(8 pages)

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Code No.: 7882

Sub. Code: WZOSE 31

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2024.

Third Semester

Zoology

Skill Enhancement Course-II — DAIRY FARMING

(For those who joined in July 2023 onwards)

Time: Three hours

Maximum: 75 marks

PART A — $(15 \times 1 = 15 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- 1. Which of the following is a major advantage of dairy farming?
 - (a) High capital investment
 - (b) Regular source of income
 - (c) Limited market demand
 - (d) High susceptibility to diseases

- 2. Which of the following is an indigenous breed of cattle in India?
 - (a) Holstein Friesian (b) Jersey
 - (c) Sahiwal
- (d) Ayrshire
- 3. Cryopreservation of semen in artificial insemination involves freezing semen at very low temperatures
 - (a) -20°C
- (b) -80°C
- (c) -196°C
- (d) 0°C
- 4. Which of the following is a primary consideration when designing a dairy house for cattle?
 - (a) Aesthetic appeal
 - (b) Proximity to urban areas
 - (c) Ventilation and airflow
 - (d) Access to entertainment facilities
- 5. What is a common practice to ensure cows maintain body heat during cold winter months?
 - (a) Reducing feed intake
 - (b) Providing additional high-energy feed
 - (c) Increasing milking frequency
 - (d) Allowing cows to graze outside more frequently

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- 6. Why is it important to regularly sanitize water troughs in a dairy house?

 (a) To reduce water consumption

 (b) To prevent the growth of algae and bacteria

 (c) To enhance the taste of water

 (d) To keep the barn smelling fresh

 7. Which of the following is considered a roughage feedstuff for livestock?

 (a) Corn silage (b) Soybean meal
- 8. "Rickets" in cattle, characterized by bone deformities, is primarily caused by a deficiency in which mineral?
 - (a) Phosphorus

Wheat bran

(b) Magnesium

Canola oil

- (c) Calcium
- (d) Sodium
- 9. Which nutrient is especially crucial for a pregnant dairy cow to ensure proper fetal development and a healthy pregnancy?
 - (a) Carbohydrate
- (b) Salt
- (c) Sugar
- (d) Protein

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- 10. What is the primary carbohydrate found in milk?
 - (a) Sucrose
- (b) Glucose
- (c) Lactose
- (d) Fructose
- 11. Which of the following is a common method of pasteurization for milk?
 - (a) Boiling at 100°C for 30 minutes
 - (b) Heating at 72°C for 15 seconds
 - (c) Freezing at -20°C for 10 hours
 - (d) Heating at 50°C for 5 minutes
- 12. Which vitamin in milk helps with the absorption of calcium?
 - (a) Vitamin A
- (b) Vitamin D
- (c) Vitamin E
- (d) Vitamin K
- 13. Which of the following bacteria is commonly associated with mastitis in dairy cattle?
 - (a) Escherichia coil
 - (b) Staphylococcus aureus
 - (c) Mycobacterium bovis
 - (d) Salmonella enterica

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[P.T.O.]

- 14. Which class of anthelmintics is commonly used for deworming cattle?
 - (a) Benzimidazoles
 - (b) Antibiotics
 - (c) Antivirals
 - (d) Antifungals
- 15. Which of the following vaccines is used to protect against Blackleg in cattle?
 - (a) Clostridial vaccine
 - (b) Bovine leukemia virus
 - (c) Parainfluenza-3 virus vaccine
 - (d) Bovine viral diarrhea vaccine

PART B — $(5 \times 4 = 20 \text{ marks})$

Answer ALL questions, by choosing either (a) or (b).

Each answer should not exceed 250 words.

16. (a) Quote the advantages of dairy farming and its contribution on rural development.

Or

(b) Describe the key aspects of dairy cattle management.

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17. (a) Explain the key considerations in the construction of a dairy house.

Or

- (b) Describe the cleaning methods used in a dairy house.
- 18. (a) Determine the importance and types of energy-rich diets for cattle.

Or

- (b) Write about the feeding management for calves for healthy growth and development.
- 19. (a) Analyze the composition of milk and their nutritional benefits.

Or

- (b) Predict the role of milk in human health.
- 20. (a) Assess the impact of protozoal infections in cattle.

Or

(b) Evaluate the reasons for dehorning in cattle and the common methods used for dehorning.

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PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, by choosing either (a) or (b).

Each answer should not exceed 600 words.

21. (a) Describe the classification of cattle breeds and provide examples of each type.

Or

- (b) Define the common methods in cattle breeding.
- 22. (a) Illustrate different types of housing systems used in dairy farming.

Or

- (b) Explain the key practices involved in winter management of a dairy farm.
- 23. (a) Write the importance of roughages in livestock diets and list some common types roughages used in animal feed.

Or

(b) Explain the feeding pattern of pregnant dairy animals to ensure both the cow's health and the development of the fetus.

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24. (a) Focus on the process of milk spoilage and the causative factors.

Or

- (b) Appraise the employment opportunities provided by dairy farming and their impact on rural development.
- 25. (a) Summarize any three common bacterial diseases in cattle, including their symptoms and control measures.

Or

(b) Conclude the importance of biosecurity measures for livestock.

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