

ANIMAL HUSBANDRY AND VETERINARY SCIENCE
(Paper II)

Time Allowed : Three Hours

Maximum Marks : 250

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

The number of marks carried by a question/part is indicated against it.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

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.

SECTION 'A'

1. Write notes on the following in about 150 words each: **10×5=50**
- (a) Disease prevention and disease-free zones
 - (b) Anatomical structures and formation of egg in hen
 - (c) Occupational zoonotic diseases in meat handlers
 - (d) Sanitation requirements for clean and safe milk production
 - (e) Irradiation preservation of meat
2. (a) Write about the major air pollutants in the vicinity of industrial areas and their effects on animal health and production. **20**
- (b) What are the advantages of value addition in meat? Describe the steps involved in the processing of cooked sausages. **20**
- (c) Discuss the socio-economic impact of zoonotic diseases on public health. **10**
3. (a) What are the problems and challenges in the control and eradication of infectious diseases of livestock and poultry? **20**
- (b) Write the etiology, pathogenesis and clinical manifestations of Equine myoglobinuria. **15**
- (c) Differentiate between local, general and regional anesthesia. Indicate the sites of operation and organs involved during castration of dogs. **15**
4. (a) What is U.H.T. processing of milk? How do we achieve commercial sterility in aseptic packaging of milk? **20**
- (b) What do you mean by drug bioavailability? Elaborate the procedure for developing a newer drug. **20**
- (c) Compare the physical and sensory properties of buffalo and cow milk khoa. **10**

SECTION 'B'

5. Discuss the following in about 150 words each: **10×5=50**
- (a) Role of enzymatic reactivators in organo-phosphorus poisoning in dairy animals

- (b) Connective tissue cells and immunoregulation
 - (c) Pathogenesis and control measures of post-parturient haemoglobinuria in cows
 - (d) Various approaches for utilization of whey
 - (e) Organ products for food and pharmaceuticals
6. (a) How are case-control and cohort studies useful in epidemiological disease investigation? Explain their application in the study of infectious diseases. **20**
- (b) Write about the etiology, epidemiology, pathogenesis, clinical findings, diagnosis and control of leptospirosis in livestock. **20**
- (c) Discuss how disease transmission occurs at ecological interfaces. **10**
7. (a) What are the advantages of canning of meat products? Detail the various steps in traditional canning. **20**
- (b) Discuss the management of fore-stomach disorders in ruminants. **20**
- (c) Explain the role of public health veterinarian in relation to meat hygiene. **10**
8. (a) Discuss the latest national guidelines on post-exposure prophylaxis (PEP) in suspected rabid dog bites in humans. **20**
- (b) Describe the various quality characteristics and storage conditions of fresh meat. **20**
- (c) How does Landscape epidemiology help in disease predictions? **10**