No. 42 Monteggia fracture in dogs involves**
- Proximal ulnar fracture
 - Proximal radial fracture
 - Distal ulnar fracture
 - Distal radial fracture
- Q. No. 43 Which of the following external fixator can be used for femur fracture repair**
- Type I
 - Type III
 - Type IIA
 - Type IIB
- Q. No. 44 Caslick's operation is recommended for**
- Vaginal tear
 - Vaginal wind sucking
 - Vaginal polyps
 - Purulent vaginitis
- Q. No. 45 Which of the following is possible coxofemoral dislocation in cattle?**
- Caudolateral
 - Ventromedial
 - Dorsomedial
 - Caudovernal

- Q. No. 46** Most common indication of hemilaminectomy in dogs is
- Intervertebral disc protrusion
 - Ankylosis spondylosis
 - Degenerative myelopathy
 - Vertebral fracture
- Q. No. 47** Which of the following is least appropriate for irrigation of infected wound
- Chlorhexidine diacetate 0.05%
 - Isotonic saline
 - Podidone iodine 1%
 - Surgical scrub solution
- Q. No. 48** Enlargement of prostate in dog is a common reason for
- Urinary incontinence
 - Perineal hernia
 - Urinary obstruction
 - Scrotal hernia
- Q. No. 49** Fredet Ramstedt operation is performed for
- GDV
 - Gastric ulcer
 - Pyloric stenosis
 - Gastric tumor
- Q. No. 50** Tenosynovitis of the tarsal sheath which encloses deep digital flexor tendon is called
- Bog spavin
 - Thoroughpin
 - Splint
 - Spavin
- Q. No. 51** The Indian society for Veterinary Surgery was founded in the year
- 1975
 - 1977
 - 1979
 - 1981
- Q. No. 52** Which statement is incorrect regarding abomasal displacement in dairy cow
- Abomasal volvulus may develop acutely or after a chronic right abomasal displacement
 - Left abomasal displacement is the most common
 - Right abomasal displacement is the most common
 - Most abomasal displacements occur during the period of 1 month after calving
- Q. No. 53**is useful contrast agent to detect radioluscent uroliths
- Conray 210
 - Barium sulphate
 - Air
 - Urograffin

- Q. No. 54 Which of the following statement about the skull radiography is incorrect**
- Correct patient positioning and primary beam centring are very important.
 - Good quality radiographs of the skull often require general anaesthesia of the patient.
 - The use of a grid is necessary irrespective of dog size.
 - A low KV, high mAs technique should be used to improve radiographic contrast.
- Q. No. 55 Which statement is incorrect regarding stringhalt condition in equines?**
- Clinical signs usually lessen at trot and disappear at canter
 - There is exaggerated upward flexion of the hindlimb at walk
 - Associated with peripheral neuropathy
 - Surgical treatment ensures immediate relief
- Q. No. 56tumors of testis are usually of embryonic origin**
- Seminoma
 - Teratoma
 - Medulloblastoma
 - Germ cell tumor
- Q. No. 57 _____ is an embryological communication of the yolk sac involving the ileum.**
- Bartholins duct
 - Wolffians duct
 - Vitelline duct
 - Mullerian duct
- Q. No. 58 The most common site of oesophageal obstruction in bovines is**
- Distal cervical
 - Pharyngeal
 - Cranial thoracic
 - Caudal thoracic
- Q. No. 59 Campbell's Test is used to assess integrity of _____ in dogs**
- Collateral ligaments of tarsal
 - Collateral ligaments of carpal
 - Collateral ligaments of elbow
 - Collateral ligaments of stifle
- Q. No. 60 The left upper permanent first premolar in dog is denoted numerically as**
- 105
 - 106
 - 205
 - 206
- Q. No. 61 Double contrast media is used for the radiograph of**
- Esophagus
 - Heart
 - Intestine
 - Urinary bladder

- Q. No. 62 Which statement is incorrect regarding nuclear sclerosis of lens**
- Occurs in older individuals
 - Leads to myopic vision
 - Starts from deeper/central portion of the lens
 - Nuclear sclerosis is initial stage of cataract
- Q. No. 63 Recommended needle specifications for palmer/planter digital nerve block in horses**
- 22 gauge, 1.5 cm
 - 22 gauge, 2.5 cm
 - 25 gauge, 1.5 cm
 - 25 gauge, 2.5 cm
- Q. No. 64 Which of the following is not indicated for the treatment of synechiae**
- Atropine
 - Anti-inflammatory drugs
 - Pilocarpine
 - Antibiotics
- Q. No. 65 Which of the following animal species has pupil as horizontal slit**
- Cow
 - Dog
 - Cat
 - Birds
- Q. No. 66 Which of the following is true bursitis**
- Fistulous withers
 - Yoke gall
 - Capped elbow
 - Capped knee
- Q. No. 67 What will be the most appropriate size of rebreathing bag required for 300 Kg horse being maintained on inhalation anaesthesia?**
- 10 litre
 - 15 litre
 - 25 litre
 - 35 litre
- Q. No. 68 Which fracture fixation technique is associated with slowest rate of fracture union?**
- Simple IM pinning
 - Dynamic intramedullary cross pinning
 - Bone plating
 - Intramedullary interlocking nailing

- Q. No. 69**is a condition often seen in dogs characterized by presence of **leptothrixs organism in mouth cavity**
- Odonolithiasis
 - Dental caries
 - Alveolar periosteitis
 - Pyorrhoea
- Q. No. 70** **The milliamp (mA) selector**
- Controls number of electrons produced by filament
 - Controls duration of exposure
 - Determines the penetrability of the x-ray beam
 - Determines the energy of the x-ray beam
- Q. No. 71** **Atropine as a preanesthetic agent**
- Reduces metabolic rate
 - Reduces intestinal secretions
 - Reduces salivary, gastric and bronchial secretion
 - Reduces body temperature
- Q. No. 72** **Best radiographic view to visualize medial proximal sesamoid bone of forelimb, clearly in equine**
- Latero-medial
 - Flexed latero-medial
 - Dorsomedial –palmerolateral oblique
 - Dorsolateral –palmeromedial oblique
- Q. No. 73** **Using clock face analogy (VD radiograph), which cardiac structure is located at 1-2 O'clock position in dog?**
- Vena Cava
 - Right atrium
 - Pulmonary artery
 - Left atrium
- Q. No. 74** **Local anaesthetic solution with adrenalin is contraindicated for teat surgery as it causes**
- Ischemic necrosis
 - Gangrene
 - Edema
 - Pressure necrosis
- Q. No. 75** **A fish eye appearance in the stage of overdose is due to**
- Loss of pedal reflexes
 - Loss of sensation
 - Loss of patellar reflex
 - Dilation of pupil
- Q. No. 76** **Hydrotherapy is used in the treatment of –**
- Acute inflammation
 - Subacute inflammation
 - Chronic inflammation
 - Non inflammatory condition

- Q. No. 77 Which statement is correct regarding use of lag screw**
- Only partially threaded screws are used as lag screw
 - Gliding hole is drilled in the far cortex and threaded one in the near cortex to achieve compression
 - Indicated to stabilize mid body fracture of proximal sesamoid in horse
 - It must be placed 45 degree to the plane of the fracture line
- Q. No. 78 The antidote for the drug xylazine hydrochloride is _____**
- Yohimbine
 - Naloxone
 - Flumazenil
 - N-acetyl cysteine
- Q. No. 79 Developmental odontogenic cyst that originates by separation of dental follicle from around the crown of an unerupted tooth**
- Dentigerous cyst
 - Dental cyst
 - Eruption cyst
 - Bakers cyst
- Q. No. 80 Barium sulphate appears radiopaque on radiograph due to**
- Coherent effect
 - Photoelectric
 - Compton
 - Heel effect
- Q. No. 81 Holt Celsus Procedure is used to treat**
- Entropion
 - Cherry eye condition
 - Ectropion
 - Chalazion
- Q. No. 82 Which of the following supracondylar fracture is intra-articular?**
- Salter Harris type V
 - Salter Harris type III
 - Salter Harris type VI
 - Salter Harris type II
- Q. No. 83 Which abdominal organ is most commonly involved in umbilical hernia in cow calf?**
- Reticulum
 - Rumen
 - Abomasum
 - Omasum

- Q. No. 84** In the dynamic compression plating system, if a hole is drilled in a loading position, tightening of each screw will achieve _____ mm of compression at the site of fracture
- 0.1
 - 0.5
 - 1.0
 - 1.5
- Q. No. 85** Cyclodialysis surgical technique in
- Glaucoma
 - Ptosis
 - Cataract
 - Uveitis
- Q. No. 86** White house technique is indicated in
- Empyema of guttural pouch
 - Hyphema
 - Sinusitis
 - Ranula
- Q. No. 87** Conchal fistula is also called as
- Periauricular cyst
 - Dentinogenesis imperfecta
 - Blue tooth disease
 - Ear worm
- Q. No. 88** During exploratory laparotomy in equine presence of bands serve as useful indicator for the identification of the various parts of the colon. How many bands are present in left ventral colon?
- 0
 - 1
 - 3
 - 4
- Q. No. 89** Commercially available Propofol
- is usually available for use in a multidose vial which contains a bacteriostatic agent
 - is dissolved in a milky oil emulsion and should only be given IV
 - can be given by subcutaneous, intravenous and intramuscular routes
 - must be refrigerated
- Q. No. 90** Part not involved in Viborg's triangle
- Caudal margin of mandible
 - Linguofacial vein
 - Tendon of insertion of sternocephalic vessel
 - Transverse facial artery

- Q. No. 91 Butorphanol is best described as**
- μ-partial agonist
 - Analgesic
 - Anaesthetic
 - Tranquilizer
- Q. No. 92 Recommended plate span width for comminuted fracture in dogs is**
- 0.4-0.5
 - 2-3
 - 5-6
 - 8-10
- Q. No. 93 Guaifenesin is most often used in horses and cattle to provide**
- Analgesia
 - Diuresis
 - Anaesthesia
 - Muscle relaxation
- Q. No. 94 Which piece of equipment helps to reduce exposure time?**
- Collimator
 - Grid
 - Rare earth screens
 - Rotating anode
- Q. No. 95 Suture pattern most appropriate for the closure of the uterine stump after ovariohysterectomy for pyometra**
- Parker Kerr
 - Simple interrupted
 - Bunnell
 - Horizontal mattress
- Q. No. 96 Proximal paravertebral anaesthesia is also called as**
- Farquharson technique
 - Cornell technique
 - Illinois technique
 - Bier technique
- Q. No. 97 Which contrast study is used to detect ectopic ureters?**
- Excretory urogram
 - Urethrography
 - Vaginography
 - Positive contrast cystography
- Q. No. 98 Orthopaedic procedure for Bone lengthening is**
- Ilizarov skeletal fixator
 - Transfixation
 - Stacked pinning
 - Bone plating

- Q. No. 99** Dose rate of acepromazine in dogs as preanesthetic by IM route is
- 0.5-1.0 mg/kg
 - 0.1-0.5 mg/kg
 - 0.05-0.10 mg/kg
 - 0.01-0.05 mg/kg
- Q. No.100** Largest source of positive artifacts echos that are not real
- Reverberation
 - Comet tails
 - Scattering
 - Resonance
- Q. No.101**makes use of the property of nuclear magnetic resonance to image nuclei of atoms inside the body.
- CT scan
 - MRI
 - Doppler
 - Nuclear scintigraphy
- Q. No.102** Radiation therapy is more effective on
- Deoxygenated cells
 - Hypochromatic cells
 - Oxygenated cells
 - Hyperchromatic cells
- Q. No.103** It is a contrast radiographic study of tendons and associative structure
- Arthrography
 - Fasciagraphy
 - Angiography
 - Arteriography
- Q. No.104** Which is true concerning windows of the operation theatre
- Should open outwards
 - Should open inwards
 - Should not open
 - No windows
- Q. No.105** Scraping of the tip of the percussion hammer proximally on the metacarpal bones elicits slight flexion of the digits. Extension of the digits is positive ____ sign indication a lesion between brain and C5.
- Schaeffer sign
 - Gordon sign
 - Cornell sign
 - Babinski's sign
- Q. No.106** Frontal sinusitis is common sequel to
- Eye cancer
 - Trephining
 - Horn amputation
 - Poll evil

- Q. No.107 The internal type of hernia is**
- Perineal hernia
 - Scrotal hernia
 - Diaphragmatic hernia
 - Umbilical hernia
- Q. No.108 Toe pointing off the ground in the horse during limb placement suggests rupture of**
- Superficial digital flexor tendon
 - Deep digital flexor tendon
 - Suspensory ligament
 - Straight sesamoidean ligament
- Q. No.109 Ventriculostomy is a procedure to**
- Drain cyst
 - Drain peritoneal fluid
 - Drain CSF
 - Drain anterior ocular fluid
- Q. No.110 Best diagnostic imaging modality for staging of lung cancer**
- PET-CT
 - MRI
 - Ultrasound
 - Radiography
- Q. No.111 Areas of increased soft tissue opacity superimposed over areas of turbinate destruction indicate:**
- Post traumatic haemorrhage
 - Neoplasia and destructive rhinitis
 - Allergic rhinitis
 - Nasal exudate
- Q. No.112 Diseases of tympanic bullae in dogs and cats is best view in:**
- Lateral survey view
 - Dorsoventral view
 - Intra-oral DV view
 - Rostrocaudal open-mouth view
- Q. No.113 Which property of the inhalant anaesthetics determine their rapid induction and recovery**
- Low minimum alveolar concentration
 - High minimum alveolar concentration
 - Low blood gas partition coefficient
 - High blood gas partition coefficient

- Q. No.114** Which of the following is a useful ultrasonographic artefact to diagnose urinary calculi?
- Acoustic shadowing
 - Acoustic enhancement
 - Mirror image
 - Reverberation
- Q. No.115** Bone is an anisotropic material. Bone is strongest to resist _____ load.
- Axial compression
 - Axial tension
 - Shear
 - Torsional
- Q. No.116** Axial pattern flaps are based on _____ which is of major importance in reconstructive surgery in dogs and cats
- Capillary loop system from superficial plexus
 - Musculocutaneous vessels
 - Local skin vasculature
 - Direct cutaneous artery and its sub-dermal plexus
- Q. No.117** _____ sutures provide a secondary suture line at a distance from primary closure to relieve excess tension on healing wound to prevent dehiscence
- Tension suture patterns
 - Retention suture patterns
 - Eversion suture pattern
 - Inversion suture patterns
- Q. No.118** The least potent inhalant anaesthetic is
- Sevoflurane
 - Halothane
 - Isoflurane
 - Desflurane
- Q. No.119** Heel effect in radiology is
- the decrease of x-ray intensity on the anode side of the X-ray beam caused by anode-target angle
 - the increase of x-ray intensity on the anode side of the X-ray beam caused by anode-target angle
 - related to the control panel of the x-ray machine
 - the small area on the target on which electrons collide to produce x-rays .
- Q. No.120** Detection of triphasic reticular motility on ultrasound indicates
- Penetrating metallic foreign body
 - Rumination or eructation
 - Reticular abscess
 - Diaphragmatic hernia

Key: Veterinary Surgery and Radiology

Q. No.	Answer	Q. No.	Answer	Q. No.	Answer
1.	B	41	A	81	A
2.	B	42	A	82	B
3.	C	43	A	83	C
4.	D	44	B	84	C
5.	C	45	D	85	A
6.	A	46	A	86	A
7.	A	47	D	87	A
8.	C	48	B	88	D
9.	B	49	C	89	B
10.	B	50	B	90	D
11.	A	51	B	91	B
12.	C	52	C	92	B
13.	A	53	C	93	D
14.	A	54	C	94	C
15.	C	55	D	95	A
16.	A	56	B	96	A
17.	B	57	C	97	A
18.	B	58	A	98	A
19.	A	59	C	99	D
20.	C	60	C	100	A
21.	D	61	D	101	B
22.	C	62	D	102	C
23.	C	63	C	103	B
24.	B	64	C	104	C
25.	B	65	A	105	D
26.	B	66	A	106	C
27.	A	67	C	107	C
28.	C	68	C	108	B
29.	D	69	A	109	C
30.	A	70	A	110	A
31.	B	71	C	111	B
32.	B	72	C	112	D
33.	B	73	C	113	C
34.	A	74	A	114	A
35.	A	75	D	115	A
36.	B	76	A	116	D
37.	C	77	C	117	A
38.	D	78	A	118	D
39.	A	79	A	119	A
40.	B	80	B	120	B