

2008 6

100

**ANIMAL HUSBANDRY AND VETERINARY SCIENCES
(OPTIONAL)**

Time : 3 hours

Maximum Marks : 200

Note :

- (i) *In all attempt Five questions.*
- (ii) *Question No. 1 is compulsory.*
- (iii) *Of the remaining questions, Attempt Any four by selecting one Question from each section.*
- (iv) *Numbers of optional questions upto the prescribed number in the order in which questions have been solved, will only be assessed and excess answers of the question/s will not be assessed.*
- (v) *Candidate should not write roll number, any names (including his/her own), signature, address or any indication of his/her identity anywhere inside the answer book otherwise he/she will be penalised.*

1. Attempt any four of the following :

- (a) Draw a neat labelled diagram of digestive system of fowl and explain in brief the Anatomy of system and physiology of digestion of food in different parts with enzymes involved. 10
- (b) Explain about feeding and management of livestock during draught conditions and other natural calamities. 10
- (c) Discuss the composition of cow milk in detail. Explain its various physical properties. 10
- (d) What is the role of biotechnology in improvement of animal health and production ? 10
- (e) Write in brief common causes of cruelty in domestic animals, name the important animal welfare organizations, their aims and duties, and role of Veterinarian in prevention of cruelty to animals. 10

SECTION - A

- 2. (a) Explain the anatomy of udder of cattle with diagrams and physiology of biosynthesis and secretion of milk. 20
- (b) Give agronomic practices for cultivation of fodder maize, jowar and lucerne, explain the different methods of conservation of fodder. 20

P.T.O.

3. (a) Define nutrition, nutrients, balanced feed, complete feed and feeding value, explain the importance of nutrients in animal health and production, how the nutritional deficiencies are managed. 20
- (b) Enumerate the agro-industrial byproducts and unconventional feeds and fodders with their nutritive value, ant-quality factors and methods to ameliorate them and explain their role in livestock feeding. 20

SECTION - B

4. (a) Discuss in brief the care and management of milking animals for maximizing the milk production. 10
- (b) What is a breed ? When would you recognize a particular group of animals as a breed ? Name home tract and one important characteristics of five important breeds of buffaloes. 10
- (c) What is concept of extension education ? Describe different principles of extension education. 10
- (d) Describe the objectives and role of Krishi Vigyan Kendra in rural development. 10
5. (a) Explain the care and management of a calf upto six months of age. 10
- (b) Describe rules and regulations regarding transportation of livestock by road. 10
- (c) Define heritability and write down its uses. List different methods of estimating heritability. 10
- (d) Describe the effects of chromosomal abbreviations on fertility and productivity of females. 10

SECTION - C

6. (a) How and what material will you collect to despatch for laboratory examination in cases of Anthrax, Rabies, Aflatoxicosis, Organophosphate poisoning and Abortion ? 20
- (b) Explain different reasons of Vaccination failure. 20
7. (a) How parasites evade the host defence system, explain with suitable example ? 20
- (b) Describe the role of different diuretics in congestive Heart failure. 20

9. (a) (i) Differentiate between the following :
(a) Fracture and dislocation.
(b) Cyst and abscess.
(c) Sinus and fistula.
(d) First degree and second degree burn.
(e) Allografts and Xenografts.
- (ii) Define the following : 5
(a) Clean wounds
(b) Septic shock
(c) Canker
(d) Degenerative joint disease
(e) Strangulation
- (iii) Give clinical signs of the following conditions : 5
(a) Scrotal hernia.
(b) Spavin in horse.
(c) Naval ill.
(d) Urethral obstruction.
(e) Upward fixation of Patella.
- (iv) Suggest line of treatment of the following : 5
(a) Maggoted wound.
(b) Sprain.
(c) String halt in horse.
(d) Frost bite.
(e) Umbilical hernia.

P.T.O.

(b) (i) Write *true* or *false*, as appropriate, against each of the following statements :

- (a) Ketamine causes severe cardiac and respiratory depression in dogs.
- (b) Morphine is a good pre-anaesthetic agent for horses.
- (c) All muscle relaxants produce their effects on neuromuscular junctions.
- (d) Metabolites of volatile anaesthetics are non-toxic to body systems.
- (e) Use of thiopental should be avoided for caesarean section in bitches.

(ii) Define the following :

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- (a) Hypnosis.
- (b) Balanced anaesthesia.
- (c) Epidural anaesthesia.
- (d) Basal anaesthesia.
- (e) Narcosis.

(iii) Give the choice of anaesthetic drug(s) with doses for the anaesthesia in the following species :

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- (a) Horse.
- (b) Monkey.
- (c) Snake.
- (d) Elephant.
- (e) Dog.

(iv) Fill in the blanks with appropriate words :

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- (a) Thiopental is a _____ acting barbiturate.
- (b) Ketamine is a derivative of _____ .
- (c) Procaine hydrochloride is lethal to _____ .
- (d) General anaesthesia in large animals may be complicated by tympany, regurgitation and _____ .
- (e) Xylazine is agonist at the _____ receptors.

P.T.O.

SECTION - D

8. (a) (i) Define the following : 5
- (a) Toxaemia
 - (b) Septicaemia
 - (c) Dehydration
 - (d) Cardiac arrest
 - (e) Vagus indigestion
- (ii) Give the clinical signs of the following conditions : 5
- (a) Traumatic pericarditis
 - (b) Haemorrhagic shock
 - (c) Tetanus in horse
 - (d) Surra
 - (e) Strangles in horse
- (iii) Suggest the treatment for the following conditions : 5
- (a) Canine Babesiosis
 - (b) TRP in cattle
 - (c) Mastitis in cow
 - (d) Ruminal acidosis
 - (e) Laminitis
- (iv) Give the vaccination schedule for the following conditions : 5
- (a) Ranikhet disease in poultry
 - (b) Rabies in pups
 - (c) FMD in cattle
 - (d) HS in buffaloes
 - (e) Distemper in canine

- (b) (i) Mention the duration of gestation in following species :
- (a) Cow.
 - (b) Mare.
 - (c) Goat.
 - (d) Bitch.
 - (e) Sow.
- (ii) Mention the most important roles of the following hormones : 5
- (a) Estrogen.
 - (b) Progestrone.
 - (c) LH.
 - (d) FSH.
 - (e) Oxytocin.
- (iii) Write short notes (not more than five sentences) on the following : 5
- (a) Vibriosis in heifer.
 - (b) Brucellosis in bull.
 - (c) Monorchid.
 - (d) Breech presentation.
 - (e) Spiral deviation of penis.
- (iv) Write clinical signs of the following : 5
- (a) Phimosis.
 - (b) Balanoposthitis.
 - (c) Rig.
 - (d) CTVT.
 - (e) Trichomoniasis in cow.

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