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 :

(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*