

CSM – 9/19
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 the surface anatomy of visceral organs of pelvic cavity ; and explain the structures involved in the epidural anaesthesia. 10+10 = 20
 - (b) List out and describe the drugs acting on fluids and electrolyte balance ; and explain the principles and use of antimicrobials in microbial infections. 10+10 = 20

- (c) What are the relationships between industrialization and animal agriculture and discuss the animal housing requirements for pregnant cows, milking cows and egg laying and broiler birds. $10+10 = 20$
- (d) Discuss, in detail, about the materials and methods of collection of clinical samples for veterolegal examination ; and explain the effect of temperature and stress on heart and blood pressure and methods to overcome those effects. $10+10 = 20$
2. (a) Describe the methods of preparation and processing of tissues for histological examination ; and explain the Bright field microscopy and Electron microscopy. $15+15 = 30$
- (b) General rules and regulations for animal quarantine ; and explain the various steps for the prevention and control of animal diseases. $15+15 = 30$
3. (a) What are the properties and functions of blood ; and discuss in detail on haemorrhagic disorders, anticoagulants, blood volume and blood groups in animals. $15+15 = 30$
- (b) Define pollutant and describe the various methods of assessment of pollution of water,

air and soil with particular reference to the role of Pollution Control Board of the centre and state. $15+15 = 30$

4. (a) Explain the mechanism of respiration, transport and exchange of gases ; and neural control of respiration. $15+15 = 30$
- (b) Describe the functional anatomy in relation to respiration and flying, digestion ; and egg production in fowls. $15+15 = 30$

SECTION – B

5. Answer any **three** of the following :
- (a) What do you mean by quality of milk ? Describe the methods of testing and grading of raw milk. $5+15 = 20$
- (b) Describe the chemical composition and nutritive value of poultry meat ; and discuss the duties and functions of veterinarians in wholesome meat production. $10+10 = 20$
- (c) What are the principles and methods of immunization of animals against specific diseases ; and explain, in detail, about chemo-prophylaxis. $10+10 = 20$
- (d) Write about emergency treatment approach in poisoning in cattle ; and explain the diagnosis and treatment approach for abomasal displacement in bovines. $10+10 = 20$

6. (a) Describe, in detail, about the pathogenesis, symptoms, post mortem lesions, diagnosis and control of foot and mouth disease in bovines. $5+5+5+5+10 = 30$
- (b) Describe surgical manipulations of chronic luxation of patella ; and surgical manipulations of urinary obstruction. $15+15 = 30$
7. (a) Describe the salient points in the care and management of domestic rabbits ; and write an account of disposal and utilization of fur in rabbits. $15+15 = 30$
- (b) Write, in detail, about the methods of preservation of meat ; and discuss on meat inspection procedures and judgement of carcass. $15+15 = 30$
8. (a) Write, in detail, on the post slaughter physiochemical changes in meat and factors influence these changes ; and explain the methods of collection and despatch of clinical samples for laboratory examination. $15+15 = 30$
- (b) Describe, in detail, about the legal standards ; and sanitation requirements of clean and safe milk and milk plant equipment. $15+15 = 30$

