

CCE(M)/AHS-I/10/2024
ANIMAL HUSBANDRY AND
VETERINARY SCIENCE
(PAPER—I)

Time : 3 hours]

[Full Marks : 250

Please read each of the following instructions carefully before attempting the questions :

- (i) There are **eight** questions divided in **two Sections**.
- (ii) Candidate has to attempt **five** questions in all.
- (iii) Question Nos. **1** and **5** are compulsory and out of the remaining, **three** are to be attempted choosing at least **one** question from each Section.
- (iv) The number of marks carried by a question/part is indicated against it.
- (v) Word limit in questions, wherever specified, should be adhered to.
- (vi) Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

SECTION—A

ESTD : 1988

1. Answer any five of the following questions :

10×5=50

- (a) What is 'dry period' in dairy cows? Explain its importance. What are the different methods of drying off a cow?
- (b) Write about the three tier AMUL pattern or Anand model dairy cooperatives of India.
- (c) Explain the role of different fat soluble and water soluble vitamins in the animal body.
- (d) Describe the different methods of preservation of semen.
- (e) What do you understand by fodder conservation? What are the strategies for fodder development to supply greens to the ruminants all throughout the year?
- (f) Briefly enumerate the different traits of economic importance in cattle and buffaloes.
- (g) Define heifer. Write about the care and management of heifers.

2. Answer the following questions :

- (a) Discuss the different methods of processing of feeds for increasing palatability and digestibility. 20
- (b) Write about the biosecurity measures to be taken in a livestock farm to prevent disease occurrence. 15
- (c) What are the various causes of stress? Write briefly about the effect of stress on health, production and reproduction of animals. 15

3. Answer the following questions :

- (a) What is artificial insemination in animals? What are its advantages and disadvantages? What approach or considerations should be taken to make artificial insemination a success? 20
- (b) What are the various methods of hay making? Mention the factors that affect the nutritive value of hay. 15
- (c) What do you mean by backyard/free range poultry production system? Briefly describe about the different backyard strains developed in India. 15

4. Answer the following questions :

- (a) Describe briefly about the different methods of selection in livestock. 20
- (b) Enlist the different breeds of livestock and poultry of north-eastern region of India and write its contribution in enhancing the socioeconomic status of the region. 15
- (c) What are the primary hormones involved in milk production? Describe their specific roles. 15

SECTION—B

5. Answer any five of the following questions :

10×5=50

- (a) Why can yaks adapt to higher climatic conditions?
- (b) What are the basic principles of extension training for rural farmers?
- (c) What are the strategies to improve farm animal welfare?
- (d) What do you mean by sex sorted semen technology? Mention its advantages and disadvantages.
- (e) What is the importance of feeding colostrum to newborn animals and why should it be fed within 30 minutes after birth? Mention the properties of colostrum.
- (f) Discuss the strengths and weaknesses of Dairy Development in India.
- (g) Briefly write about blood coagulation and homeostasis.

6. Answer the following questions :

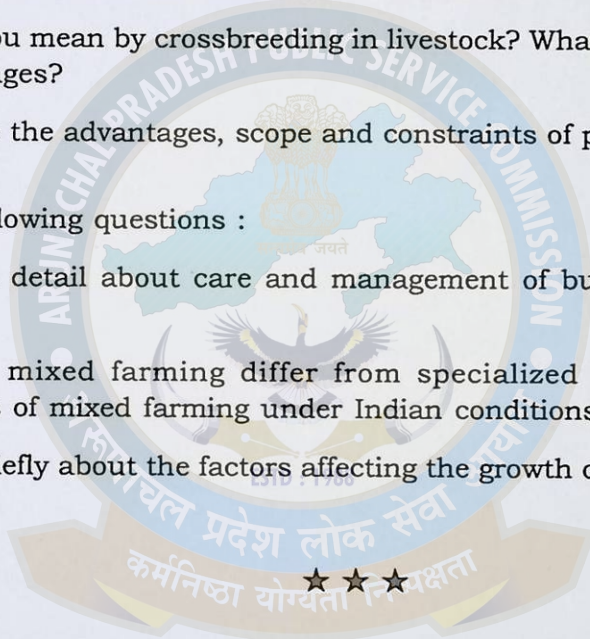
- (a) What do you mean by weaning? What are the merits and demerits of early weaning on piglets? 20
- (b) What are the various anti-nutritional factors present in livestock feeds? Suggest methods of their reduction. 15
- (c) How is selection done on the basis of progeny testing? Mention its merits and demerits. 15

7. Answer the following questions :

- (a) What are the adverse effects of livestock industries on environment? What measures are to be taken to mitigate such issue? 20
- (b) What do you mean by crossbreeding in livestock? What are its advantages and disadvantages? 15
- (c) Enumerate the advantages, scope and constraints of pig farming in India. 15

8. Answer the following questions :

- (a) Discuss in detail about care and management of buffaloes during summer months. 20
- (b) How does mixed farming differ from specialized farming? Discuss the advantages of mixed farming under Indian conditions. 15
- (c) Discuss briefly about the factors affecting the growth of animals. 15



SPACE FOR ROUGH WORK



CCE(M)/AHS-II/10/2024
ANIMAL HUSBANDRY AND
VETERINARY SCIENCE
(PAPER—II)

Time : 3 hours]

[Full Marks : 250

Please read each of the following instructions carefully before attempting the questions :

- (i) There are **eight** questions divided in **two Sections**.
- (ii) Candidate has to attempt **five** questions in all.
- (iii) Question Nos. **1** and **5** are compulsory and out of the remaining, **three** are to be attempted choosing at least **one** question from each Section.
- (iv) The number of marks carried by a question/part is indicated against it.
- (v) Word limit in questions, wherever specified, should be adhered to.
- (vi) Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

SECTION—A

1. Answer any five of the following questions :

10×5=50

- (a) What do you mean by castration? What are the different methods of castration in goats?
- (b) Briefly write about the various steps involved in anaesthesia of large animals.
- (c) What are the different types of placenta found in domestic animals?
- (d) What is coccidiosis? Write briefly about the disease in poultry.
- (e) What measures should be taken for clean milk production in a dairy farm?
- (f) Write a short note on hygiene and sanitation of slaughter house and meat processing premises.
- (g) What are the different channels of marketing poultry eggs and meat?

2. Answer the following questions :
- (a) How can you reduce the environmental pollution evolving from slaughter houses? 20
 - (b) What are the general principles of prevention and control of infectious diseases? 15
 - (c) What are the steps involved in the preparation of curd? 15
3. Answer the following questions :
- (a) Discuss about the causes, symptoms, treatment and prevention of milk fever in cattle. 20
 - (b) What are the commonly occurring viral diseases of poultry and how will you prevent them? 15
 - (c) Write about the general principles of prevention and control of infectious diseases. 15
4. Answer the following questions :
- (a) What are the important factors responsible for emergence of zoonotic diseases? 20
 - (b) Describe briefly the deficiency diseases commonly occurring in poultry. 15
 - (c) What are the routine tests for quality control of milk? 15
- SECTION—B**
5. Answer **any five** of the following questions : 10×5=50
- (a) What are the different sources of contamination of milk?
 - (b) How will you differentiate infectious disease from contagious disease?
 - (c) Write a brief note about Indian dairy products.
 - (d) Write about the digestive system of pigs.
 - (e) Describe briefly about the different methods or routes of drug administration in animals.
 - (f) Write a short note on the nutritive value of meat.
 - (g) What are the housing requirements for different categories of dairy cattle?
6. Answer the following questions :
- (a) Discuss in detail about the direct and indirect effects of climate on animal. 20
 - (b) What are the common viral diseases of pig? Discuss one most commonly occurring viral disease affecting pig production in India. 15
 - (c) How is an egg formed in the reproductive tract of a fowl? Explain with a diagram. 15

7. Answer the following questions :

- (a) Write about the different methods of pasteurization of milk, its merits and demerits. 20
- (b) Describe in detail about the different methods of milking cows. 15
- (c) Discuss about the role of wild animals in transmission of zoonotic diseases. 15

8. Answer the following questions :

- (a) Describe the common metabolic disorders of cattle. What are the measures to be taken to prevent these disorders? 20
- (b) What is horse colic? What are the different types of colic in horse? What measures are to be adopted to prevent its occurrence? 15
- (c) Write briefly about the *ante-mortem* inspection of food animals. 15



SPACE FOR ROUGH WORK

