

Assistant Store Officer (Purchase), Purchase Cell, O/o Comptroller
GURU ANGAD DEV VETERINARY AND ANIMAL SCIENCES UNIVERSITY
Ferozepur Road, Ludhiana- 141004 – Punjab (India)
Email : officepurchasecell@gmail.com, Phone 0161-2553353

DETAILED NOTICE INVITING e-TENDER (DNIT)

Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana invites e-tenders through the website <https://eproc.punjab.gov.in> under two bid systems from eligible and qualified bidders (Manufacturer/Sole Selling Agent/Distributor/Authorized Dealer) for the supply of the following items, as per the required specification with full terms & conditions.

Details of required item(s):-

Sr No	Name of required item(s)	Quantity	Name of indenting department/ place of delivery /installation of item(s)
1.	<p>Purchase of Augmented and Virtual Reality content and Application Development</p> <p>1. Augmented Reality content and Application Development:</p> <ul style="list-style-type: none"> • 3D Content modelling (Content modelling, rigging, texturing, etc.) • Android and iOS App with backend having open and restricted facility for accessing AR content (User interface interaction and design; Pre-defined marker based/ Plane tracking/ Product Try on AR App) • Deployment on Play store and iOS Application Store <p>2. Virtual Reality content and Application Development:</p> <ul style="list-style-type: none"> • VR Environment Modelling (Environment assembling like hospital room, table, equipment etc.) • VR Content modelling (including rigging and all other related components) & Simulation of VR content up to 5 steps and up to 10 steps. • VR App Development for transmitting VR content and/or 3D Animation to VR Headsets. • 3D Animation with voice over for viewing through VR Headsets including sequence of animations and playback management. <p>Complete as per required specifications with accessories (If any)</p>	<p>5 Nos.</p> <p>1 No.</p> <p>1 No.</p> <p>1 No.</p> <p>3 Nos.</p> <p>1 No.</p> <p>1 No.</p>	<p>University Librarian, Guru Angad Dev Veterinary & Animal Sciences University, Ludhiana - 141004 (Punjab)</p>

CRITICAL DATE SHEET

eTender Reference No.	PC/2021-22/2176 dated 15/03/2022
eTender ID No.	2022_DAH_82678_1
Last Date & time for submission of online Bid NOTE: <i>If the bidders using Net Banking Service of banks other than SBI are advised to must deposit online Fees in advance at least (3) three working days prior to the last date of submission of the Bid.</i>	21-03-2022 upto 12.30 pm
Date & time for opening of technical Bid NOTE: <i>If sufficient bids are not received within stipulated time, tender may be extended/ re-tendered or opened with new date & time as per the recommendations of sub purchase committee.</i>	21-03-2022 at 04.30 pm
Contact person for required item(s) related any enquiry	Nirmal Singh, M- 81461-30088, Email Id- nirmal02@yahoo.co.in, librarygadvasu@rediffmail.com

DETAILS OF FEES

Sr No.	Details	Amount (Rs)
1	Tender Fees (Non-refundable)	1,800/-
2	Earnest Money Deposit (EMD) (Refundable) The EMD will be returned to the unsuccessful bidders automatically by the State Public Portal i.e. http://eproc.punjab.gov.in . Note: <i>Earnest Money Deposit (EMD) of successful bidder will be refunded only after receiving the satisfactory report from the inspection committee of the concerned department/college as per the tender terms and conditions, and guidelines laid down in the Purchase Procedure of Guru Angad Dev Veterinary and Animal Sciences University.</i>	71,000/-
3	Total Processing Fee including GST @ 18% (in INR)	2,360/-

Exempted from the payment of Bid Security (Earnest Money Deposit):

i) *As per Rule 170 of General Financial Rules (GFRs) 2017, the units registered with Micro and Small Enterprises (MSEs) or are registered with Central Purchase Organisation or the concerned Ministry or Department as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) (as per Rule 1.10.4 of Manual for Procurement of Goods 2017) shall be exempted from the payment of Bid Security (Earnest Money Deposit).*

ii) *In such case, copy of the certificate showing registration with the above mentioned institutions (indicating the terminal validity date of their registration) for the item tendered (as manufacture of the bidding item(s)) to be uploaded in Cover-I of the e-tender in PDF format.*

iii) *If firm gets exemption for depositing Bid Security (Earnest Money Deposit) by providing wrong certificate OR certificate without terminal validity date of their registration OR not being a manufacture of tendered items, the bid shall not be accepted and also bid of the firm shall be cancelled at any stage of tender, if found wrong submission of certificate.*

Important Note:-

1. The e-Tender of Guru Angad Dev Veterinary & Animal Sciences University, Ludhiana appeared/listed on website <https://eproc.punjab.gov.in> under Organisation "Department of Animal Husbandry" and Division "Purchase Cell". For details logon to www.eproc.punjab.gov.in and https://gadvasu.in/tender_notice. Any corrigendum(s) will be published on above websites only.

2. The interested bidders are advised to submit/upload their bids/documents well in advance before closing date/time to avoid any problem at the later stage.

3. The bidders using Net Banking Service of banks other than SBI are advised to submit their EMD and other fees (if any) in advance at least (3) three working days prior to the last date of submission of the Bid.

4. At the time of Technical Evaluation of Technical Bids, the sub purchase committee may ask all/any bidder(s) to submit the hard copy of any document or any additional documents or show presentation/demo of product or any query (If required) for verification/approval of Technical bids.

5. Financial Bids will be opened only of those tenderers, who qualify and are found suitable during the processing of Evaluation of Technical Bids. Financial Bids will be opened after receiving Technical Evaluation report from the concerned sub purchase committee.

Detailed specifications of the required item(s):-

**University Library
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana**

Subject: Proceedings of the meeting of sub purchase committee for purchase of Augmented and Virtual Reality Content and Application Development under RKVY Project.

A meeting of the sub purchase committee for purchase of Augmented and Virtual Reality Content and Application Development under RKVY Project ‘Capacity Building of Human Resource in Livestock Sector using Augmented and Virtual Reality’ was held in the office of the University Librarian on 14th March, 2022 at 11.30 AM for finalizing the technical specifications and terms & conditions to effect the purchase. The committee members unanimously decided the following technical specifications and terms and conditions for inviting bids through e-Tender for the purchase of Augmented and Virtual Reality Content and Application Development encompassing Augmented Reality Content and Application Development, Virtual Reality content and Application Development, and 3D Animation with voice over, under RKVY project for University Library:

Sr. No.	Title of Envelope	Contents of Envelope	Qty.
1	‘Technical Bid’	<p>1. Augmented Reality content and Application Development:</p> <ul style="list-style-type: none"> • 3D Content modelling (Content modelling, rigging, texturing, etc.) • Android and iOS App with backend having open and restricted facility for accessing AR content (User interface interaction and design; Pre-defined marker based/ Plane tracking/ Product Try on AR App) • Deployment on Play store and iOS Application Store <p>2. Virtual Reality content and Application Development:</p> <ul style="list-style-type: none"> • VR Environment Modelling (Environment assembling like hospital room, table, equipment etc.) • VR Content modelling (including rigging and all other related components) & Simulation of VR content up to 5 steps and up to 10 steps. • VR App Development for transmitting VR content and/or 3D Animation to VR Headsets. <p>3D Animation with voice over for viewing through VR Headsets including sequence of animations and playback management.</p>	<p>5</p> <p>1</p> <p>1</p> <p>1</p> <p>3</p> <p>1</p> <p>1</p>
2	‘Financial Bid’	Detail about price along with all charges including all taxes i.e. GST/CST, FOR, Insurance/warranty etc.	

The bids be invited through e-Tender in the name of ‘University Librarian, Guru Angad Dev Veterinary & Animal Sciences University, Ludhiana’ which shall be opened on the last date of submitting bid in presence of all sub purchase committee members. The financial bid will be opened only of those bidders who have qualified in the technical bid.

1 Anurag 14/3/22 2 Gaurav 14/3/22 3 P 14/3/22 4 [Signature] 5 [Signature] 14/3/22 6 [Signature] 14/3

Terms & Conditions:

1. **Valid GST No. and HSN code must be mentioned on the quotation. The university is exempted from the payment of GST as per notification no. 47/2017-integrated Tax rate and the exemption, wherever applicable, will be availed by providing GST exemption certificate.**
2. Incomplete bids or received after due date/time shall be rejected forthwith.
3. Conditional and unsigned quotation will not be accepted.
4. The quotation shall not contain corrections, erasers and overwriting, it will result in rejection of quotation straightway.
5. The rates must be quoted for each component of Augmented Reality, Virtual Reality and 3D animation, separately. **GADVASU reserves the right to increase or decrease the number of 3D content modelling under AR and/or VR, Virtual Environment, and 3D animation.** Android and iOS App for AR, Deployment on Play store and iOS Application Store and VR App Development for transmitting VR content and/or 3D Animation to VR Headsets should be one-time expenditure only with provision for adding more 3D models for AR and VR, and 3D animation(s), as applicable.
6. The bidder company shall be in existence for at least last three years. Valid proof about registration of the company be attached.
7. The bidder must have atleast two years of relevant experience of developing AR/VR/3D animation content and application development.
8. The annual turnover of the company should be at least Rs. 50 Lakhs for last two year. Proof in this respect be attached.
9. **The topics/titles along with technical details for developing AR and VR contents including 3D animation are given in Annexure-I.** The AR 3D models should offer 360 degree rotation with option to zoom in and zoom out and interaction as per details provided. Plain tracking of AR content with application would be preferred. The VR content should offer interactivity of the user with the subject as per details provided. In 3D animation, the voice over would be in Punjabi language and it should be compatible for viewing using VR Headsets.
10. The rates of the content/application/items must be quoted strictly according to the full Specifications and details as per Annexure-II along with all the terms & conditions and must be FOR University Library, GADVASU, Ludhiana destination basis and should include all types of taxes and transport charges etc.
11. Rates quoted must be valid for 1 month. In case prices slash down or any other benefit (in form of lesser price/lesser tax/foreign exchange rate etc.) it must be passed on to GADVASU.
12. Payment would be released in ration of 25:35:40 on completion and making available publicly of full modules as follow:

AR module	25%
VR module	35%
After testing and signing of satisfactory report by the project team, respectively.	40%

13. **The successful bidder will be required to sign an agreement on stamp paper of Rs. 500/- on mutually agreed terms for completion of the work of Augmented and Virtual Reality content and Application(s) development** at his own expenses.
14. On completion of each module viz. Augmented Reality, Virtual Reality and 3D animation, the supplier would impart on-site training to GADVASU fraternity in using the concerned module.
15. The supplier would install VR content to VR Headsets at GADVASU and would impart training to University Library personnel for transmission of VR content to VR Headsets using VR Application.

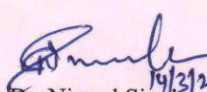
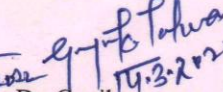
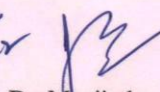

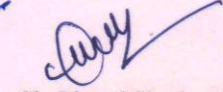

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16. In case a holiday is declared on the last date for submission of quotations, the next working day will be the last day to submit the quotations.
17. The University reserves all the rights to accept or reject any/all quotation(s) and to increase or decrease quantity or configuration of items specified without specifying any reason. No correspondence will be made on this matter.
18. Supplier will be responsible for clearing the equipment/item from the custom department and deliver the same to the University Library, GADVASU, Ludhiana.
19. The quoted content/application/equipment shall be in compliance with the required specifications mentioned in the tender/quotation notice and shall be of the latest technology, best quality and high standards. Any optional accessories/ tooling, besides the standard equipment recommended for the better performance of the equipment, if offered, be provided with their full technical details including their use and advantage in a separate sheet with the technical documents. No extra payment shall be paid on account of any discrepancy in nomenclature of items.
20. Bidder shall take into account all costs including installation, commissioning, cartage, etc. for giving delivery of material at site before quoting the rates. In this regard no claim for any extra payment for any reason shall be entertained.
21. The payment will be made after deducting TDS as per GST/Govt. Rules as applicable.
22. The supplier should give an undertaking that they will be responsible to carry out the preventive maintenance and to repair the equipment during guarantee and post guarantee period.
23. Full details of after sale service offered during the post guarantee period should be furnished along with tender specified.
24. While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any tender stipulate any condition of his own, such conditional tender is liable to be rejected.
25. All disputes shall be subject to Ludhiana jurisdiction only.

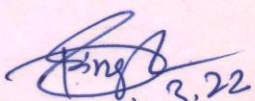
List of documents to be attached by the bidder

The bidder must attach the following documents with bid:

1. Proof about existence/registration of the company for atleast last three years.
2. Proof about relevant experience of the company in developing AR/VR/3D animation content and application development for atleast last two years.
3. Valid proof about the annual turnover of the company (at least Rs. 50 Lakhs for last two year).

 Dr. Nirmal Singh, Assistant Librarian, University Library	 Dr. Gopika Talwar, Asso. Prof., CODST	 Dr. Manjinder Sharma, Asstt. Prof., Deptt. of Vety. Phy. & Bio.	 Sh. Yogesh Sharma, SDE(E)	 Sh. Pirtpal Singh, Superintendent, Directorate of Livestock Farms	 Sh. Rajinder Kumar, Store Keeper
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"It is certified that the above specifications are general and do not favour any specific model/brand/ company etc."

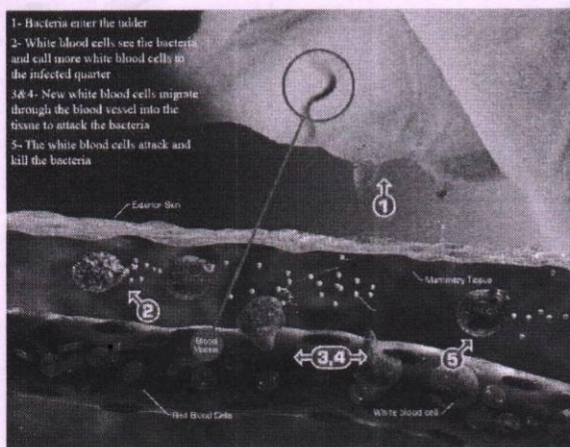
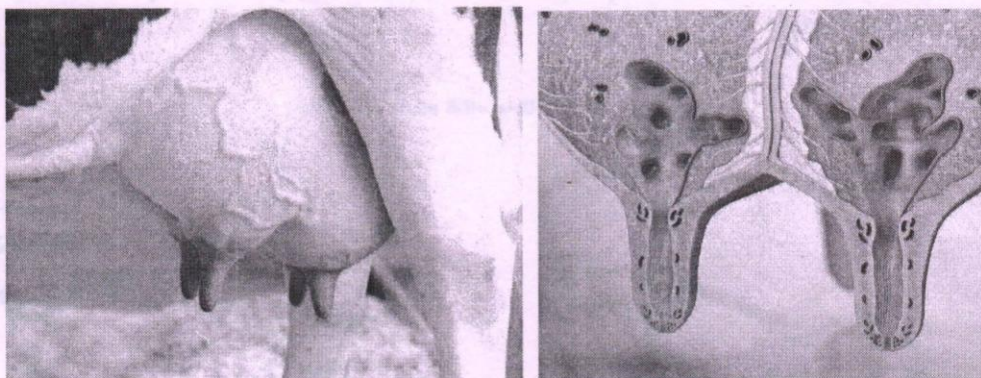

 14.3.22
 University Librarian

UNIVERSITY LIBRARY
 GURU ANGAD DEV VETERINARY AND ANIMAL SCIENCES UNIVERSITY
 LUDHIANA

Topics/titles for Augmented and Virtual Reality content development under RKVY project along with technical details and reference material

A. Topics for Augmented Reality: (360 degree rotation with zoom in and zoom out, preferably plain tracking based)

a. Tackling issues of Mastitis problem (labelling is to be done in Punjabi) (interaction upto 5 steps)



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Dr. Nirmal Singh,
 Assistant Librarian,
 University Library

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 14.3.2022

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 Prof., CODST

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Sh. Yogesh
 Sharma, SDE(E)

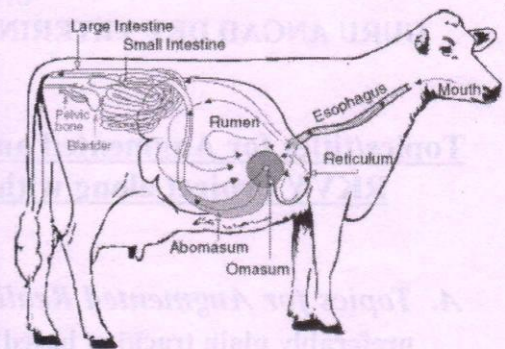
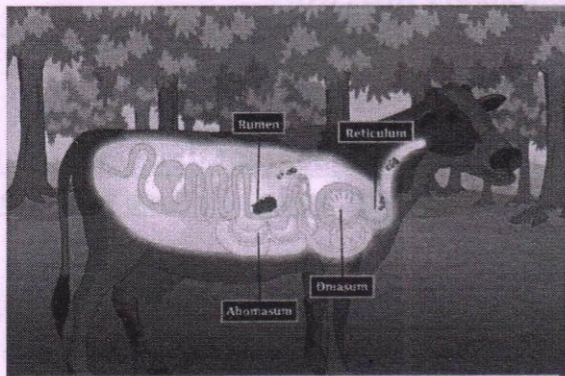
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Sh. Pirtpal Singh,
 Superintendent,
 Directorate of
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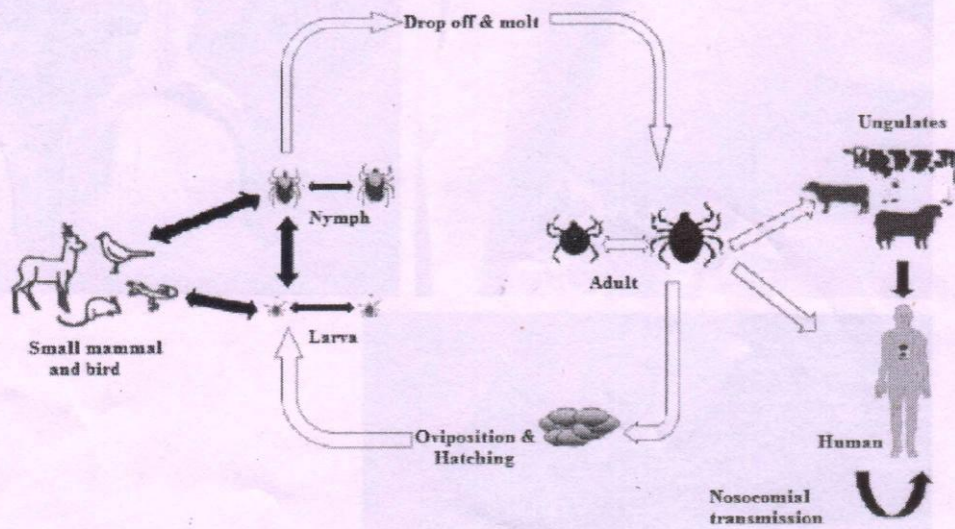
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Sh. Rajinder Kumar,
 Store Keeper

b. Digestive system of cattle (labelling is to be done in Punjabi) (Movement of feed in all four parts)



c. Life cycle of a tick for its proper control (All six steps of life cycle of tick and control steps)



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Dr. Nirmal Singh,
Assistant Librarian,
University Library

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Dr. Gopika
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Prof., CODST

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Sharma, Asstt.
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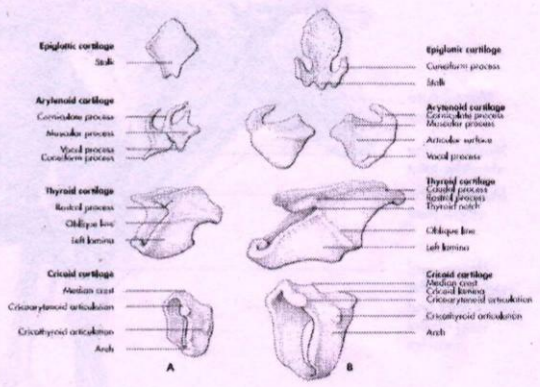
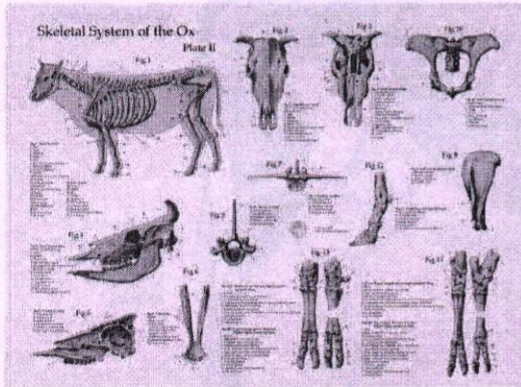
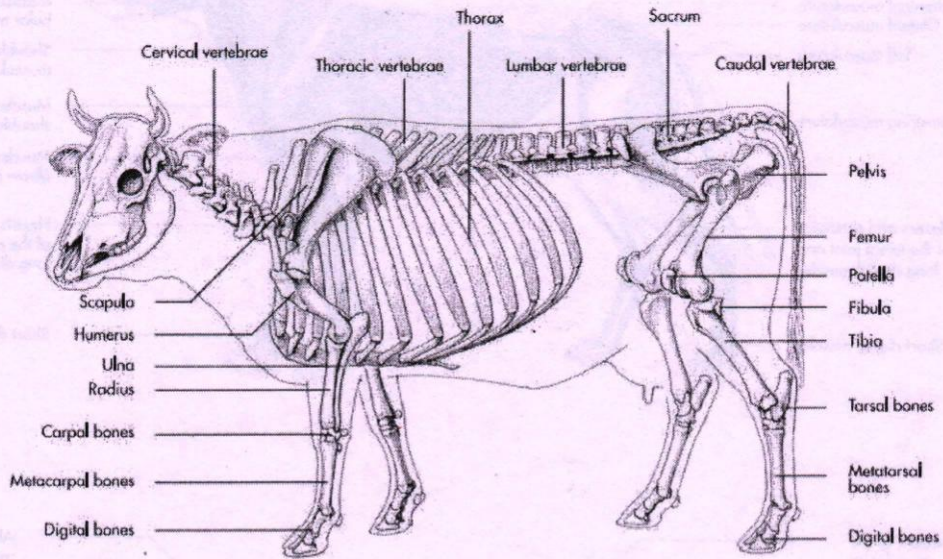
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d. Anatomy of bovine/ equine/ canine (separately):

i. Skelton system (with further detailing of each bone)



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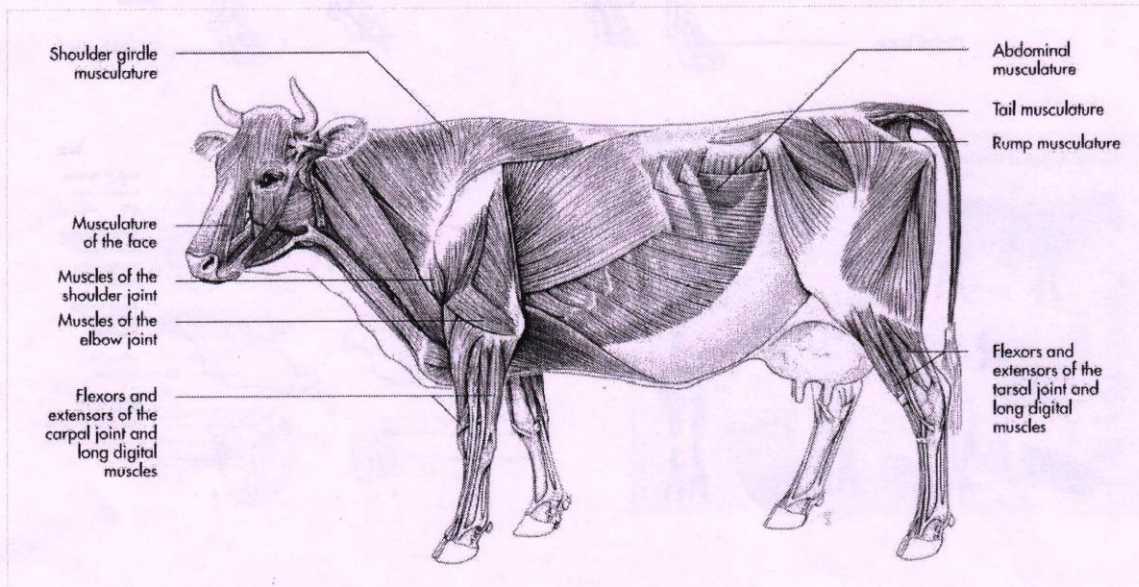
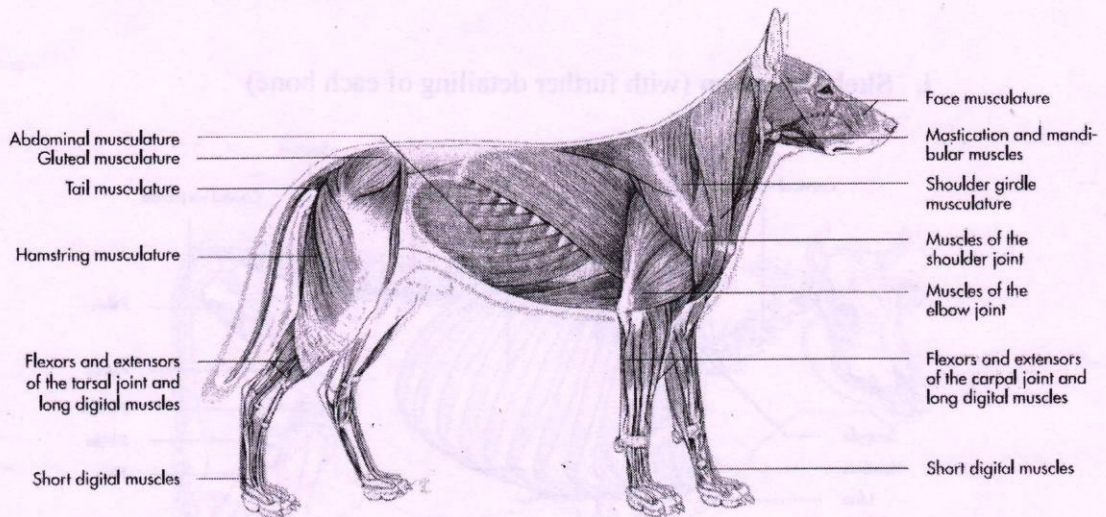
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 Sharma, SDE(E)

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 Sh. Pirtpal Singh,
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 Directorate of
 Livestock Farms

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ii. Muscles (with further detailing of each muscle)



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Dr. Nirmal Singh,
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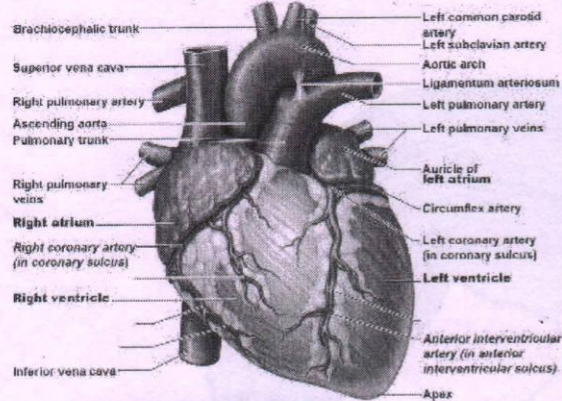
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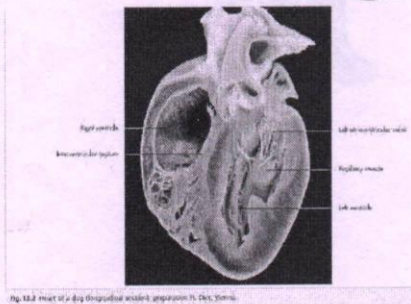
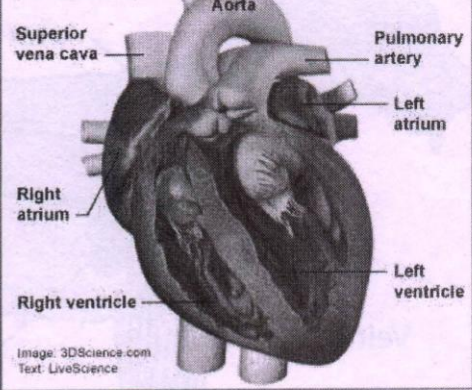
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Sh. Rajinder Kumar,
Store Keeper


iii. Heart (further interactivity with parts)

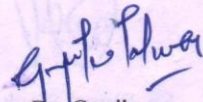
Gross Anatomy of the Heart





Inside the Heart






Dr. Nirmal Singh,
Assistant Librarian,
University Library


Dr. Gopika
Talwar, Asso.
Prof., CODST

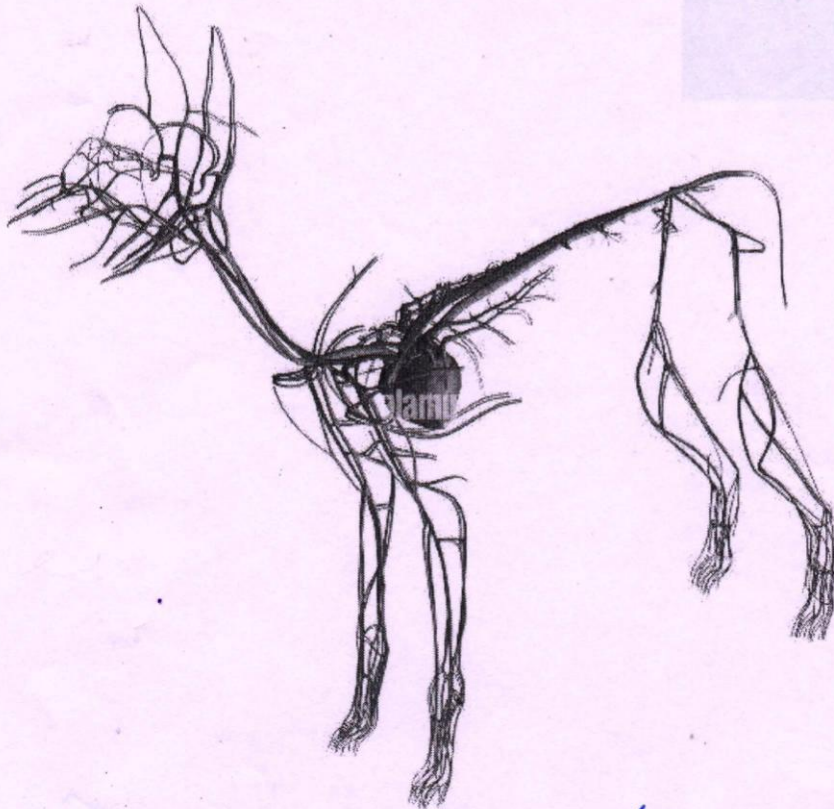
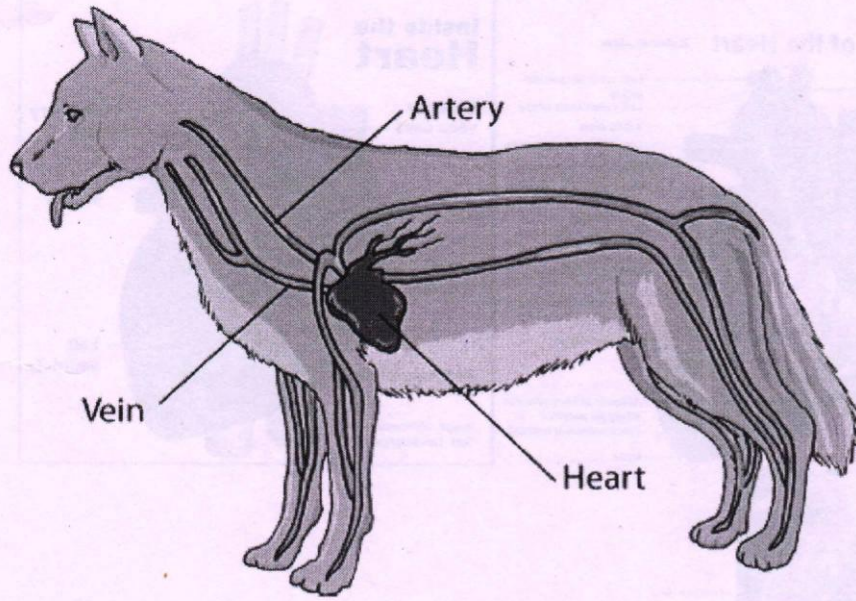

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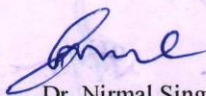

Sh. Yogesh
Sharma, SDE(E)

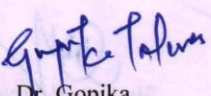

Sh. Pirtpal Singh,
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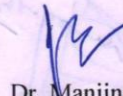

Sh. Rajinder Kumar,
Store Keeper

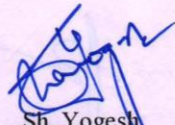
iv. Blood supply of heart (with further interaction with arteries)

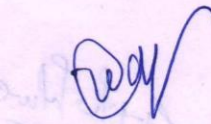


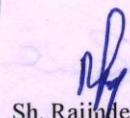

Dr. Nirmal Singh,
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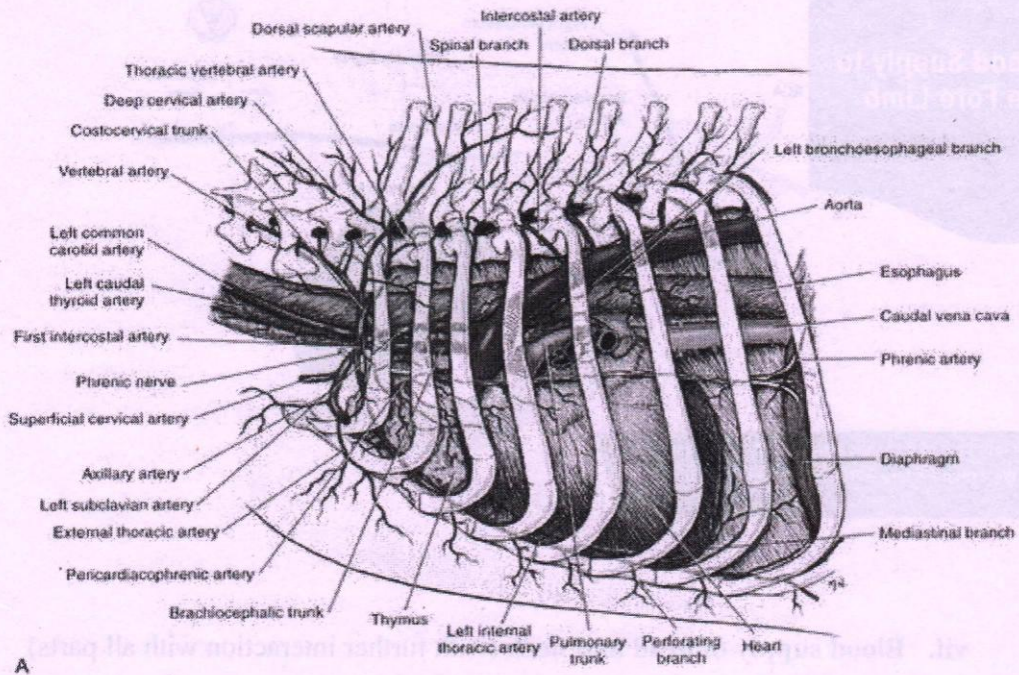

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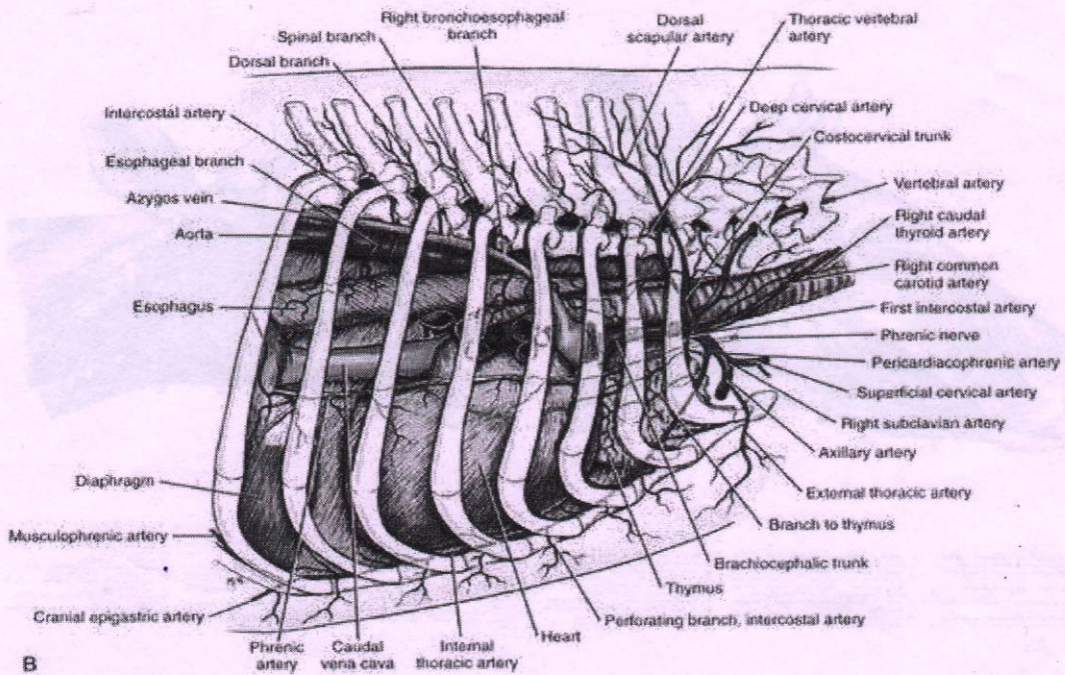

Sh. Pirtpal Singh,
Superintendent,
Directorate of
Livestock Farms


Sh. Rajinder Kumar,
Store Keeper

v. Blood supply of thoracic artery (with further interaction with all parts)



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B

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Dr. Nirmal Singh,
Assistant Librarian,
University Library

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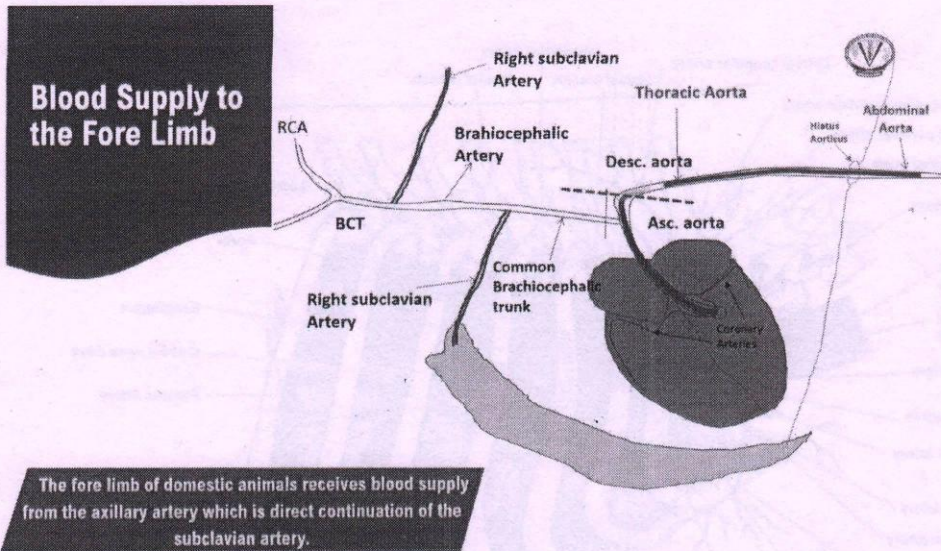
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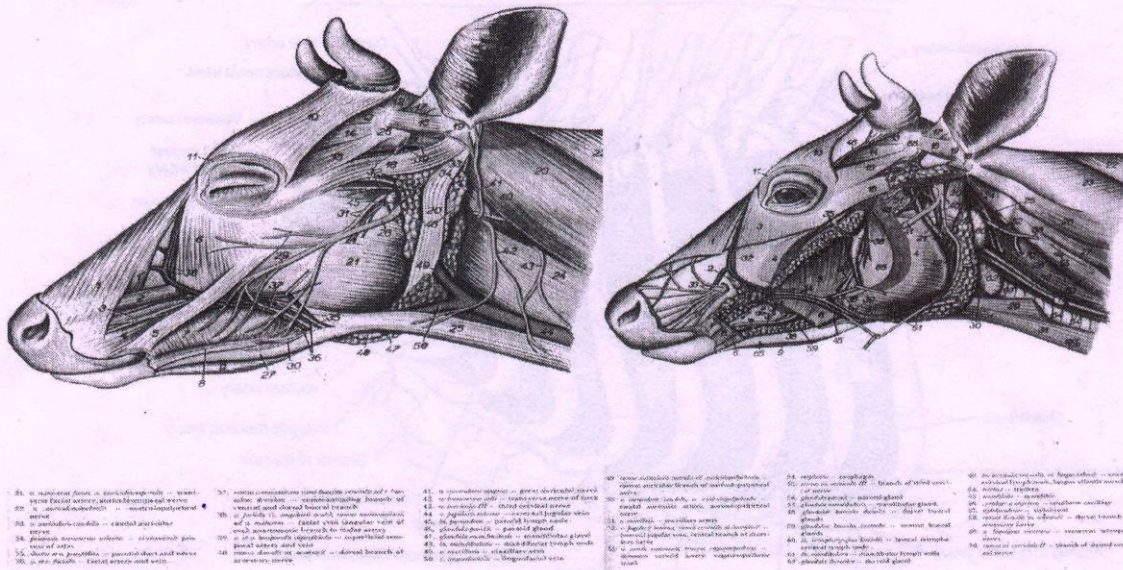
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Sh. Rajinder Kumar,
Store Keeper


vi. Blood supply of forelimb (with further interaction with all parts)





vii. Blood supply of head and neck (with further interaction with all parts)

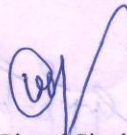




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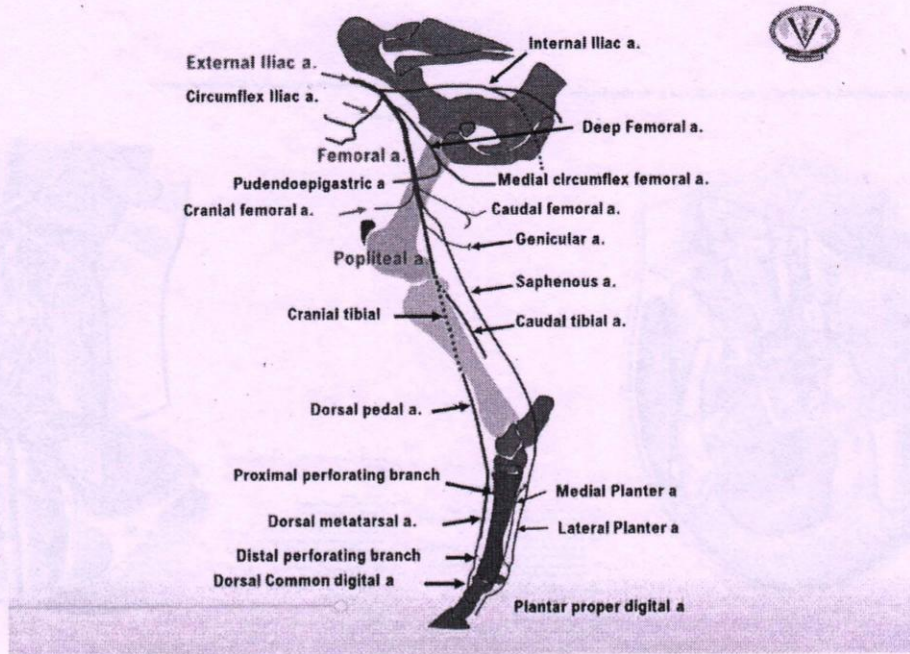

 Dr. Manjinder
 Sharma, Asstt.
 Prof., Deptt. of
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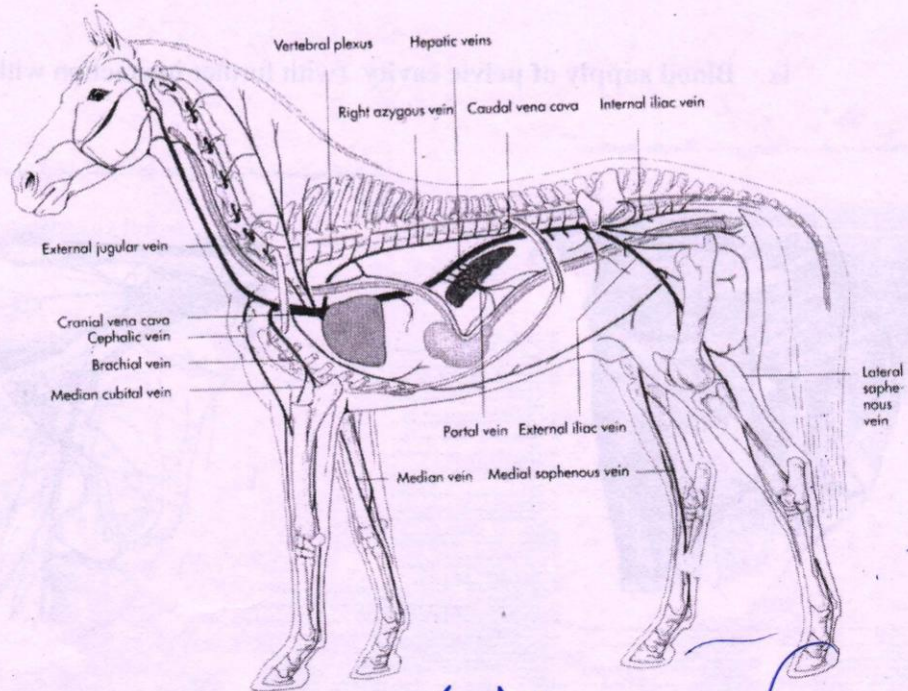

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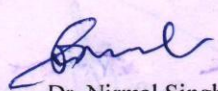
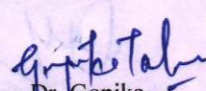
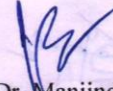
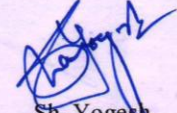
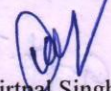


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x. Blood supply of hind limbs and tail (with further interaction with all parts)

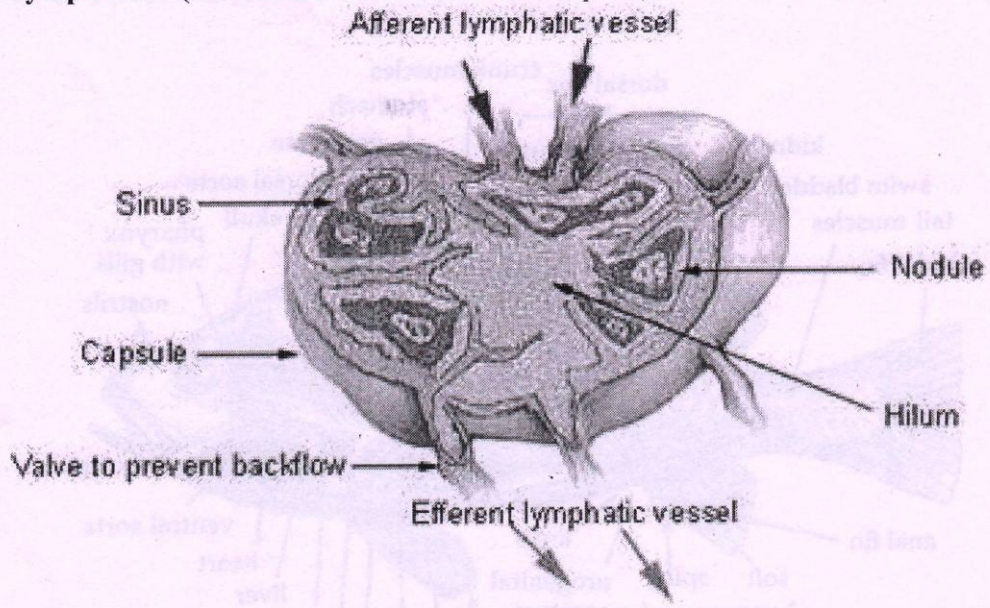


xi. Venous drainage (with further interaction with all parts)

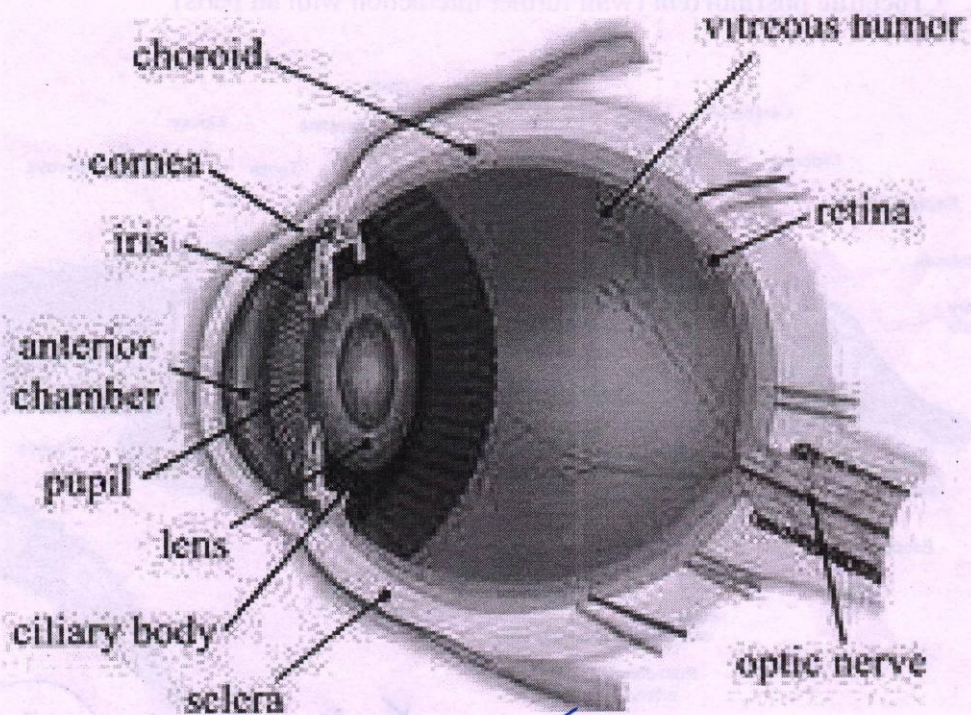


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e. Lymph node (with further interaction with all parts)



f. Eye (with further interaction with all parts)



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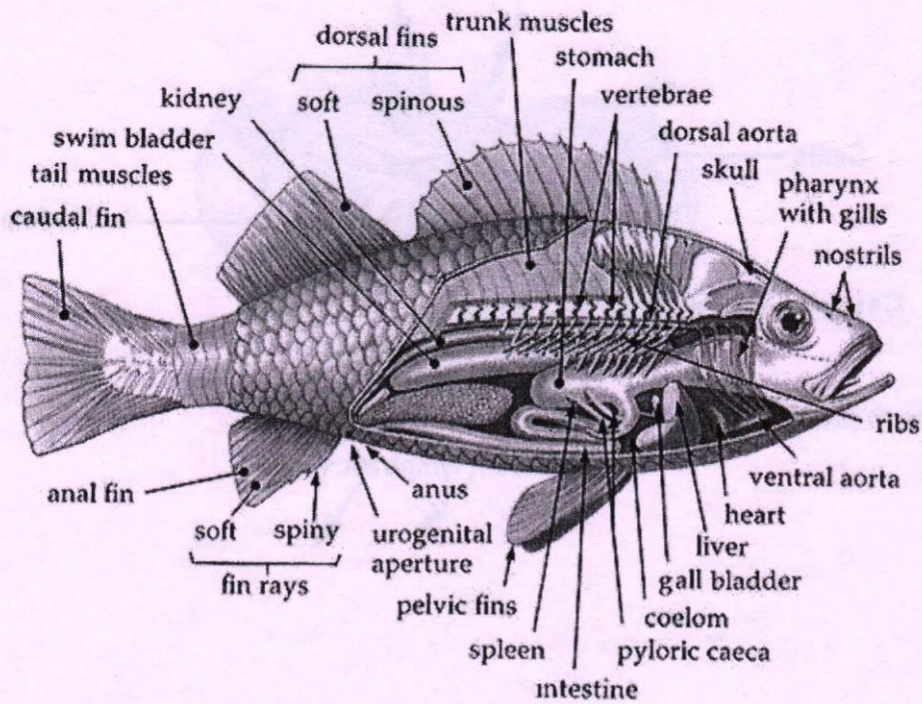
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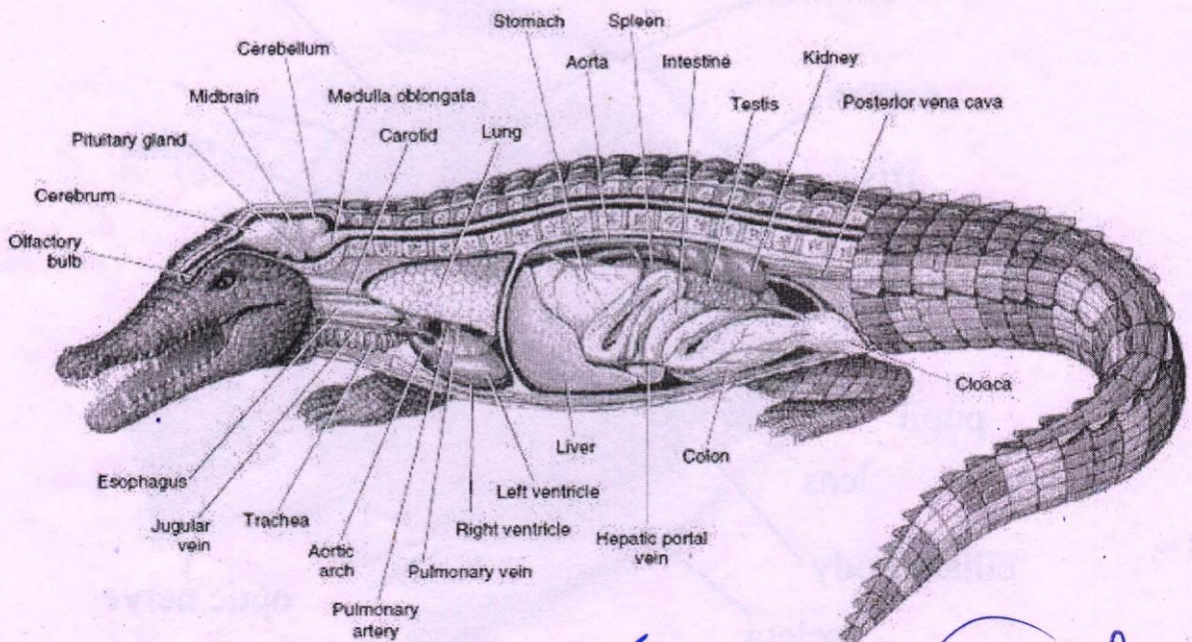
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g. Fish postmortem (with further interaction with all parts)



h. Crocodile postmortem (with further interaction with all parts)



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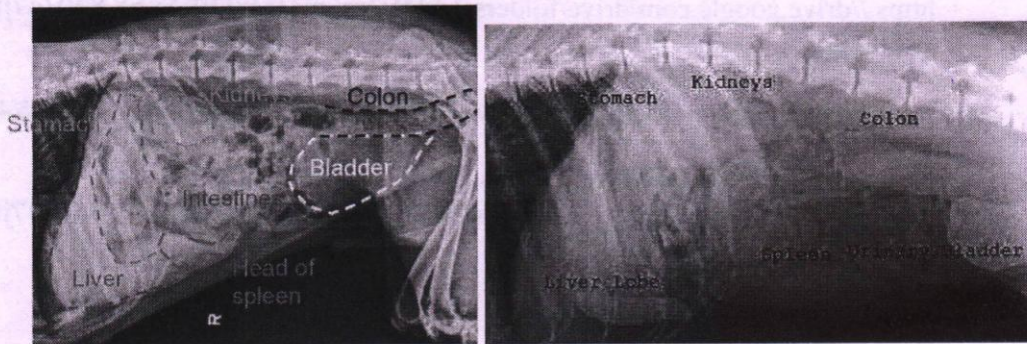
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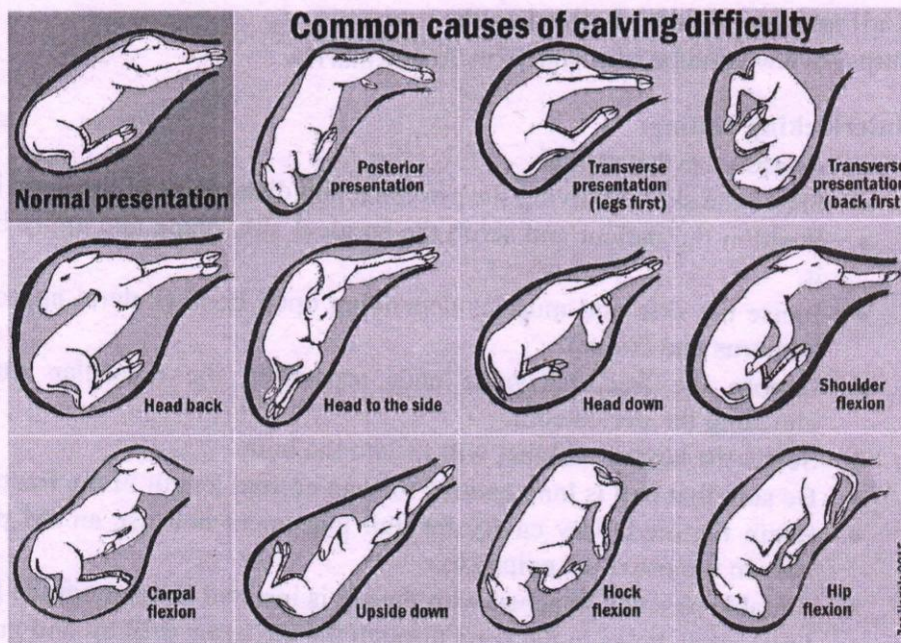
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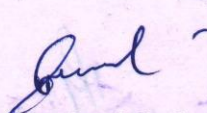
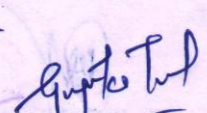
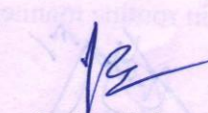
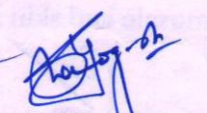
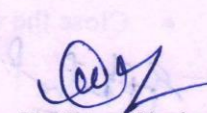
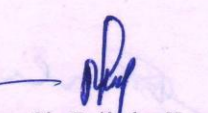
i. Canine X-Ray interpretation (Tabs highlighting concerned organs in X-Ray marked with different colour(s))



j. Dystocia due to abnormal fetal postures: Dystocia due to abnormal fetal postures: (Dystocia due to forelimbs; Dystocia due to heel deviations; Dystocia in anterior presentation due to hind limbs; Dystocia in posterior presentation; Dystocia due to transvers presentation)

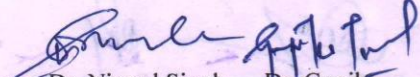


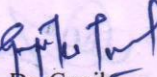
k. Torsion of uterus – How to correct it: <https://www.youtube.com/watch?v=t1LHLOkg6tg>

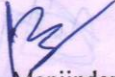
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B. Virtual Reality:

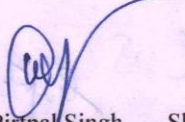
- a. **Routine farm management activities:** (Video 1):
https://drive.google.com/drive/folders/1diDN3cs_m1f5WOfKSx5YYYYH47jf_YP11?usp=sharing
- b. **Process of Silage making:** https://www.youtube.com/watch?v=DUIQ_2W4Trw
- c. **Mozzarella Cheese Making:** (Video 2)
https://drive.google.com/drive/folders/1diDN3cs_m1f5WOfKSx5YYYYH47jf_YP11?usp=sharing
- d. **Clean Milk Production:** (Video 3)
https://drive.google.com/drive/folders/1diDN3cs_m1f5WOfKSx5YYYYH47jf_YP11?usp=sharing
- e. **Adulteration in milk – Testing:** (Video 4)
https://drive.google.com/drive/folders/1diDN3cs_m1f5WOfKSx5YYYYH47jf_YP11?usp=sharing
- f. **Calf management for better health:**
<https://www.youtube.com/watch?v=7tcocwmaHIw>
- g. **Interlocking nailing:**
 - Anesthetize the animal
 - Shave the skin involving the proximal and distal joint of the bone involved.
 - Position the patient and scrub the surgical site, drape and apply betadine over it.
 - Incise the skin and muscles depending upon bone (Lateral approach for both humerus and femur).
 - Expose the fractured bone ends separating the muscular attachments by elevating the periosteum.
 - Select the largest nail that will fit into the bone.
 - Be sure that nail is long enough to span normal length of the fractured bone.
 - Ream the medullary cavity for nail placement and use an IM pin to make a hole in the proximal epiphysis.
 - Suitable size nail attached with the zig is inserted in normograde fashion.
 - Drill screw holes in the bone through the zig using drill bit and guide.
 - The screw holes were taped and depth measure by depth gauge.
 - The most distal screw hole was screwed first followed by the most proximal screw hole.
 - Rotate distal segment to check if nail is also rotating.
 - Check rotational alignment and axial length of bone before placing remaining distal screws and proximal screws.
 - Close the muscle and skin in routine manner.



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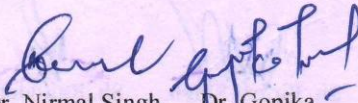

Sh. Rajinder Kumar,
Store Keeper

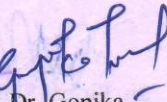
h. **Ovariohysterectomy:** <https://www.youtube.com/watch?v=rEyZQyeFJFc>

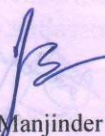
- Anesthetise the animal
- Shave the animal and perform surgical scrubbing
- Apply betadine on surgical area
- Give midline incision on skin from umbilicus and backwards
- Incise the linea alba and separate the muscles
- Insert the spay hook along the abdominal wall with its curved part facing the abdominal wall and reverse its direction when it reaches the centre and pull out uterus from front of urinary bladder
- Take out the body of uterus and follow one of the uterine horns to reach ovarian bursa.
- Suspensory ligament is ruptured to free the ovary.
- Two clamps are applied below the ovary and one is applied above the artery.
- Ligature is applied between two clamps applied below the artery and the ovary is released.
- Same procedure is repeated on other ovary.
- Then the body of uterus is ligated by applying two artery forceps cranial to cervix and both the uterine arteries are ligated.
- The uterus and ovaries are exteriorized and the stumps are checked for any hemorrhage.
- The abdominal wall is sutured back followed by skin

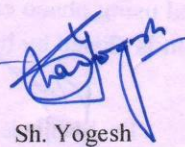
i. **Castration of dog:** <https://www.youtube.com/watch?v=UjfNbu0zxfk>

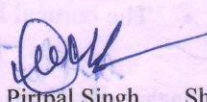
- Anesthetise the animal
- Shave the animal and perform surgical scrubbing
- Apply betadine on surgical area
- Give midline incision on prescrotal area
- Push one of the testicles toward the incision and keep on giving soft incisions on the structures visible over the testis
- Pull out the testicle
- The Tunica Vaginalis will be covering the testicle
- Give incision on Tunica Vaginalis and take out the testis
- Pull out the tail of epididymus and sever it
- Ligate the vascular supply and then remove the testicle.
- Check for any bleeding
- Repeat the procedure for other testicle
- Suture the midline incision

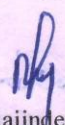

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j. **Colic:** <https://www.youtube.com/watch?v=cUWknPH1EkM>

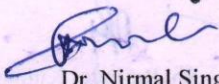
- Anesthetise the animal
- Shave the animal and perform surgical scrubbings
- Apply betadine on surgical area
- Give midline incision on skin from umbilicus and backwards
- Incise the linea alba and separate the muscles
- Decompress the cecum if gas distended.
- Do cecotomy if impaction or fluid distension
- Explore the abdomen for lesions –correct abnormalities ie. faecolith Impaction strangulation etc
- Flush the abdomen with ringer lactate or normal saline
- Place a folly's catheter inside abdomen
- Close the abdomen followed by skin

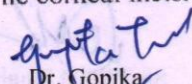
k. **Diaphragmatic hernia:** <https://www.youtube.com/watch?v=lguZRkNX4wA> (time 6:33 – 15:00)

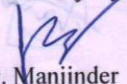
- IV cannulation, restrain the animal in lateral position,
- Anesthetise the animal, intubate the animal, connect the breathing circuit of the anaesthetic machine
- Change the position in dorsal recumbancy
- Shave the abdomen and perform surgical scrubbings
- Apply betadine on surgical area
- Give post xiphoid midline incision
- Incise the linea alba and separate the muscles and peritoneum
- Palpate the herinal ring and break adhesion
- Pull reticulum back into the abdomen
- Hyper inflate the lungs Suture the hernia ring with non-absorbable sutures
- Apple suction to restore negative pressure inside thorax
- Close the abdomen followed by skin


l. **Cataract:** https://www.youtube.com/watch?v=TReYNReG_RI

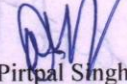
- Dilate the pupil prior to surgery using topical mydriatics or sub tenon's anaesthesia after induction of anaesthesia.
- Anaesthetize the patient. Position the patient with the affected eye upward.
- Wipe antiseptic solution around the eye and instil few drops in eye.
- Give a small incision at the ventral limbal margin of cornea (main port) and on lateral side (side port.)
- Inject dye in the anterior chamber.
- Inject viscoelastic solution.
- Give a small incision on lateral side (side port) of limbal margin.
- Incise the anterior lens capsule using and bent needle and perform capsulorhexis with rhexis forceps
- The lens is removed using phaco emulsification technique.
- The corneal incision is closed by hydrosealing or suture.



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m. **Medial patellar desmotomy:** <https://www.youtube.com/watch?v=6ntrtgAqI-4>

n. **Thawing and loading of AI gun:** <https://www.youtube.com/watch?v=KkT79NAw6kc>

Material required:

Small liquid nitrogen container, a flask for hot water, a thawing flask, thermometer, gloves, insemination guns, plastic sheaths, scissors, paper towel or cotton and soap

Procedure

- Take out the frozen semen straw with a long neck forceps out of the frozen semen container keeping the canister below the frost line.
- Thaw straw horizontally in water at 35-37°C for 30 seconds.
- Wipe the semen straw with tissue paper or absorbent cotton properly.
- Hold the gun in your left hand, pull the piston almost 13-14 cm outside.
- Load the straw in the AI gun in such a way that powder plug end remains outside the gun.
- Cut the powder plug giving a straight and vertical cut to the straw while keeping the gun parallel to the ground.
- Cover the AI gun with insemination sheath and lock it with plastic ring provided with the gun.

o. **Insemination technique using frozen thawed semen:**

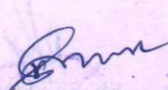
<https://www.youtube.com/watch?v=KkT79NAw6kc>

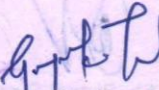
Materials required:


Small liquid nitrogen container, thawing flask, thermometer, gloves, insemination guns, plastic sheaths, scissors, paper towel or cotton, soap and record books


Procedure

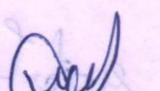
- Restrain animal properly and clean the perineum.
- Insert the lubricated hand in the rectum and after removing dung, grasp cervix and place thumb at os-cervix.
- Pull apart the vulvar lips and pass loaded AI gun through vagina at 45° angle.
- Push cervix forward to straighten the vagina and abolish vaginal folds.
- Manipulate AI gun gently so as to strike the thumb placed already at cervix and direct through the cervix by avoiding fornix.
- Pass the AI gun to the body of uterus of the animal under hygienic conditions.
- Deposit semen in the body of uterus.
- Withdraw AI gun together with the arm in the rectum.
- Massage the clitoris at the ventral commissure of vulva.
- AI gun is properly washed, dried, wrapped and sterilized for further use.



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p. **Epidural anesthesia:** <https://www.youtube.com/watch?v=aDTEExxnvK4>

Technique

- Site of injection in cattle is between last sacral and first coccygeal vertebra (sacro-coccygeal) or between first and second coccygeal vertebra.
- These joints are located by moving the thumb downward from the sacrum while moving the tail upwards and downwards.
- The movable joint between the two spines of vertebrae confirms the space for injection.
- As sacral vertebrae are fused, it is easier to confirm the movable sacro-coccygeal space.
- The area may be clipped, washed with soap and dressed with alcohol.
- An 18 gauge needle is inserted at right angles to the normal contour of tail head in the middle of space.
- The needle is passed downwards for a distance of 2-4 cm until it strikes the floor of epidural space.
- It is slightly withdrawn and the required amount of the drug (6-10 ml) is injected.
- If there is no resistance to the flow of drug, the needle tip is supposed to be in the epidural space.

q. **Prolapse of genitalia – corrective measures:**

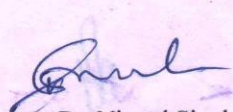
<https://www.youtube.com/watch?v=ny6ChxEpSFU>

Treatment

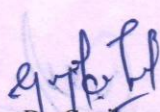
- Wash the prolapsed mass thoroughly with running water/weak potassium permanganate solution for 10-15 minutes
- Reduce size of prolapsed mass through drainage of urine and by reducing edema.
- Before reposition of the prolapsed mass, tears or lacerations, if any, should be properly sutured.
- Application of the Buhner's sutures is the most common technique

Supportive therapy

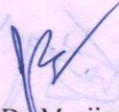
- Fluid therapy
- Intra-venous calcium
- Antibiotics
- Anti-histaminics
- Analgesic
- Antioxidants
- Urinary antiseptics, if there is presence of cystitis or urethritis
- Non-steroidal anti-inflammatory drugs
- Check staining through sedation



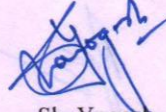
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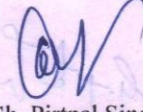
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r. Retention of fetal membranes:

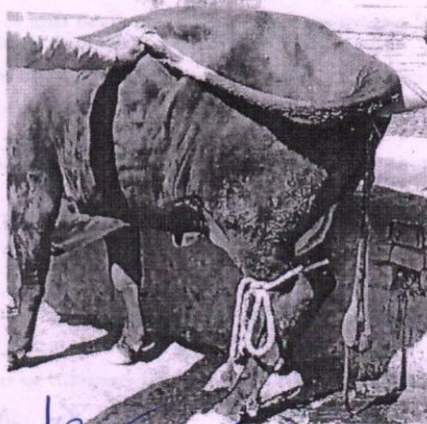
Treatment

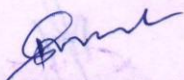
A. Manual removal

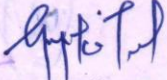
- Wash the perineal area with running water. If the placenta is lying loose in the uterus, it can be removed manually. Pass your hand in between the uterus and the placenta. If it is partially attached, then pass your hand inside the uterus, grasp the caruncle from the base and press it. Due to pressure at base, the crypts in the surface of caruncle will dilate. With the help of thumb the membranes are separated from the crypts. The procedure may be repeated on other placentomes where placenta is attached. Without detaching, never pull out the fetal membranes, as it can lead to prolapse of genitalia or detachment of maternal caruncle, which will cause excessive hemorrhage and uterine infections.


B. Conservative treatment: It involves medicinal treatment, which includes the use of ecbolics and antibiotics. Ecbolics induce the uterine contractions and help in separation of fetal membranes while anti-microbial drugs will limit the infection in the uterus.

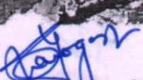
- Ecbolics and Broad Spectrum antibiotics: Parenteral or intra-uterine administration of Ecbolics and Broad Spectrum antibiotics help to limit the uterine infection. If combined with urea, it helps in detachment of strongly adhered placenta and checking of infections.
- Oxytocin: 30-50 IU intramuscularly or sub-cutaneously and repeated after 2-3 hours.
- Prostaglandin: 500 µg Cloprostenol, intramuscularly.
- Fluid therapy
- Intra-venous calcium
- Supportive therapy (anti-histaminics, antioxidants, liver extracts)
- Non-steroidal anti-inflammatory drugs

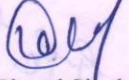




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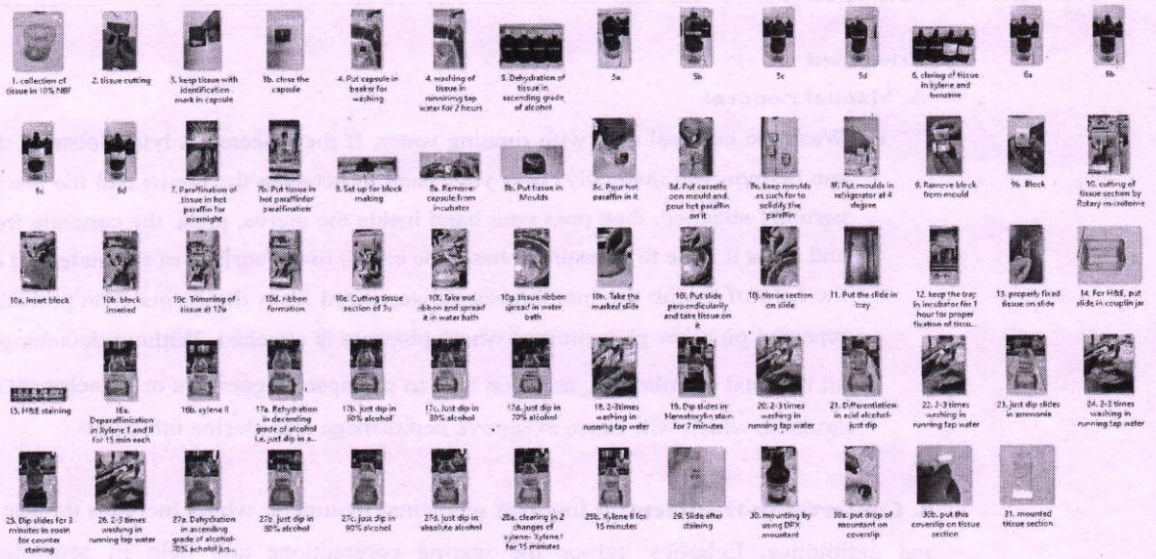

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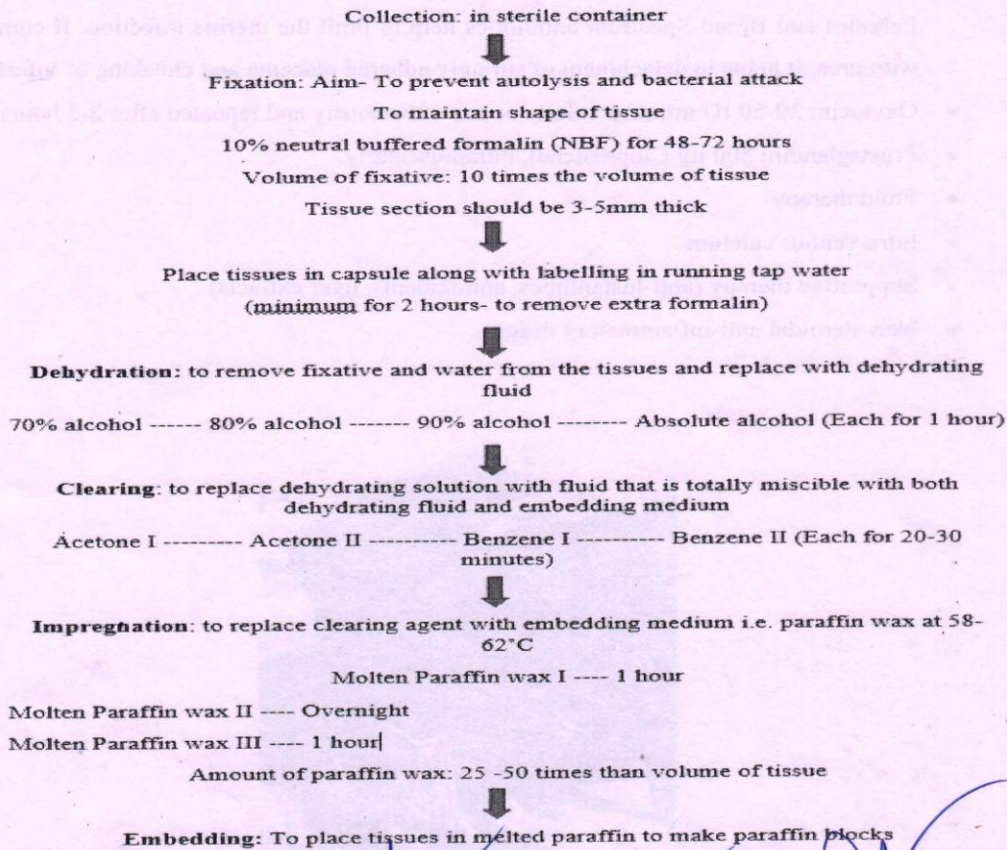

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s. Tissue processing for histopathological analysis:



Aim: to embed the tissue in solid medium firm enough to support the tissue and give it sufficient rigidity to enable thin sections to be cut and viewing under microscope after staining.



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Place some paraffin in mold and then place tissue in it

Put cassette on it and fill paraffin upto brim



Transfer the molds to refrigerator

Sectioning: by rotary microtome

For normal histopathology: 5-7 μ section

Enzyme study: 10 -20 μ section

For fine organelles (mitochondria): 1-2 μ section

Before sectioning, blocks should be kept in refrigerator as cooler temperature harden the tissue




Lay section in hot water bath

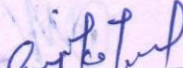



Mount section on clean glass slide





Transfer the slides in incubator for 1hour



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t. **Hematoxylin and eosin staining (H&E):** <https://www.youtube.com/watch?v=TI2AmNppiXg>

**Aim: To examine the slides under microscope, staining of tissue slides is required.
Hematoxylin will stain the nucleus and eosin will stain the cytoplasm.**

Take the slides having tissues sections on it

↓
Deparaffinization: Xylene I ----- Xylene II (each in 15 minutes)

↓
Hydration: Descending grades of alcohol

Absolute alcohol ----- 90% Alcohol ----- 80% Alcohol ----- 70% Alcohol (Just dip one time in each)

↓
Washing in tap water (2-3 times)

↓
Hematoxylin (7 Minutes)

↓
Washing in tap water (2-3 times)

↓
Acid alcohol (Just dip one time)

↓
Washing in tap water (2-3 times)

↓
Ammonia (Just dip one time)

↓
Washing in tap water (2-3 times)

↓
Counter stain: Eosin (3 Minutes)

↓
Washing in tap water (2-3 times)

↓
Dehydration: Ascending grade of alcohol

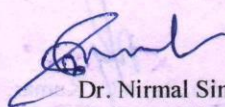
70% Alcohol ----- 80% Alcohol ----- 90% Alcohol ----- Absolute Alcohol (Just dip one time in each)

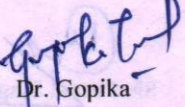
↓
Air dry


↓
Clearing: Xylene III ----- Xylene IV (15 minutes in each)


↓
Mounting: use DPX mountant


Results: Nuclei: Blue/Violet and Cytoplasm: Pink

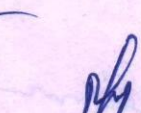

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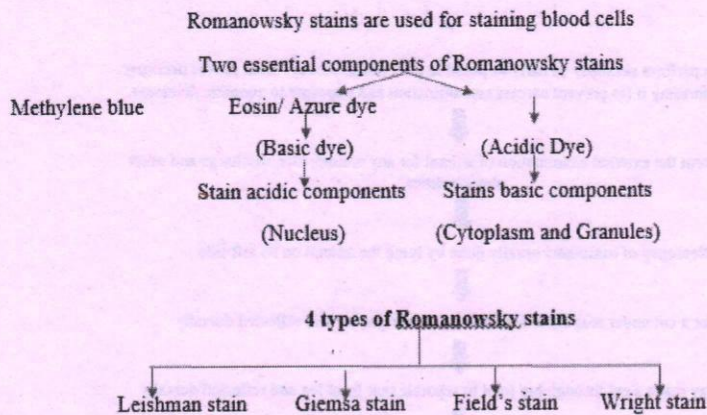

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u. **Blood smear staining:**

https://www.youtube.com/results?search_query=blood+smear+staining+procedure



PREPARATION OF BLOOD SMEAR

Take a drop of fresh blood or blood collected in EDTA tube on one end of clean glass slide



Take another slide called the spreader slide in right hand between thumb and forefinger



Spread the blood evenly with spreader slide at 30° angle

PROCEDURE OF LEISHMAN STAINING

Make thin blood smear on clean glass slide



Pour Leishman stain on it and allow to act for 1 minute



Add buffer to slide: double the volume of stain



Mix well and allow to act for 25-30 minutes




Wash the film in running tap water/ Distilled water

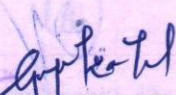


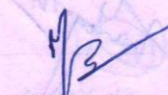
Dry in air and examine under microscope





Results: Nucleus: blue and Cytoplasm: Pink



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- **Necropsy procedure for ruminants:** <https://www.youtube.com/watch?v=4-VgrkduDNw>

It is best to perform necropsy as early as possible after death. Always wear gloves necropsy while performing it (to prevent carcass contamination and exposure to zoonotic diseases).

First perform the external examination of animal for any wound, bite, discharge and other abnormalities.

Necropsy of ruminants usually done by lying the animal on its left side.

Make a cut under scapula to separate the front right leg and reflected dorsally.

Same way make a cut through hip joint to separate rear front leg and reflected dorsally

(Both steps are done to access thoracic and abdominal cavities)

Deskinning performed by giving cut in the midline and separate it from the body to reduce the contamination

Make a cut start from midline on either side along the rear border of the ribs to open the abdominal cavity

See for any adhesions or fluid in the abdominal cavity

If rumen is fully distended, then give a small nick to release the gas

Cut the duodenum and root of mesentery to move intestine up and out from abdominal cavity

Remove all organs from the abdominal cavity for their examination

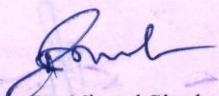
(Liver, kidney, uterus, ovary and bladder can be examined at its place)

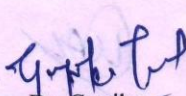
Cut the diaphragm and junction between ribs and sternum to access the thoracic cavity

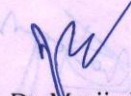
See for any adhesions or fluid in thoracic cavity

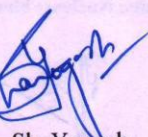
Cut the ventral, dorsal and diaphragmatic attachments to remove heart and lungs

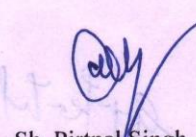
Examine all the organs properly.

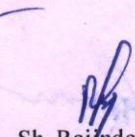

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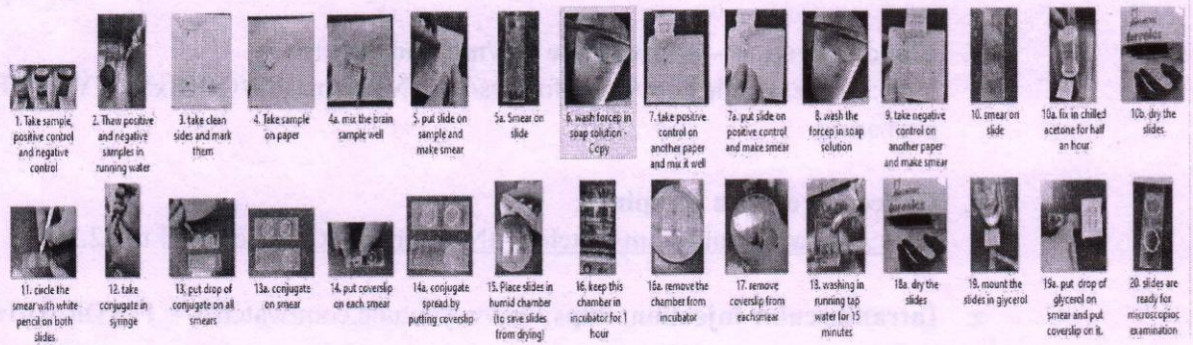

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v. Direct fluorescent antibody test for detection of diseases (Rabies):

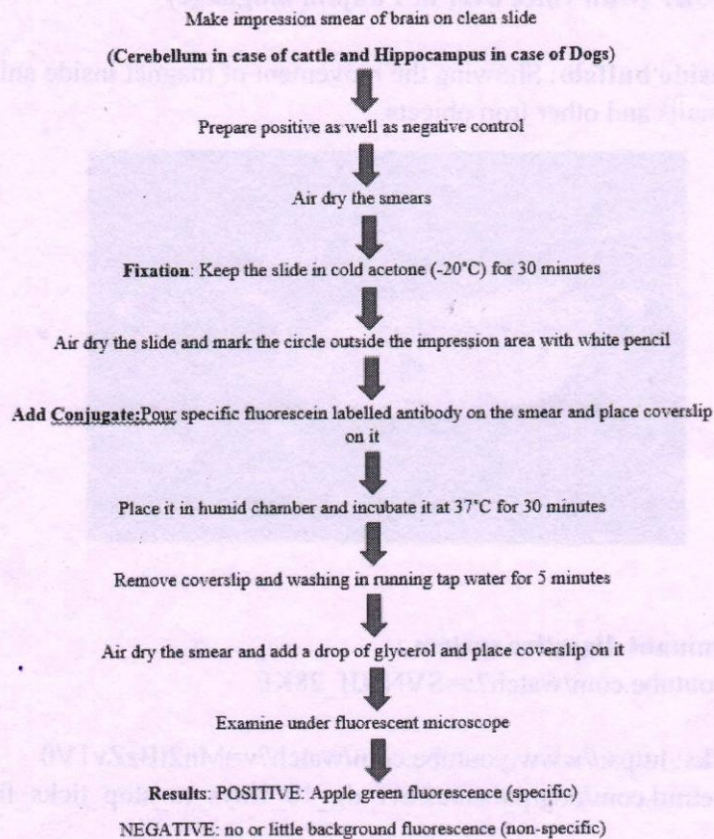
Process



Principle: Immunofluorescence techniques are based on antigen- antibody interaction in which fluorescence chemicals viz., RITC (Rhodamine B isothiocyanate) or FITC (Fluorescein isothiocyanate) are conjugated with Fc portion of antibody (Conjugate) which gives fluorescence when seen under fluorescent microscope.

- If there is no antigen, there will be no fluorescence.
- This test is used to diagnose the rabies antigen.

PROCEDURE OF FAT



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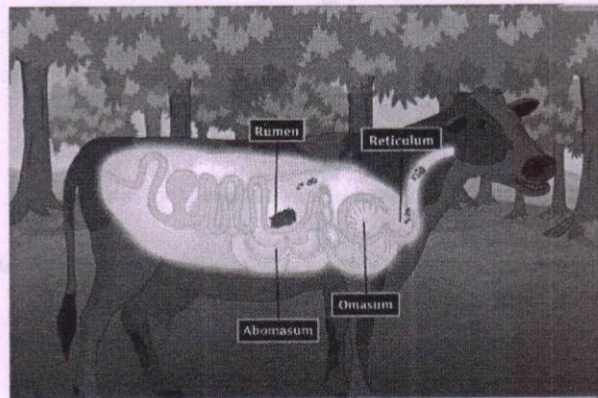
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- w. **Dog postmortem:** (Video 5)
https://drive.google.com/drive/folders/1diDN3cs_m1f5WofKSx5YYYYH47jf_YP11?usp=sharing
- x. **Blood collection – appropriate site/method:** (Video 6)
https://drive.google.com/drive/folders/1diDN3cs_m1f5WofKSx5YYYYH47jf_YP11?usp=sharing
- y. **Collection of skin scrapings:**
<https://www.youtube.com/watch?v=tNeYLMookqQ> (time 35.03 to 42.30)
- z. **Intramuscular injection:** https://www.youtube.com/watch?v=_F-XDRaxuJw
- aa. **Subcutaneous injection:** https://www.youtube.com/watch?v=U_uoQhn4aaq
- bb. **Dissection of frog:** <https://www.youtube.com/watch?v=nU61egBVsqU>

C. 3D Animation: (with voice over in Punjabi language)

- a. **Magnet inside buffalo:** Showing the movement of magnet inside animal and collecting nails and other iron objects.



- a. **Inside the ruminant digestive system :**
https://www.youtube.com/watch?v=SVNNJf_28KE
- b. **Control of ticks:** <https://www.youtube.com/watch?v=Mn2tBzZv1V0>
https://www.petmd.com/dog/parasites/evr_dg_10_ways_to_stop_ticks_from_biting_your_dog
- b. **Calf rearing:** <https://www.youtube.com/watch?v=7tcocwmaHlw>

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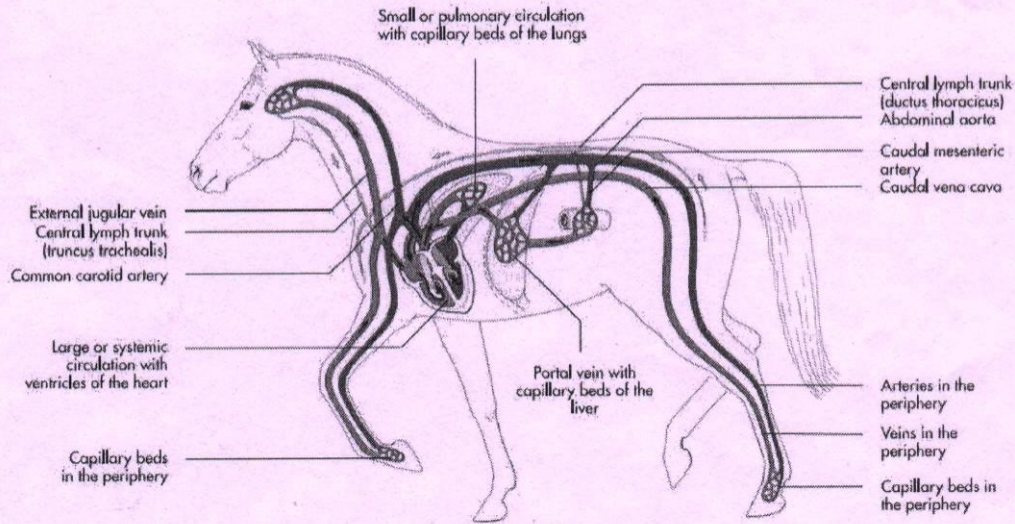
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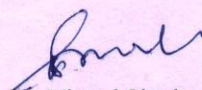
c. **Brucellosis:** <https://www.youtube.com/watch?v=HnyICPgQRkY>

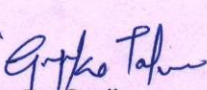
d. **Rabies:** <https://www.youtube.com/watch?v=Q6r9iNZIVX0>

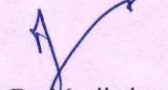
e. **Circulatory System of bovine/canine/equine (each separately) with running blood**




f. **Formation of egg in poultry:** https://www.youtube.com/watch?v=J4qPm7_qkbY


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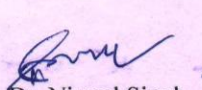

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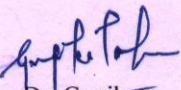

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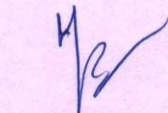

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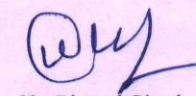
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Guidelines for submission of TECHNICAL BID:

The Technical Bids should contain detail information on the following: -

- 1) Full Name of the Bidder Firm along with complete address.
- 2) Bankers Name & Address.
- 3) GST No.

- 4) PAN/TAN No. 5) Experience in line. 6) Validity of Offer. 7) Lead time/Delivery Period. 8) Payment condition. 9) Write-ups, Guaranty/Warranty, AMC details etc. 10) Quality Assurance/Monitoring system followed- Certificates where needed should be attached.

The firms are also required to upload copies of the following documents in a single file of .pdf format with Technical Bid:-

- a) Scanned copy of dully filled Check List.
- b) Scanned copy of Full details of Item(s), sub systems and additional items/accessories to be quoted (i.e. Full name, Model number, Name of Accessories, Manufacture Details, Literatures/brochures/write-ups, Guaranty/Warranty, AMC details etc.) as mentioned in the technical bid.
- c) Scanned copies of Brochure/leaflets/catalogues for equipments should be submitted in the technical bid.
- d) Scanned copy of all document(s) mentioned in the above detailed specification of the required items (if any).
- e) Scanned copy of the Authorization dealer/distributor/stockist certificate issued by Manufacturer.
- f) In case of imported equipment, scanned copy of Manufacturers Authorization Certificate issued by Principal Manufacturer duly verified by the Indian Agent.
- g) Scanned copy of Tender Acceptance letter, Undertaking & non-blacklisting certificate (Annexure-I).
- h) Scanned copy of firm's Registration, PAN Card, GSTIN.
- i) Scanned copy of Income Tax Statement for the last year.

Guidelines for submission of FINANCIAL BID:

(a) The rates should be quoted as per the BOQ uploaded on the SPP Portal. Taxes, if any, should be indicated separately. **Please mention the amount of GST under column no. 9 duly calculated as per total quantity required as per column no. 4 for each item.** The bidders are advised to download this BOQ.xls as it is and quote their offer/rates in the permitted column and upload the same in the Financial Bid. The Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with GADVASU.

(b) The bidders are advised to quote price for equipment in INR.

(c) The payment will be made after deducting TDS as per GST/Govt. Rules.

(d) (i) **The University is entitled for Discounted GST @ 5% on items which are covered under Notification No 47/2017- Integrated Tax (Rate) Dt 14th Nov, 2017, Notification No. 45/2017-Central Tax (Rate) Dt 14th Nov, 2017 and Amendment no. 10/2018- Integrated Tax (Rate) Dt 25th Jan, 2018 and University shall provide Declaration for GST Benefit.** Therefore all charges including GST according to above circulars and any other levies payable by University should be clearly indicated otherwise it would be presumed that the rates quoted are inclusive of all these charges and will not be paid. **Please mention the amount of GST under column no. 9 duly calculated as per total quantity required as per column no. 4 for each item in BOQ uploaded on the SPP Portal.**

(ii) **GADVASU is registered with DSIR and is exempted from Excise Duty & Custom Duty. Hence, CDEC/DSIR will be provided to the firm, if demanded. Rates should be quoted accordingly.**

However, the bidder can either charge discounted GST @5% or avail Custom Duty Exemption on behalf of GADVASU as mentioned above. It is further clarified that University will issue only one document either Declaration for GST benefit or Custom Duty Exemption i.e. CDEC/DSIR.

Guidelines for bidders for Registration and Submission of bids:-

1. For participating in the above e-tender, the contractors shall have to get themselves registered with <http://eproc.punjab.gov.in>. and get user ID & password. Bidders who have not registered with e procurement portal need to get registered by paying the requisite registration fee for e-tender participation and obtain Class 3 Digital Signature Certificate (DSC) which are mandatory to participate in the e-tendering process.
2. Bidders should enroll/register in the e-procurement module of State Public Procurement Portal (SPP Portal) through the website: [URL:http://eproc.punjab.gov.in](http://eproc.punjab.gov.in) for participating in the bidding process. Useful information for Registration of first time bidder and instructions for submitting the online bids on the SPP Portal is available at

URL:<http://www.eproc.punjab.gov.in> through its link "Bidder Manual Kit" (<https://eproc.punjab.gov.in/nicgep/app?page=BiddersManualKit&service=page>).

3. Tender Documents can be downloaded from the State Public Procurement Portal [URL:http://eproc.punjab.gov.in](http://eproc.punjab.gov.in).
4. Any change/corrigendum/extension of opening date in respect of this tender shall be issued through websites www.gadvasu.in and www.eproc.punjab.gov.in only and no press notification will be issued in this regard. Bidders are therefore requested to regularly visit these websites for updates. Bidder should also take into account all corrigendum(s) published before submitting the bids online.
5. The bidders are required to submit their bids online on the SPP Portal, using valid Digital Signature Certificates. Bids received only on SPP Portal will be considered, however bids sent through sealed cover/email/post/fax, etc. will be rejected.
6. The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for that tender.
7. The date and time fixed for closing of bids will remain unchanged, even if it is declared as a holiday by the Government. GADVASU will not be responsible for any delay in enrolment/registration as bidder or submitting /uploading the offer on e-tender portal. Hence, bidders are advised to register in e-tendering website [URL:http://eproc.punjab.gov.in](http://eproc.punjab.gov.in) and obtain their Digital Signature Certificate and upload their bids/documents well in advance.
8. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender.
9. For any clarification/difficulty regarding e-tendering Process please contact on helpdesk at Punjab State e Governance Society, Plot No. D-241, Industrial Area, Phase 8, Sector 74, Mohali, Phone No. 0172-2970263 & 0172-2970284. E-mail: eproc@punjab.gov.in and niceproc.punjab@gmail.com

10. Intimation Regarding Payment of Online Fees :

1. The bidders using Net Banking Service of banks other than SBI are advised to submit their EMD and other fees (if any) in advance at least (3) three working days prior to the last date of submission of the Bid.

2. The bidders are hereby informed not to close/suspend their Bank Accounts, from which the EMD/Tender Fee/Processing Fee is being paid for respective Tender. In case of any refund issue relating to the respective tender, the Department would not be liable or responsible in anyway.

11. Intimation Regarding Payment through NEFT / RTGS Mode The bidders are hereby informed that settlement of NEFT / RTGS transaction does not take place on Sundays, 2nd and 4th Saturdays of a Month, and Declared Bank Holidays.

General Terms & Conditions / Instructions for bidders:-

1. The interested, bona fide and reputed dealers/distributors/stockists/manufacturers or Indian agents (on behalf of their foreign principals) may submit online bids for each of the required item(s) along with all requisite documents, Tender Fee, Processing Fee and EMD.
2. EMD(s) for different required item(s) as indicated in respective cell(s) under the EMD column of the above table should be submitted separately for each item(s).
3. Tender shall be accepted only from Manufacturer/Sole Selling Agent/Distributor/Authorized Dealer.
4. **Exempted from the payment of Bid Security (Earnest Money Deposit):** i) As per Rule 170 of General Financial Rules (GFRs) 2017, the units registered with Micro and Small Enterprises (MSEs) or are registered with Central Purchase Organisation or the concerned Ministry or Department as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) (as per Rule 1.10.4 of Manual for Procurement of Goods 2017) shall be exempted from the payment of Bid Security (Earnest Money Deposit).
ii) In such case, copy of the certificate showing registration with the above mentioned institutions (indicating the terminal validity date of their registration) for the item tendered (as manufacture of the bidding item(s)) to be uploaded in Cover-I of the e-tender in PDF format.
iii) If firm gets exemption for depositing Bid Security (Earnest Money Deposit) by providing wrong certificate OR certificate without terminal validity date of their registration OR not being a manufacture of tendered items, the bid shall not be accepted and also bid of the firm shall be cancelled at any stage of tender, if found wrong submission of certificate.
5. The EMD will be returned to the unsuccessful bidders automatically by the State Public Portal i.e. <http://eproc.punjab.gov.in>.
6. The EMD will be forfeited if the bidder fails to accept the order based on his/her offer/bid or fails to supply the items.
7. The supplier will have to complete the supply of materials within due time from receiving of purchase order. The liquidated charges @1% per week shall be imposed if supply is made after expiry of delivery period subject to maximum 10% of the total value of the order. After 10 weeks order shall stand cancelled. However competent authority of the University has reserves to right to accept the material even after stipulated period without any liquidated charges.

8. The quoted equipment shall be in compliance with the required specifications mentioned in tender and shall be of the latest technology, best quality and high standards. Any optional accessories/ tooling, besides the standard equipment recommended for the better performance of the equipment, if offered, be provided with their full technical details including their use and advantage in a separate sheet with the tender documents. No extra payment shall be paid on account of any discrepancy in nomenclature of items.
9. The item should be delivered F.O.R. at GADVASU/Research Stations/KVKs/Colleges etc. as mentioned in Tender document and the supplier shall be responsible for any damage during the transit of goods. The FOR price should be inclusive of all incidental charges i.e. freight, forwarding, insurance, etc.
10. The clearing charges from custom house will be borne by the Indian Agent of supplier.
11. All miscellaneous charges on foreign transactions make Form 15A and its subsequent charges on verification by Chartered Accountant would be borne by the bidder.
12. The documents will be provided to the Indian Agent on request by GADVASU.
13. Tenderer shall take into account all costs including installation, commissioning, cartage, etc. for giving delivery of material at site before quoting the rates. In this regard no claim for any extra payment for any reason shall be entertained.
14. The payment will be made after deducting TDS as per GST/Govt. Rules as applicable.
15. Our Institute is registered with DSIR and is exempted from Excise Duty & Custom Duty. Hence, CDEC/DSIR will be provided to the firm, if demanded. Rates should be quoted accordingly.
16. The quantity can be increased/decreased as per the actual requirement.
17. The supplier should give an undertaking that they will be responsible to carry out the preventive maintenance and to repair the equipment during guarantee and post guarantee period.
18. Full details of after sale service offered during the post guarantee period should be furnished along with tender specified.
19. Information of actual users of the equipment in India supported with evidences and performances should be furnished alongwith tender.
20. If required the working of the equipment must be demonstrated in any place to be specified by the supplier.
21. The supplier shall train to the satisfaction of the purchaser one or two technicians at site/factory for operating, servicing and undertaking minor repairs without extra cost.
22. The bidder is required to furnish the non-blacklisting certificate as per Annexure – I.
23. While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any tender stipulate any condition of his own, such conditional tender is liable to be rejected.
24. GADVASU reserves the right to accept/reject any or all the tenders in part/full without assigning any reason thereof.
25. All disputes shall be subject to Ludhiana jurisdiction only.

Place: Ludhiana

Sd/-
Assistant Store Officer (Purchase)
Purchase Cell

Checklist

Sr.No.	Details	
1.	Name and Complete Address of the Firm	
2.	Email Id and Contact number of the bidder	
3.	Permanent Account Number (PAN) No. of the Firm	
4.	Bank details of the Firm: Bank Name, Branch Address, Account Number., Type of Account (Current/Savings), MICR Number , RTGS/NEFT Code etc.	
5.	Details of Quoted item(s) i.e. Name, Make, Model Number etc.	
6.	Attached scanned copy of Full Details of item(s), Sub systems and additional items/accessories to be quoted (i.e. Full name, Model number, Name of accessories, Manufacture details, Literatures/Brochures/Write-ups, Guarantee/ Warranty, AMC details etc.) as mentioned in the technical bid. (Write YES OR NO)	
7.	Attached scanned copy of the Authorization dealer/distributor/stockist certificate issued by manufacturer (Write YES OR NO)	
8.	In case of imported equipment, Attached scanned copy of Manufacturers Authorization certificate issued by Principal Manufacturer duly verified by the Indian Agent. (Write YES OR NO)	
9.	Attached scanned copies of all other document(s)/ certificate(s) mentioned/required in the DNIT. (Write YES OR NO)	
10.	Attached scanned copy of Tender Acceptance letter & Undertaking (Annexure-I). (Write YES OR NO)	
11.	Attached scanned of firm's Registration, PAN Card, GSTIN. (Write YES OR NO)	
12.	Attached scanned copy of Income Tax Statement for the last year. (Write YES OR NO)	
13.	Whether the accessories (if any) are included in price of equipment item(s) quoted by you? (Write YES OR NO)	

Date:

Place:

**Signature of the Bidder
with Official Seal**

Name -----

Designation-----

TENDER ACCEPTANCE LETTER, UNDERTAKING & NON-BLACKLISTING CERTIFICATE

(To be given on firm letter head)

Date:

To,

Assistant Store Officer (P),
Purchase Cell O/o Comptroller
Guru Angad Dev Veterinary and Animal Sciences University
Ludhiana

Tender Reference No: _____

Name of the tender/work:- _____

Sir,

1. I/we have downloaded the tender documents for the above mentioned Tender/Work from the website(s) www.eproc.punjab.gov.in as per your advertisement.
2. I/we hereby certify that I/we have read the entire terms and conditions of the tender documents from Page **First** to **Last** (including all documents like Annexure(s), schedules(s), etc.,) of **DETAILED NOTICE INVITING e-TENDER** which form part of the contract agreement and I/we shall hereby abide the terms/conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/organization has also been taken into consideration, while submitting this acceptance letter.
4. I/we hereby unconditionally accept the tender terms and conditions of above mentioned tender document (s)/corrigendum(s) in its totality /entirety.
5. I/we certify that the items/products quoted by our firm comply all required Technical Specifications as mentioned in the DNIT (Detailed Notice Inviting Tender) under 'Detailed Specifications of the required items'.
6. I/we hereby certify that all miscellaneous charges on foreign transactions, make Form 15A and its subsequent charges on verification by Chartered Accountant would be borne by our firm /dealer/distributor.
7. I/we hereby certify that our company/Firm and Manufacturer/Principal Firm have not been **blacklisted/debarred** by any Govt. Department/Public Sector Undertaking/ Research Institution/Statutory body/University in India during the last **Five** years.
8. I/we certify that all information furnished by our Firm is true and correct and in the event the information is found to be incorrect/untrue, then your department/organization shall without giving any notice or reason thereof or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours faithfully

Date:

Place:

**Signature of the Bidder
with Official Seal**

Name -----

Designation-----