

UPSC - INDIAN FOREST SERVICE - 2014

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 chronological 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.

Answers must be written in ENGLISH only.

Neat sketches may be drawn, wherever required.

SECTION—A

1. Write short notes on the following in about 150 words each : 8×5=40
- (a) Staining of tissues for histological study
 - (b) Mechanism of coagulation of blood
 - (c) Drugs acting on fluids and electrolyte balance
 - (d) Effect of climate change on animal health and production
 - (e) Diagnosis and treatment of organophosphorus poisoning
2. (a) Define catecholamines and discuss their pharmacological effects. What is the clinical use and mode of action of dopamine? 15
- (b) Discuss the comparative features of locomotor apparatus and their application in biomechanics of mammalian body. 15
- (c) Describe different factors related to choice of an antimicrobial agent. 10
3. (a) Distinguish between colibacillosis and coccidiosis in poultry, and write their treatment and control measures. 15
- (b) Describe the occupational health hazards of personnel working in a slaughterhouse. 15
- (c) Classify air pollutants and discuss their effects on animal health. 10
4. (a) Describe different types of mastitis and their etiology, epidemiology, pathogenesis, clinical findings, diagnosis, treatment and control. Correlate morbidity of mastitis with milk production. 15
- (b) What diseases are caused by mites? Describe the etiology, epidemiology, clinical findings, diagnosis, treatment and control. Also write the morbidity of the disease in relation to animal production. 15
- (c) What are the objectives, rules and procedure for conducting vetero-legal postmortem examination? 10

SECTION—B

5. Write short notes on the following in about 150 words each : 8×5=40
- (a) Characteristics of synthetic milk and its detection
 - (b) Why is modernization of slaughterhouse important?
 - (c) PSE pork—its reason, limitation and utilization
 - (d) Shelf stable meat products
 - (e) Judging of live meat animals

6. (a) What is the antimicrobial defence system of egg? Comment on the fungal spoilage of egg. 15
- (b) Define milk sample. What are different types of milk samples, how are they collected and sent to laboratory for examination? Also describe different platform tests of market milk. 15
- (c) Describe antemortem care and management of food animals and their effect on the meat quality. 10
7. (a) Describe the health benefits and concerns of meat consumption. 15
- (b) Describe the humane methods of slaughter of meat animals. Write their importance in production of safe and wholesome meat. 15
- (c) Describe food-borne pathogens in poultry meat and control of product contamination. 10
8. (a) Write the comparison with respect to advantages and disadvantages of hot air oven drying and freeze drying of meat products. Also mention the commercial application of freeze-dried meat products. 15
- (b) Distinguish among radurization, radicidation and radappertization of meat. Comment on the safety of irradiated meat on consumers' health. 15
- (c) Write a note on the role of NGO's in livestock extension services. 10
