

Time : 3 hours

Full Marks : 200

**Instructions :**

- (1) Answer **all** questions following the directions.
- (2) The figures in the margin indicate full marks for the questions.

1. Define the following terms (any ten) : 1×10=10

- (a) Abortion
- (b) Rigor mortis
- (c) Innate immunity
- (d) Sterility
- (e) Outcrossing
- (f) Bypass protein
- (g) Weaning
- (h) Cytokines
- (i) Quarantine
- (j) Humectants
- (k) Fecundity
- (l) Flushing

2. Answer any *seven* of the following (within 250 words) : 7×7=49

- (a) Write about the various methods of semen collection in farm animals.
- (b) Write about the care of cow to be taken during and after parturition.
- (c) Write about the types of immunity. Write some applications of monoclonal antibody.

- (d) What are the major symptoms of brucellosis in cow? How will you prevent brucellosis in a dairy herd?
- (e) What are the different types of housing generally found to follow among the poultry keepers? Write some advantages of deep litter system.
- (f) Describe different methods of slaughter of meat animals.
- (g) Write the procedure of cheese production.
- (h) Describe briefly the economic traits of pigs to consider for starting a commercial pig farm.
- (i) Write the advantages of rabbit farming in North-Eastern region.

3. Answer the following :

6×7=42

- (a) Name six Indian breeds of cattle.
- (b) Write about the feeding of broilers for meat production.
- (c) Write different methods of packaging of fresh meat.
- (d) Write different drugs used to tranquilize wild animals along with their antidotes.
- (e) What are the samples to be collected for diagnosis of transmissible diseases? Write about different methods of sampling for the same.
- (f) What is milk? Write the composition of milk of cow and buffalo (values in %).
- (g) Describe briefly the principles of good milking.

4. What are the different causes of infertility in cows? Discuss the functional causes of infertility in brief.

4+4=8

5. What are the different sources of arsenic poisoning? Write the clinical signs, diagnosis and treatment of arsenic poisoning in large animals.

3+3+3+3=12

6. Describe briefly the conditions occurred due to vitamin E deficiency in poultry. 6
7. Write down the etiology, symptoms, diagnosis and treatment of ketosis in dairy cow. 3+3+3+3=12
8. Write about the process of milk secretion in the udder of a cow. 6
9. Write down the modes of transmission, clinical signs and diagnosis of new castle disease in poultry. 3+3+3=9
10. Name some factors affecting the survival of bull spermatozoa. 6
11. Explain the factors affecting the quality and quantity of milk production in a dairy cow. 14
12. Define vitamins. Describe the importance and role of fat-soluble and water-soluble vitamins in productive and reproductive performances of livestock. 5+10=15
13. Explain the recent trend in small ruminant production. Describe briefly the factors affecting wool production in sheep. 7+4=11

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