

B.V.Sc. & A.H. (Part – III) Examination – 2015
of the Five-Year Degree Course
VETERINARY PHARMACOLOGY PAPER-I

Time: Three Hours

Maximum Marks: 60

Section A: General and Systyemic Veterinary Pharmacology: VPT-311 Marks 30

Section B: Veterinary Neuropharmacology: VPT-321 Marks 30

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.

SECTION – A

General and Systyemic Veterinary Pharmacology: VPT-311 Maximum Marks 30

Q.1 Fill in the blanks. (9x0.5 = 4.5)

- i) 'Like cures like' theory is associated with _____ system of medicine.
- ii) Drugs not included in pharmacopoeia are termed as _____.
- iii) _____ is an example of glycoside of plant origin.
- iv) Phase IV of drug development is also known as _____.
- v) Omeprazole inhibits _____.
- vi) Salbutamol is an example of _____ bronchodilators.
- vii) Solid preparation of drug containing sugar and gum having soothing, demulcent and antiseptic effect on mucus membrane is known as _____.
- viii) ADH has _____ effects on urinary system.
- ix) Drugs which stimulate uterine contractions are known as _____.

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: (9x0.5 = 4.5)

- i. Following is a drug obtained from natural source. ()
1. Diclophenac
 2. Quinine
 3. Paracetamol
 4. Meloxicam

ii. Antihistamines act through which types of receptors? ()

1. H₁
2. H₂
3. H₃
4. All of above

iii. Which of following one is an *in vivo* anti-coagulant? ()

1. Sodium citrate
2. Heparine
3. Sodium chloride
4. EDTA

iv. Which of following is an action of drug on body? ()

1. Binding with receptors
2. Disrtibution
3. Metabolism
4. None of above

v. Which is a gastric prokinetics? ()

1. Cisapride
2. Mosapride
3. Metaclopramide
4. All of above

vi. Thiazide diuretics act on: ()

1. Loop of Henle
2. Glomerulus
3. PCT
4. DCT

vii. The LD₅₀ means ()

1. Lethal dose
2. Toxic dose
3. Median Lethal dose
4. Mean Lethal Dose

viii. Which one of following is an osmotic diuretic? ()

1. Frusamide
2. Mannitol
3. Losartan
4. Acetazolamide

ix. Pharmacologically inert substance which reduces absorption of toxic substances is: ()

1. Activated charcoal
2. Zinc oxide
3. Magnesium sulphate
4. None of above

Q.3 Attempt any nine out of the following twelve questions. Answer of each question should be in 2 to 3 lines. (9x1= 9)

i) Define Posology:

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ii) Differentiate between dose and dosages:

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iii) Enlist different types of processes of drug transport with examples:

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iv) Define antagonism and enlist types of different antagonism:

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v) Define dose response curve:

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vi) What is bio equivalence?

vii) Define lethal synthesis.

viii) Give any two disadvantages of intravenous route of drug administration:

ix) Explain Dale's reversal phenomenon.

x) Define conjugation of drug in drug metabolism.

xi) Define cardiac tonics and cardiac stimulants.

xii) What is orphan drug?

Q.4 Attempt any three out of the following four questions. Answer of each question should be in 5 to 8 lines. (3x2 = 6)

i) Explain mechanism of action of loop diuretics.

ii) Discuss mechanism of action of magnesium sulphates.

iii) Explain different receptors involved in process of vomiting.

iv) Give therapeutic indications of urinary alkalinizers and acidifiers.

Q.5 Answer the following question in 1-2 pages (attempt any one).

(1x6 = 6)

i) Classify diuretics with examples.

ii) Discuss drug acting on uterus.

Veterinary Neuropharmacology: VPT-321

Maximum Marks 30

Q.6 Fill in the blanks.

(9x0.5 = 4.5)

- i) Triflupromazine is an example of _____ anti-depressant.
- ii) ANS controls _____ function of body.
- iii) Stage -II of general anaesthesia is known as _____.
- iv) _____ inhibits uptake of choline into the neurones.
- v) Nicotinic receptors are _____ type of receptors.
- vi) _____ is an example of G protein coupled receptor.
- vii) MAO stands for _____.
- viii) Carbachol _____ gastric motility.
- ix) Pilocarpine is indicated in _____.

Q.7 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: (9x0.5 = 4.5)

- i. Following is a naturally occurring alkaloid obtained from the Chinese shrub *Ephedra vulgaris*? ()
1. Atropine
 2. Ephedrine
 3. Digitalis
 4. Digitoxin
- ii. Amphetamine acts by: ()
1. Releasing noradrenaline
 2. Releasing dopamine
 3. 1 & 2
 4. None of above
- iii. Caffeine acts on which part of CNS? ()
1. Medulla
 2. Cortex
 3. Spinal cord
 4. All of above
- iv. Picrotoxin causes inhibition of which of following neurotransmitters? ()
1. Adrenaline
 2. Acetylcholine
 3. Nitrous oxide
 4. GABA

- v. Which of following synthetic opioid has anti-diarrhoeal activities? ()
1. Diclomine
2. Loperaminde
3. Domperidole
4. Hydroxy codeine.
- vi. Which is the competitive neuromuscular blocker? ()
1. d-tubocurarine
2. Gallamine
3. Pancuronium
4. All of above
- vii. Following is phenothiazine tranquilizer. ()
1. Promethazine
2. Chlorpromazine
3. Triflupromezine
4. All of above
- viii. Which is an example of endogenous opioids? ()
1. Endorphins
2. Epinephrine
3. Ephedrine
4. All of above
- ix. All opioid receptors are following type of receptors? ()
1. G protein coupled
2. Ligand gated ion channels
3. Enzymes linked
4. None of above:

Q.8 Attempt any nine out of the following twelve questions. Answer of each question should be in 2 to 3 lines. (9x1= 9)

i) Give mechanism of action of morphine:

ii) Define dissociative anaesthesia with one example?

iii) Give two examples of acetylcholine esterase inhibitors:

iv) Explain Basal anaesthesia?

v) Enlist major side effects of NSAIDs.

vi) Define pre-anaesthetics with examples.

vii) Enlist two inhibitory CNS neurotransmitters.

viii) How NSAIDs decrease the fever?

ix) What is chloramphenicol resistance?

x) Give physiological functions of COX I and COX II enzymes:

xi) Give any one effect of cholinergic stimulant on GIT and urinary system.

xii) Discuss mechanism of action of pentazocine:

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Q.9 Attempt any three out of the following four questions. Answer of each question should be in 5 to 8 lines. (3x2 = 6)

i) Enlist ideal characteristics of local anaesthesia.

ii) Differentiate between competitive and non-competitive neuromuscular blocker.

iii) Enlist five pre-anaesthetics with their uses.

iv) Give mode of action of cetirizine.

10 Answer the following question in 1-2 pages (attempt any one). (1x6 = 6)

- i) Discuss therapeutic uses of adrenaline in detail.
- ii) Discuss mechanism of action and clinical applications of barbiturates.