

CSM – 8/21
Animal Husbandry & Veterinary Science
Paper – I

Time : 3 hours

Full Marks : 300

The figures in the right-hand margin indicate marks.

*Candidates should attempt Q. No. 1 from
Section – A and Q. No. 5 from Section – B
which are compulsory and any **three** of
the remaining questions, selecting
at least **one** from each Section.*

SECTION – A

1. Write brief notes on any **three** of the following :

20×3 = 60

- (a) Describe the measures of feed energy and their applications.
- (b) Write, in detail, about feeding standards in livestock.

- (c) What are various preventive measures to control heat stress in pigs ?
- (d) Explain "Seasonal Breeding" in livestock.
2. (a) Briefly mention thermal adaptation in poultry. 30
- (b) What are the hereditary effects on animal growth ? 30
3. (a) Describe, in detail, about the important protein sources of ingredients in livestock and poultry feed formulation.
- (b) Give a note on significance of structural and functional aspects of spermatozoa. 30
4. (a) Importance of calorie / protein ration in poultry feed. 20
- (b) How does the nutritional status of birds alter the meat quality ? 20
- (c) How will you conserve the green fodder ?
Write, in detail, about quality silage production. 20

SECTION – B

5. Write short notes on any **three** of the following :

20×3 = 60

- (a) What do you mean by progeny testing ? How and why progeny testing is carried out ?
- (b) Differentiate specialised farming and mixed farming.
- (c) What is inbreeding ? Write about the genetic and phenotypic effects of inbreeding ?
- (d) How will you determine the age of bovines in the farmers' holdings ? Explain with diagram/ simple line drawing.

6. (a) Describe body condition scoring in small ruminants. Also, discuss about the mating systems followed in sheep and goat rearing.

30

- (b) Explain crossbreeding in cattle to improve milk production traits.

30

7. (a) Enumerate the economic traits of cattle and buffaloes ? Describe the production and

reproduction traits. Explain briefly how dairy cows are selected ? 30

(b) Mention the bovine breeding policies adopted in the country and your state. 30

8. (a) How open nucleus breeding system is operated in genetic improvement of sheep and goats. 20

(b) What do you mean by genetic gain ? How the gain in selection is influenced by various factors ? 20

(c) What is the difference between conservation and preservation ? Why does the native germplasm need to be conserved ? 20

