

6. a) What are the common blood protozoan diseases in cattle?
 b) What steps to be taken to prevent and control these diseases in dairy crossbred cattle?
 c) Discuss the current status of diseases caused by rinderpest in India with the strategies taken to control it.
 d) Comment on the synthesis, breakdown, occurrence and pharmacological actions of histamine on respiration and blood pressure in veterinary practice?
 e) What are the measures to be taken to eradicate this tuberculosis from livestock in India? (60)
7. a) What are the different methods adapted to elucidate and provide self-employment to farmers under rural conditions in India?
 b) Discuss the problems and constrains in transfer of technology in animal husbandry programs for rural development?
 c) What are the policy initiatives taken by government of India through veterinary council of India and ICAR for delivery and HRD sustainability? (60)
8. a) Differentiate between local, general and epidural anesthesia?
 b) Describe the surface anatomy of salivary glands and their importance in bovine system.
 c) Discuss the effect of air, water and solid pollutants on animal productivity.
 d) Discuss the role of nervous system in co-ordinating an animal response to environment. (60)



1(CCE-M)6

ANIMAL HUSBANDRY & VETERINARY SCIENCES - II

[02]

Time Allowed -3 Hours

Maximum Marks-300

INSTRUCTIONS

- i) Answers must be written in English.
 ii) The number of marks carried by each question is indicated at the end of the question.
 iii) The answer to each question or part there of should begin on a fresh page.
 iv) Your answer should be precise and coherent
 v) The part/parts of the same question must be answered together and should not be interposed between answers to other questions.
 vi) Candidates should attempt any five questions.
 vii) If you encounter any typographical error, please read it as it appears in the textbook.
 viii) Candidates are in their own interest advised to go through the general Instructions on the back side of the title page of the answer script for strict adherence.
 ix) No continuation sheets shall be provided to any candidate under any circumstances.

- x) Candidates shall put a cross (X) on blank pages of answer script.
- xi) No blank page be left in between answer to various questions.
- xii) No programmable Calculator is allowed.
- xiii) No stencil (With different markings) is allowed.
- xiv) In no circumstances help of scribe will be allowed.

1.
 - a) Distinguish between heritability and repeatability.
 - b) Discuss merits and demerits of different methods of estimating heritability.
 - c) What are quantitative trait local? How it helps in methods of selection?
 - d) Deduce the correlated response of indirect selection with examples. **(60)**
2. Write short notes on any SIX:
 - a) Genetic covariance.
 - b) Random drift and small population.
 - c) Path Coefficient.
 - d) Balanced lethal and balanced polymorphism.
 - e) Genetic homeostasis.
 - f) Epistasis.
 - g) Importance of herd recording.
 - h) Autosexing in poultry farming. **(60)**

3.
 - a) Describe the action plan for conservation of animal biodiversity using biotechnology.
 - b) What are the strategies adopted for conservation and sustainable management for livestock production system in India?
 - c) Elaborate all important heritable traits in poultry on the basis of their phenotypic performance. **(60)**
4.
 - a) What is the difference between genotype and allele frequencies?
 - b) What is the current status of dairy cattle crossbreeding in India?
 - c) What are the different limiting factors associated with crossbreeding as a method of upgrading local cattle?
 - d) Enumerate solutions that can give a further boost to the crossbreeding work to augment milk production. **(60)**
5.
 - a) How the slaughterhouse by-products can be utilized to make it profitable proposition?
 - b) How meat adulteration can be detected?
 - c) Discuss modern methods of preservation and packaging of meat and meat products.
 - d) Why rabbit manure has been considered as a good fertilizer? **(60)**