

UPSC Mains 2025 Aug 31, 2025 Animal Husbandry and Veterinary (Paper 1) Question Paper and AnswerKey PDF

Q. No.	Question	Check Solution
Q1 (A)	Write short notes in 150 words: Nervous control of respiration in animals.	Check Solution
Q1 (B)	Write short notes in 150 words: National Livestock Health and Disease Control Programme.	Check Solution
Q1 (C)	Write short notes in 150 words: Factors affecting pre- and post-natal growth in animals.	Check Solution
Q1 (D)	Write short notes in 150 words: Write AIV method of silage preparation.	Check Solution
Q1 (E)	Write short notes in 150 words: Explain the concept of Essential Amino Acid Index (EAAI) and its significance in evaluating protein quality.	Check Solution
Q2 (A)	Write about the methods to calculate energy requirements for the maintenance of animals.	Check Solution
Q2 (B)	Discuss the effects of ionophores on rumen metabolism.	Check Solution
Q2 (C)	Name the different constituents of blood and write about their functions.	Check Solution
Q2 (D)	Discuss the role of hormones secreted by adrenal gland with special reference to the survival of animals.	Check Solution
Q3 (A)	Narrate the "Participatory Rural Appraisal" techniques used for rural planning.	Check Solution
Q3 (B)	Define ethology. Describe in detail about the various types of behaviours in animals.	Check Solution
Q3 (C)	Discuss the limiting nutrients and strategic feeding of high milk-yielding cows.	Check Solution
Q4 (A)	Explain in detail about the classification of hormonal receptors and their functions.	Check Solution
Q4 (B)	Discuss in detail the microbial digestion of carbohydrates in ruminants.	Check Solution
Q4 (C)	Describe different factors which influence the voluntary feed intake in poultry.	Check Solution
Q4 (D)	Write short notes on the following: (i) Effect of amino acid imbalance in swine ration. (ii) Circulation and functions of cerebrospinal fluid. (iii) Reno-renal reflex and how it controls renal functions. (iv) General functions of minerals in animals	Check Solution
Q5 (A)	Recurrent selection and Reciprocal recurrent selection.	Check Solution
Q5 (B)	Which are the processes preventing random assortment of genes to gametes? Describe them.	Check Solution

Q5 (C)	Discuss the feeding strategies for animals in drought situations.	Check Solution
Q5 (D)	Management of rabbits as meat animals.	Check Solution
Q5 (E)	Factors affecting semen quality in vivo and in vitro.	Check Solution
Q6 (A)	Describe different types of heritability based on genetic variance components.	Check Solution
Q6 (B)	Explain in detail about the different methods of semen collection in livestock and poultry.	Check Solution
Q6 (C)	Describe the different methods to estimate heritability in animals.	Check Solution
Q7 (A)	Write in detail about "Dairying under mixed farming". What are its advantages over "Dairying under specialized farming" in the Indian context?	Check Solution
Q7 (B)	Illustrate the systematic process involved in changing gene and genotype frequencies of a population.	Check Solution
Q7 (C)	Throw light on socio-economic concepts of chicken egg production in India.	Check Solution
Q8 (A)	Classify the investment, receipts and expenditure in a commercial dairy farm.	Check Solution
Q8 (B)	Mention the signs of estrus in cattle and buffaloes. What is the time of insemination for better conception in these animals and why is it so?	Check Solution
Q8 (C)	Give an account of individual selection, family selection and within-family selection.	Check Solution