Indian Forest Services (Main)
Examination-2025

DJSM–B–AHVS

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.

Question Nos. **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

1. Write short notes on the following : 8×5=40

(a) Histological structure of liver of ox

(b) Kidney function tests

(c) Importance of amelioration of heat stress in farm animals

(d) Diagnosis and treatment of ruminal impaction in cattle

(e) Clinical diagnosis of neurological disorders

2. *(a)* Classify quinolone group of synthetic antibacterial agents. Discuss, in detail, the mechanism of action, antimicrobial spectrum, side effects and clinical uses of fluoroquinolones. 15

(b) Briefly describe the mechanism of pulmonary respiration. Also write down various functions of respiration. 15

(c) Discuss various hormones that play crucial roles in regulating the cow's reproductive cycle and maintaining pregnancy. 10

3. *(a)* Describe the functional anatomy of fowl in relation to flying. 15

(b) Discuss, in brief, the structure and function of blood-brain barrier and blood-CSF barrier. 15

(c) How is the concept of herd immunity useful for prevention of spread of infectious diseases in animals? 10

4. *(a)* Describe the pathogenesis, diagnosis, treatment and control of Peste des Petits Ruminants (PPR) in goats. 15

(b) What is post-parturient haemoglobinuria? Write down its aetiopathogenesis, diagnosis and treatment in cows. 15

(c) How will you diagnose radio-ulnar fracture in a cow? Write, in detail, the anaesthetic approach and surgical intervention for its correction. 10

SECTION—B

5. Write short notes on the following : 8×5=40

(a) Epidemiological measures used in disease control

(b) Cleaning-in-place (CIP) system of cleaning and sanitizing dairy plant equipment

(c) Role of the Food Safety and Standards Authority of India (FSSAI) in ensuring safe and quality milk and meat products in India

(d) Systems of grading of wool

(e) National Livestock Mission

6. *(a)* Define zoonosis. Elaborate on various modes of transmission of zoonotic diseases along with their general prevention and control measures. 15

(b) Describe the epidemiological procedure for field investigation during outbreak of an epidemic. 15

(c) Enlist the important Central and State rules for prevention and control of animal diseases, and write briefly about their salient features. 10

7. *(a)* Define pasteurization of milk and enlist various methods of pasteurization. Discuss the importance of various quality tests commonly conducted in the laboratory of a dairy plant producing pasteurized toned milk in pouches. 15

(b) Discuss the importance of utilization of byproducts in dairy industry. Outline the strategies for profitable utilization of whey and skim milk in a large dairy plant. 15

(c) Explain the salient features of different extension methods adopted to educate farmers under rural conditions. 10

8. *(a)* Do you think antemortem examination is essential in meat inspection? If yes, justify. Enlist the judgements arrived at by a veterinarian after antemortem and postmortem examinations. 15

(b) *(i)* "Poor preslaughter handling practices lead to huge economic loss to meat industry." Justify the statement. 5

(ii) What is meat curing? Describe the physical, biochemical, organoleptic and other quality changes brought about by different agents during meat curing. 10

(c) Briefly explain the methods of preservation suitable for shell eggs meant for export trade. Also enlist the important quality control tests that need to be carried out for the above. 10

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