

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR
SEMESTER END THEORY EXAMINATION, B. Tech. Dairy Technology 2019-20

Semester	: I (V Dean)	Academic Year	: 2019-2020
Course No.	: DBM-101	Course Title	: Milk Production Management and Dairy Development
Credits	: 2+1=3	Total Marks	: 50
Day & Date	: Saturday, 11.01.2020	Time	: 11.00 to 13.00 Hrs

- Note :**
- 1) All questions from **Section 'A'** are compulsory.
 - 2) Solve **Any Three** questions from **Section 'B'**.
 - 3) Draw neat and well labelled diagram wherever necessary.

SECTION –‘A’

Q. 1. A) Choose the most appropriate answer from the options given below. (05)

- i) Dry period of cow is days.
 - a) 40
 - b) 50
 - c) 30
 - d) 60
- ii) Green forage crops preserved under anaerobic condition
 - a) Concentrate
 - b) Roughage
 - c) Hay
 - d) Silage
- iii) The smallest European cattle breed with highest fat percentage is
 - a) Jersey
 - b) Holstein- Friesian
 - c) Brown Swiss
 - d) Ayershire
- iv) Which of the following has been used extensively for genetic improvement of the buffaloes in India?
 - a) Outcrossing
 - b) Grading- up
 - c) Crossbreeding
 - d) inbreeding
- v) Which of the following is used for cryo-branding
 - a) Liquid nitrogen
 - b) Boric acid
 - c) Dry ice
 - d) Zinc oxide

B) Define the following. (05)

- i) Dry period
- ii) Culling
- iii) Parturation
- iv) Maintenance ration
- v) Silage

Q. 2 A) Give the reason for the following. (05)

- i) Milking should be completed within 5-7 minutes.
- ii) Dry period is important in cows.
- iii) Excess fatness in breeding bulls is not desired.
- iv) After 16 weeks of pregnancy in cows, pregnancy diagnosis by rectal palpation becomes difficult.
- v) Abomasum is considered as "true stomach" in cows.

(P.T.O.)

- B) State whether True or False. If false, rewrite the statement after making necessary corrections. (05)
- i) Adrenaline hormone is responsible for milk let down.
 - ii) Sahiwal is draft purpose breed of cattle.
 - iii) Tagging is the method of identification of animal.
 - iv) Separation of calf from mother is culling.
 - v) Disbudding is conducted in adult cattle.

SECTION – 'B'

- Q. 3 A) Explain about care and management of new born calf. (05)
B) Discuss various farm practices performed at dairy farm. (05)
- Q. 4 A) Write in details the essential requirement for starting a dairy farm. (05)
B) Describe any two common diseases of cow. (05)
- Q. 5 A) Explain bovine digestive system with a neat diagram. (03)
B) Differentiate between inbreeding and outbreeding. (03)
C) Explain progeny testing. (04)
- Q. 6 A) Write a short note on various methods of milking. (03)
B) Briefly describe phases of estrous cycle in dairy cattle. (03)
C) Enumerate various components of reproductive tract of dairy cattle along with their function. (04)
- Q.7 Differentiate between *Bos indicus* and *Bos taurus*. Discuss in brief about classification of cattle breeds. (10)
