CSM – 9/16

Animal Husbandry and Veterinary Science

Paper – II

Time : 3 hours

Full Marks : 300

The figures in the right-hand margin indicate marks.

Candidates should attempt Q. No. 1 from Section – A and Q. No. 5 from Section – B which are compulsory and ***three*** *of the remaining questions, selecting at least* ***one*** *from each Section.*

SECTION – A

1. Answer any **three** of the following : $20 \times 3 = 60$

   (a) Give a detailed account of mitosis and the chemicals which affect mitosis at different stages.

   (b) What are the various type of placenta in domestic animals ? What is the effect of type of placenta in immunity in newborn ?

(c) Describe, in detail, various hemorrhagic disorders in canines.

(d) Define Shock ? What are the physiological mechanisms involved in shock ?

2. (a) Classify antibiotics. Explain the mode of action of different antibiotics in detail. 30

(b) Describe the structure of Kidney. Write about kidney function tests. What are the various functions of Kidney in well being of an animal ?

10+12+8 = 30

3. (a) How do drugs find their way into animals and animal products ? What are the approaches for minimizing drug residues in livestock products ? 10+20 = 30

(b) What is the effect of climate/environment on dairy animal productivity ? Explain with relevant data. 30

4. (a) Classify zoonoses with examples. Give a detailed account of bacterial zoonoses and their prevention. 10+20 = 30

(b) Define Epidemiology. Describe, in detail, how epidemiological data is collected and used for disease control. 30

SECTION – B

5. Answer any **three** of the following :

   (a) Describe the etiology, pathogenesis, symptoms, lesions and control of foot and mouth disease in cattle. 2+5+5+5+3 = 20

   (b) Write a detailed account of etiology, symptoms, diagnosis and treatment of milk fever. 2+6+6+6 = 20

   (c) Describe the various types of vaccines with examples. What are the advantages and limitations of live vaccines ? 10+10 = 20

   (d) How do you diagnose and control Bovine viral diarrhea in a herd ? 20

6. Answer any **two** of the following :

   (a) Describe, in detail, about important diseases caused by deficiency of vitamins in livestock. 30

   (b) Define Anesthesia. What are the advantages of local anesthesia over general anesthesia ? Which are contraindicated factors for general anesthesia ? 6+12+12 = 30

(c) Write, in detail, on collection of samples for laboratory investigation with special reference to choice of samples, collection media, packing and transport to disease investigation laboratory. 30

7. Answer any **three** of the following :

(a) Describe the quality testing and grading of raw milk. How is the milk stored at different stages while the milk passes from production to the consumer ? 5+5+10 = 20

(b) Give a detailed account of BIS standards and Agmark specifications for milk. 10+10 = 20

(c) What are the common adulteration practices with reference to meat ? What methods are used for detecting the adulteration of meat ? 7+13 = 20

(d) Write short notes on any **five** of the following : 4×5 = 20

(i) Antemortem care of food animals

(ii) Stamping out policy

(iii) Abomasal displacement

(iv) Technology transfer and feedback

(v) SPCA

(vi) Chronic renal failure

(vii) Blood-brain barrier

(viii) Gametogenesis

(ix) Autocoids

8. (a) Write about the factors that influence meat spoilage. Give a brief account of meat borne infections. 8+12 = 20

(b) Write, in detail, on various slaughter house by-products and their utilization. 20

(c) Describe the etiology, pathogenesis, diagnosis and control of PPR in small ruminants. 2+6+6+6 = 20