

# **CSM : 16**

## **ANIMAL HUSBANDRY AND VETERINARY SCIENCE PAPER - I**

Time Allowed : 3 hours

Full Marks : 100

*Marks for each question is indicated against it.*

*Attempt any 5 (five) questions taking not more than 3 (three) questions from each Part.*

### **PART - A**

1. What do you mean by feed additives? Explain in short the different types of feed additives with an example. How is it different from feed supplement? List out the advantages and disadvantages of feed additives. **(2+10+2+3+3=20)**
2. Describe the common anti-nutritional factors present in animal feed, the potential risk of toxicity and methods to detoxify them. **(10+5+5=20)**
3. Discuss advantages and disadvantages of artificial insemination in livestock. What are the major causes of anoestrus in farm animals? Briefly describe potential of embryo transfer technology in enhancing livestock production. **(8+4+8=20)**
4. Briefly describe the pathway for Coagulation of blood. What is the importance of blood-brain barrier? Discuss physiological control of blood volume in a healthy animal. **(6+4+10=20)**

### **PART - B**

5. Give a brief outline of the requirement for setting up of poultry farm in your locality. What feeding and managemental practices should be followed to make a profitable venture? **(8+12=20)**
6. Discuss various strategies required to ensure supply of green fodder throughout the year. Briefly describe the housing requirement for a small scale dairy farm (10-12 animals) and draw a possible layout for the farm with proper labelling. **(8+6+6=20)**
7. What is Hardy-Weinberg law? What are the factors that might cause deviation from the Hardy-Weinberg law in a population? Define breeding value. How is breeding value estimated? Discuss the differences between dominance and epistasis. **(2+3+3+6+6=20)**
8. What is extension education? Discuss role of technology transfer for augmenting animal husbandry production in rural areas. Also describe various constraints for transfer of technology to rural framers. **(4+8+8=20)**