CSM – 9/21

Animal Husbandry & 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 any ***three*** *of the remaining questions, selecting at least* ***one*** *from each Section.*

SECTION – A

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

   (a) Describe histological structure of ovary of cow and also, explain development of lung of cattle. 10+10 = 20

   (b) Describe, in detail, properties of cardiac muscle. Explain cardiac cycle in detail. 10+10 = 20

(c) Define spermatogenesis and write, in detail, about spermatogenesis. Explain, in detail, advantages of semen preservation.

10+10 = 20

(d) Explain the histology of seminiferous tubule. Describe the structure of hen's egg.

10+10 = 20

2. (a) Give brief explanation of the following :

3×10 = 30

(i) Symptoms, diagnosis and treatment of chronic laminitis.

(ii) Filtration fraction and urine volume

(iii) ESR

(iv) Bohr's effect

(v) Juxtaglomerular complex

(vi) Diagnosis and treatment of hypovolemic shock in calf

(vii) Spasmodic colic in horse

(viii) Neuro endocrine reflex arc

(ix) Effects of Air pollution on animal health

(x) Classification and symptoms of spavin

(b) Enlist various cardiac glycosides with their botanical sources. What are diuretics ? Give classification of diuretics with examples.

5+10+15 = 30

3. (a) What are betalactam antibiotics, classify with examples depending on the spectrum of activity and duration of action. Explain the mechanism of action on bacteria and bacterial mechanism of resistance to antibiotic. 10+20 = 30

(b) Describe economic traits of poultry and also explain scope of poultry farming in India.

15+15 = 30

4. (a) Describe, in detail, classification of zoonoses with suitable examples ; and

discuss in detail types, synonyms, etiology, host, transmission, symptoms, diagnosis and prevention of Hydatidosis. 15+15 = 30

(b) Define marketing, describe, in detail, different methods of marketing of livestock and its products. 30

SECTION – B

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

(a) Discuss etiology, clinical findings, diagnosis, treatment and control of tropical Theileriosis in animals. 4+4+4+4+4 = 20

(b) What are various by products obtained by processing animal intestines ? Write in detail process of preparation of casings using cattle intestine. 10+10 = 20

(c) What is MFPO ? What is the aim of this order ? Write about different categories and schedules of MFPO. 5+5+10 =20

(d) Discuss principles of control and prevention of infectious diseases of new born farm animals in detail. 20

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

(a) Describe in market milk industry in India and abroad. Explain condensed and evaporated milk in detail. Describe, in details, about defects in condensed and evaporated milk. 10+10+10 = 30

(b) Give history and status of dairy industry in India; and discuss milk pasteurization in detail with suitable examples. 15+15 = 30

(c) Explain, in detail, about stunning in animals; sources of contamination, adulteration and preservation of meat. 5+5+20 =30

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

(a) Define pollution, explain water pollution in detail and also, discuss water borne diseases with examples. 20

(b) Explain sausages in detail and also, discuss preparation of emulsion based meat products. 20

(c) Enlist various viral zoonoses and also, explain public health significance of KFD and Japanese encephalitis in detail. 20

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

(i) Occupational zoonoses with examples

(ii) Pre-slaughter care and management of poultry

(iii) DFD and PSE

(iv) Physico-chemical properties of milk

(v) Koch's postulates

(vi) Cysticercus bovis

8. (a) (i) Describe, in detail, about Reconstituted milk and Recombined milk ; Discuss in detail factors affecting composition of milk. 5+10 = 15

(ii) Explain, in detail, elements of meat inspection and meat hygiene practices and also, discuss objectives of meat hygiene. 10+5 = 15

(b) (i) Draw layout of modern abattoir and write about its various components. 10+5 =15

(ii) Give brief explanation on any **five** of the following : 3×5 = 15

(A) Treatment of teat fistula in goat

(B) Respiratory acidosis

(C) Monoclonal antibody

(D) Different sources of data collection

(E) Homogenization

(F) Fermented meat products