

ANIMAL HUSBANDRY AND VETERINARY SCIENCE
(Paper I)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

All questions carry equal marks.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Write short notes on any three of the following in about 200 words each:
 - (a) Nutrient requirements for milking cows and buffaloes
 - (b) Nutrient requirements and feed formulation for broilers at different ages
 - (c) Current status of hormonal control of mammary development, milk secretion and milk ejection
 - (d) Factors affecting semen production and quality preservation
2. Discuss the mechanisms of adaptation and regulatory mechanisms involved in animal behaviour under environmental stress factors. Describe the various methods for controlling the climatic stress conditions in farm animals.
3. The swine feed has become very costly. Describe as to how you will formulate a balanced swine ration most economically without adversely/affecting the growth of the baby-growing pigs and the quality of meat production.
4. Explain the steps for preparation of artificial vagina before collection of semen. Describe the deep freezing techniques of semen for artificial insemination in cows, sheep, goats, swine and poultry.

SECTION 'B'

5. Write short notes on any three of the following in about 200 words each:
 - (a) Economic dairy farming
 - (b) Modern trends in enhancing production of eggs and poultry meat
 - (c) Feeding and management of dairy animals under flood conditions
 - (d) Chromosomal aberrations in farm animals
6. Describe the merits and demerits of Deep litter system and Battery system of housing poultry. Which system of poultry housing will you recommend to poultry farmers in India and why?
7. Name the species of animals in India which are commercially used for wool production. Describe various breeds of each such species. How will you proceed for improving a rabbit colony for wool and meat production, by using different selection and breeding methods?
8. What is heterosis and what is its genetic basis? How can heterosis be advantageously used in various methods of breeding?