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Total Number of Pages 16

B.V.Sc. & A.H. (Third Professional) Examination – 2023

Veterinary Pharmacology and Toxicology Paper -I

(MSVE 2016)

To be filled by the candidate:

Candidate's Roll Number:

In figure

In words

Candidate's Enrolment Number:

Day and date of examination:

Please see for general instructions overleaf.

Signatures of invigilators verifying the details filled by the candidate

Signature of invigilator 1: 2:



Handwritten signature

Handwritten signature

Candidate should not write anything below this line

Marks to be filled by the examiner:

Section A	
Q. No.	Marks
1.	
2.	
3.	
4.	
5.	
Total	

Total Marks obtained:

In figures: In words:

Signature of examiner:

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INSTRUCTIONS TO THE CANDIDATES

1. The invigilator and the members of the Flying Squad are empowered to take search of the examinees during the examinations.
2. Candidate should read the question paper and the instructions carefully before they begin to write answers.
3. The candidate will not be allowed to leave the examination hall before one hour from the end of the examination time.
4. Write on the cover page all the required entries correctly and get the signature of the invigilators.
5. Write legibly in the space provided for answer of each questions/sub-questions according to instruction given in the question paper booklet (question paper).
6. Do not write your name on any part of the question paper / answer booklet.
7. Do not leave examination hall without handing over question paper / answer booklet to the invigilator incharge.
8. No leaves should be torn out of the question paper / answer booklet.
9. Candidate attempting to use unfair means or talking to one another will be dealt with severely as per unfair means rules.
10. No written paper or book notes etc. should be brought to examination hall.
11. Total number of pages of question paper / answer booklet be checked before writing.
12. Candidate should not bring in any article other than pens and admit card. Use of Mobiles, calculators on any other electronic device in the examination hall is strictly prohibited.

SPACE FOR ROUGH WORK

B.V.Sc. & A.H. (Third Professional) Examination – 2023
Veterinary Pharmacology and Toxicology Paper -I
(MSVE 2016)

Time: Three Hours

Maximum Marks: 100
Weightage: 20

- Unit-1 (General Pharmacology)
- Unit-2 (Drugs Acting on Autonomic Nervous System)
- Unit-3 (Drugs Acting on Central Nervous System)
- Unit-4 (Drugs Acting on Different Body Systems)

Instructions:

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

Q.1 Fill in the blanks.

(20x 0.5 = 10)

- 1.1is study of sources and identification of drugs.
- 1.2is regarded as the “Father of Modern Veterinary Pharmacology and authored the first edition of Veterinary Pharmacology and Therapeutics.
- 1.3is the total quantity or amount of a drug applied or administered all at one time to a patient to get the desired pharmacological/therapeutic response.
- 1.4 Half-life is a secondary pharmacokinetic parameter derived from two primary parameter Volume of distribution and
- 1.5 Most (about 90%) of the body content of 5HT is localized in the cells of gut mucosa.
- 1.6 Local anaesthetics act by preventing the depolarization as result of blockade ofions permeability through nerve axonal membrane.
- 1.7is the principal neurotransmitter at neuromuscular junction as well at all preganglionic fibres and parasympathetic postganglionic fibres.
- 1.8 Organophosphate/Carbamate act as indirect acting para-symphathomimetic agents by inhibiting the enzyme.
- 1.9 Action of Adrenaline/Noradrenaline is terminated mainly by reuptake in the vesicles and partly by metabolism through enzyme.
- 1.10 Muscarine is cholinomimetic alkaloid obtained from mushroom

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- 1.11 Ketamine is dissociated anaesthetics which act as antagonists of receptor.
- 1.12are drugs which induces sleep resembling natural sleep (arousable).
- 1.13 Corticosteroids/glucocorticoids inhibit the release of arachidonic acid from membrane lipid by stimulating production of protein called
- 1.14 Montelukast/Zafirlukast produces bronchodilator effect by inhibiting the receptor.
- 1.15are drugs which loosen or break viscous or inspissated pulmonary secretion to facilitate expectoration.
- 1.16are the agents which precipitate the surface proteins, form a protective coating over the inflamed surfaces, skin or gastric mucosa.
- 1.17 Xanthines/Methyl xanthines derivative relax the smooth muscle by inhibiting the enzyme.
- 1.18are drugs promote the haemoglobin synthesis and or erythropoiesis in general and are in the treatment of anaemia.
- 1.19 are drugs which increase the volume and fluidity of saliva and help in improving appetite and digestion of food.
- 1.20 Nitric oxide (NO) produces its effects by activation of enzyme to increase the cGMP formation

Q.2 Choose the most suitable answer and write the number of the correct answer 1 or 2 or 3 or 4 in the space given against each sub question:

- 2.1 Study dealing with drug dosage determination (20x 0.5 = 10) ()
1. Posology
 2. Pharmacy
 3. Metrology
 4. Pharamacognosy
- 2.2 Drug distribution is influenced by ()
1. Lipid solubility
 2. Degree of blood flow
 3. Plasma protein binding
 4. All of the above
- 2.3 Drugs with high plasma protein binding have ()
1. Less drug interaction
 2. Short duration of action
 3. Lower volumes of distribution
 4. All of the above

- 2.4 Amount of drug left after four plasma half-life is ()
1. 6.25
2. 12.5
3. 25
4. 50
- 2.5 All of the following are second messengers except ()
1. Cyclic AMP
2. Diacylglycerol
3. Guanylyl cyclase
4. Inositol triphosphate
- 2.6 Therapeutic index is an assessment of ()
1. Onset of action
2. Potency of drug
3. Duration of action
4. Margin of safety
- 2.7 All of the following are lipid autacoids except ()
1. Kinin
2. Leukotriene
3. Prostaglandin
4. Platelet activating factor
- 2.8 Select the 5HT₄ receptor agonist drug ()
1. Cisapride
2. Azapirone
3. Ketanserin
4. Ondansetron
- 2.9 Drug which decrease vesicular uptake of acetylcholine (Ach) ()
1. Atropine
2. Vesamicol
3. Hemicholinium
4. Botulinum toxin
- 2.10 Sympathomimetic drugs are used clinically except ()
1. As cardiac stimulant
2. In allergic/anaphylactic shock
3. To prolong the local anaesthetic action
4. As ectoparasitocides and anthelmintics
- 2.11 Select the inhibitory neurotransmitter ()
1. Glycine
2. Dopamine
3. Acetylcholine
4. Noradrenaline
- 2.12 Prostaglandins are used therapeutically except ()
1. In peptic ulcer
2. As tocolytic agent
3. In termination of pregnancy
4. To arrest the post-partum haemorrhage

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- 2.13 Select the analeptic agent ()
1. Enalapril
2. Sucralfate
3. Nikethamide
4. Hexobarbitone
- 2.14 The example/s of drastic purgative ()
1. Jalap
2. Colocynth
3. Podophyllum
4. All of the above
- 2.15 Select the potassium sparing diuretic ()
1. Mannitol
2. Amiloride
3. Amlodipine
4. Acetazolamide
- 2.16 The example/s of calcium channel blocker ()
1. Esmolol
2. Dofetilide
3. Verapamil
4. All the above
- 2.17 Potassium channel opener used as vasodialator ()
1. Monoxidil
2. Hydralazine
3. Sodium nitoprusside
4. All of the above
- 2.18is the drug that inhibit enzyme renin ()
1. Losartan
2. Aliskiren
3. Captopril
4. Lignocaine
- 2.19 All of the following are angiotensin receptor antagonists except ()
1. Enalapril
2. Losartan
3. Irbasartan
4. Candesartan
- 2.20 Which of the following is are dissociative anaesthesia ()
1. Tiletamine
2. Lignocaine
3. Nikethamide
4. All of the above

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

3.1 Tocolytics

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3.2 Antitussive

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3.3 Antiemetics

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3.4 Sialagogues

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3.5 Haemostatics

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3.6 Digitalization

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3.7 First pass effect

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3.8 Tranquilizers

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3.9 Local anaesthetics

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3.10 Volume of distribution

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3.11 Enter hepatic circulation.

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3.12 Dale's vasomotor reversal/Dale's reversal phenomenon of adrenaline.

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

4.1 Prokinetic drugs

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4.2 Stage of anaesthesia

4.3 Ligand gated ion channel

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4.4 AChE enzyme inhibitors (Anti-cholinesterase)

4.5 Synthesis, storage, release and metabolism of noradrenaline

4.6 Classification of antiarrhythmic drugs with suitable example

4.7 Classification of sympathomimetic drugs with suitable example.

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4.8 Advantage and disadvantage of intravascular (I/V) administration of drugs.

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

- 5.1 What is biotransformation? Describe the different reactions of drug metabolism.
- 5.2 Classify the non-steroidal anti-inflammatory drugs (NSAIDs) and discuss their pharmacological effects, mechanism of action, clinical use and adverse effects.
- 5.3 Classify the diuretics (with suitable example) based on their mechanism of action, indicate their site of action in the nephron and clinical application