### IFS 2001 ANIMAL HUSBANDRY AND VETERINARY SCIENCE

### **PAPER-I**

## SECTION - A

- 1. Write short notes on any four of the following in not more than 150 words
- a. Dentition and its relationship with age in cattle

(10)

b. Role of volatile fatty acids in ruminant nutrition.

(10)

c. Corpus Luteum and its functions.

(10)

d. Repeatability estimates.

(10)

e. Weaning of calves.

(10)

2. Draw a labelled diagram of the reproductive system of a cow. Enumerate the functions of its various parts. Also discuss the role of various hormones responsible for its functioning.

(40)

a. How do we classify Indian sheep breeds? Give example of breed of each class.

(20)

b. Why have we gone for cross breeding in sheep in India? Name the breed(s) of choice for cross breeding in India,

(20)

- 4. Describe
- a. Embryo Transfer Technology (10)
- b. Priming in cows. (10)
- c. Dehorning and Disbudding. (10)
- d. Free martins and Crypt orchids. (10)

### **SECTION B**

- 5. Write short notes on any four of the following in not more than 150 words:
- a. Piglet Anaemia. (10)
- b. Good litter for poultry, its qualities. (10)
- c. Role of Iron, Copper and Cobalt in ruminant nutrition.
- d. Progeny Testing. (10)
- e. Stomach of a cow, its structure and functions. (10)
- 6. A female calf was born on 15.8.1995. Alter growing; the animal came in first heat on 6.5.1997.

Again the animal showed symptoms of heat on 26.5.1997 and was inseminated. Calving took place on 2.3.1998 and remained in milk up to 20.12.1998. In this period the animal was again inseminated on 8.6. 1998 and calved for the second time on 15.3.1999.

Determine (in days)

- a. Age at puberty.
- b. Age at first calving.
- c. First gestation period.
- d. Service period.
- e. Lactation length.
- f. Intercalving period.
- g. Dry period.
- h. Second gestation period. (40)
- 7. What are out breeding, out crossing, cross breeding and grading? What is Heterosis? Why have we

gone for cross breeding in dairy cattle in India? Name the breed(s) of choice being used for grading. (40)

8. Give the Protein, Energy and Fibre requirements of layer hens. Compute a complete ration for layer hens kept in cages. How much feed will be required for 5000 layer hens laying at the rate of 80%, for three months?

(40)

# **PAPER-II**

### **SECTION A**

1. Write short notes on any four of the following in about 150 words each:

 $(10 \times 4 = 40)$ 

- a. Role of blood and urine analysis in disease interpretation.
- b. Housing for Broilers
- c. Disease-free Zone
- d. Biomarkers: Measures to assess environmental pollution
- e. Hygienic requirements of an abattoir
- 2. Give an account of drug-receptor interaction. Discuss various variables which influence drug activity.

(40)

- 3. Discuss the epidemiological measures in study of infectious diseases and its control measures. (40)
- 4. Give an account of deficiency diseases found in poultry and methods of its prevention.

(40)

# **SECTION B**

5. Write short notes on any four of the following in about 150 words each:

 $(10 \times 4 = 40)$ 

- a. Irradiation preservation of meat
- b. Processing of cheese
- c. Principles of chemotherapy in drug therapy
- d. Pharmacological basis of neurohumoral transmission
- e. Treatment in fractures
- 5. What are autacoids? Classify with examples. Discuss their role in animal behaviour.

(40)

7. Discuss various methods adopted to educate rural farmers in transfer of technology of Animal Husbandry Programmes.

(40)

8. Discuss the control measures to be adopted in case of water-borne infections by studying the epidemiological features.

(40)