

# IAS Mains Animal Husbandry and Veterinary Science 1995

## Paper-I

### Section A

1. Write short notes on any three of the following in about 200 words each:
  - a. Forages as sources of energy
  - b. Growth stimulants
  - c. Inter-relationships of magnesium with calcium and phosphorus in animal nutrition
  - d. Diluents for buffalo bull semen
2. Answer the following questions
  - a. State how does nutritive requirements of broilers differ from those of chicken and layers.
  - b. What is the importance of protein quality in rations of poultry? Which amino acids may be deficient in practical otherwise well balanced rations for chick? Give an example of how an amino acid deficiency can be corrected.
  - c. Which measures of energy, net or metabolizable, is the measure of choice in formulating rations of poultry and why? Discuss in brief the utility of high energy rations for broilers and layers.
3. "Digestibility coefficients are constant for a given feed or species." Critically examine the statement throwing light on factors affecting digestibility of feed in ruminants. Is the nitrogen balance a better indicator of feeding value of protein than a feed's digestible protein content? Discuss.
4. What is the nature of growth? How growth is measured? Describe the hormones involved in growth. Discuss in brief the conditions causing retarded growth and accelerated growth in a farm animal of your choice.

### Section B

5. Write short notes on any three of the following in about 200 words each:
  - a. Yoghurt
  - b. Battery system of housing poultry
  - c. Feeding animals under drought conditions
  - d. Milk pricing policy
6. "With modern advances in dairying, the dairy cow is unequalled as an efficient producer of human food." Comment upon the statement outlining, in some detail, the modern advances in dairying that have made the dairy farming a profitable venture rather than a subsistence one. Briefly discuss the role of personnel management in increasing dairy profits.
7. With reference of goat keeping:
  - a. Write a detailed note on goat as producer of milk, meat and fibre

c. State how does the feed and feeding habits of goats differ from other animals

8. Define homogenization of milk and state how homogenization is accomplished . How does homogenization differ from standardization ? Discuss the merits and demerits of marketing standardized and homogenized milk under Indian conditions.