

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.

The number of marks carried by a question/part is indicated against it.

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: **20×3=60**
- (a) Steaming up
 - (b) Buffalo semen diluents
 - (c) Milk synthesis and ejection
 - (d) Bypass proteins
2. (a) Agro-industrial by-products are gaining momentum day-by-day in livestock feeding. How do you proceed in preparing safer feeds from the above products? **50**
- (b) Name ten agro-industrial by-products used in feeding livestock. **10**
3. Why is fertility status of cattle and buffaloes low in India? Give suggestions for improving the fertility status of cattle and buffaloes in India. **60**
4. Enlist the proteolytic enzymes of gastro-intestinal tract of monogastrics (swine). Write the substrate and product formed and the optimum pH required for activity. **60**

SECTION 'B'

5. Write short notes on any three of the following in about 200 words each: **20×3=60**
- (a) Package of practices in supply of green fodder to dairy cattle round the year
 - (b) Up-grading
 - (c) Management of livestock in drought conditions
 - (d) Environment and genotype interactions
6. (a) What do you understand by the words 'Random Mating' and 'Selection'? When do we use random mating in breeding of livestock? **30**
- (b) Explain the various aids to selection and their relative merits and demerits. **30**
7. Enlist different farming systems that are adopted in livestock rearing. Explain the advantages and limitations in each farming system. Suggest a feasible farming system most suitable to Indian conditions. **60**
8. (a) What do you mean by 'Variance'? Discuss in detail about the components of variance. **30**
- (b) What is heritability in the broad sense and heritability in the narrow sense? Give examples. **30**

