## IAS Mains Animal Husbandry and Veterinary Science 1992

## Paper-I

## **Section A**

- 1. Write short notes on any three of the following in about 200 words each:
  - a. Factors affecting nutrients consumption by large ruminants
  - b. Trace elements requirements of poultry for egg
  - c. Recommendations for improving feed resources in India
  - d. Role of water-soluble vitamins in animal health
- 2. Mineral mixtures are routinely used as supplement to feeding rations. What do they contain and in what way do these components help the animal?
- 3. Answer the following questions
  - a. In feeding pigs, state the primary differences as compared to feeding of ruminants that need to be observed.
  - b. Name and discuss at least five important steps required to balance a ration.
- 4. Answer the following questions
  - a. Compare the different system of farming. Which one would you recommend to a marginal farmer and why?
  - b. How are the water needs of large ruminants met under natural conditions? What role does water play in the animal body?

## Section B

- 5. Write short notes on any three of the following in about 200 words each:
  - a. Digestion and absorption of carbohydrates in the alimentary tract of non-ruminants
  - b. Collection and transport of raw milk from rural areas
  - c. Factors affecting post-natal growth in a maturing calf
  - d. Interdependence of agriculture and livestock farming
- 6. Answer the following questions
  - a. What are the good qualities of a semen dilutor? Can a single semen dilutor be used for diluting semen of various species of animals if not, why?
  - b. What are the main advantages and disadvantages of using frozen semen for artificial insemination?
- 7. 'Success in sheep business is largely measured by percentage of lamb crop raised and kilograms of lambs marketed per year.' How would you achieve this by using modern management techniques if you are a sheed breeder?
- 8. Answer the following questions

- a. Work out the cost of rising one male calf up to the age of the year.
- b. What steps would you take in respect of care and management of cow at the time of parturition?
- c. What advice would you give to a dairyman so that his milking utensils are clean and sterile before each milking