

**ANIMAL HUSBANDRY & VETERINARY SCIENCES-II**

[02]

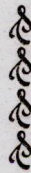
**Time : 3 Hours**

**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 text book.
- 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.

- c) Discuss about salient features of government schemes that can help rural youth for self employment.
8. a) Discuss the general principles to be followed in selection and use of antimicrobial drugs in veterinary practice and the risks involved. (60)
- b) Define meat inspection and explain the principles of ante mortem and post mortem meat inspection procedures. Discuss the principles and basis of judgement during meat inspection.
- c) Explain the signs and hormonal changes associated with oestrous cycle in cow.



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.*

1. a) What is Hardy-Weinberg Law? And discuss its application in genetics. (60)
- b) How phenotypic variance can be partitioned? Discuss how genetic and environmental variances in animal population can be estimated?
- c) Describe the common breeding strategies adopted during development of commercial broiler poultry breeds.
2. a) What is selection index? Critically assess the merits and demerits of selection index in breeding of farm animals in comparison to other methods of selection. (60)
- b) What are the advantages and drawbacks of inbreeding of animals and how the drawbacks can be mitigated?
- c) Explain reciprocal recurrent selection and hybridization.
3. a) Explain "cardiac cycle" with a neat diagram. (60)
- b) How acid-base balance is regulated in an animal body?
- c) Explain the technique for preparation and staining of blood smear for protozoan parasites.

2-II (2)

4. a) Discuss in detail the serological and molecular diagnostic tests that can be used for detection of common bacterial and viral diseases. (60)

b) Critically assess the reasons for recurrent outbreak of FMD disease in some countries and strategies adopted for its control.

c) Discuss the etiology, pathogenesis, diagnosis and treatment of haemorrhagic septicaemia.

5. a) Explain the procedure for manufacture of ice-cream with a flow chart and discuss important factors influencing the quality of ice cream. (60)

b) Give "Agmark" specifications for ghee.

c) Critically appraise the merits and demerits of different packaging techniques commonly used for fluid milk.

6. a) List different diseases transmitted from animals to man. Discuss the etiology, pathogenesis, diagnosis and treatment of glanders. (60)

b) Discuss the duties of a veterinarian in a slaughter house.

c) Describe how animal by-products can be effectively utilized for economic development.

7. a) Describe the procedure for production of meat and bone meal from fallen (dead) animals. (60)

b) Explain how internet and digital connectivity to rural areas can be innovatively harnessed to educate farmers.

2-II (3)

Turn Over