

ANIMAL HUSBANDRY AND VETERINARY SCIENCE

Paper – II

Time Allowed : **Three Hours**

Maximum Marks : **200**

Question Paper Specific Instructions

Please read each of the following instructions carefully before attempting questions :

*There are **EIGHT** questions in all, out of which **FIVE** are to be attempted.*

*Questions no. **1** and **5** are compulsory. Out of the remaining **SIX** questions, **THREE** are to be attempted selecting at least **ONE** question from each of the two Sections A and B.*

Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

All questions carry equal marks. The number of marks carried by a question/part is indicated against it.

Neat sketches may be drawn, wherever required.

*Answers must be written in **ENGLISH** only.*

SECTION A

Q1. Write short notes on the following :

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| (a) | Significance of ECG in dogs with lead system used | 8 |
| (b) | Etiological diagnosis and treatment of different types of dehydration in dogs | 8 |
| (c) | Status of Veterinary Public Health in India | 8 |
| (d) | Indications, surgical techniques and post-operative care of rumenotomy operation in buffaloes | 8 |
| (e) | Various components of placenta in fetus and mother, in cows, with suitable diagram | 8 |

- Q2.** (a) Discuss the effect of climate change and global warming on production, reproduction and animal health. 15
- (b) Describe pathogenesis, clinical findings, clinical pathology, necropsy findings and control of foot-and-mouth disease in cattle. 15
- (c) What is HACCP (Hazard Analysis Critical Control Point) and its role in reducing or preventing food-borne zoonotic diseases ? 10
- Q3.** (a) Classify zoonosis and discuss the zoonotic diseases that can be transmitted from animals/birds to humans which wreaked havoc in world trade in the recent past. 15
- (b) (i) Discuss in detail the ectodermal and endodermal derivatives in mammalian embryo. 10
- (ii) Explain the structure and composition of chicken eggs. 5
- (c) Describe etiology, clinical findings, clinical pathology, and treatment of parturient paresis in a cow. 10
- Q4.** (a) (i) What is the modern concept of anaesthesia and anaesthetic antimicrobial drug in ruminants ? Discuss in detail. 10
- (ii) Discuss various anatomical structures used in epidural anaesthesia in tabular form. 5
- (b) Write down the importance of post-mortem examination of vetero-legal cases. Discuss the procedures of post-mortem examination, collection and preservation of specimens from any suspected case. 15
- (c) Explain different types of buffer systems of blood and their significance in animals. 10

SECTION B

Q5. Write short notes on the following :

- (a) Physical and chemical changes occurring in preserved meat 8
- (b) Nutritive properties of standardized milk 8
- (c) Indian standard specification for condensed milk 8
- (d) Nutritive value of hen egg and its preservation 8
- (e) Advantages and disadvantages of hot boning 8

- Q6.** (a) Explain in detail the philosophies, objectives and principles of extension education. 15
- (b) (i) Describe the methods used for collection and preservation of endocrine glands from slaughter house for medicinal use. 8
 - (ii) Write different methods used for wool harvesting from rabbits, its grading and utilization. 7
 - (c) Discuss the significance of different quality control tests to be conducted in a milk plant laboratory to measure its quality. 10

- Q7.** (a) (i) Describe in detail, different factors that influence the keeping quality of milk under Indian conditions. Also discuss the quality storage grades of whole milk. 10
- (ii) Write down the steps involved in dahi and yoghurt preparation in flowchart form. 5
 - (b) Write about falsification of meat and describe various tests for its detection. 15
 - (c) Discuss in detail various extension methods to educate farmers. 10

- Q8.** (a) How will you proceed to determine the carcass yield and dressing percentage in different meat-producing livestock species ? 15
- (b) Discuss about the chemical and biological differentiation of meats of different species of animals. 15
 - (c) Discuss different steps in the manufacture of toned and flavoured milk. 10

