

Total No. of Printed Pages:2

SUBJECT CODE NO:- B-2225
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. T.Y (Sem.-VI) Examination OCT/NOV 2019
Dairy Science and Technology Paper- XIX
(Genetics and animal breeding)

[Time: 1:30 Hours]

[Max.Marks:50]

Please check whether you have got the right question paper.

N.B

1. Attempt all questions.
2. Illustrate your answer with suitable labeled diagram.

Q.1 Define meiosis. Explain the phases of meiosis. 20

OR

Define sterility. Describe physiological causes of sterility.

Q.2 What are the methods of out breeding? Explain species hybridization and grading-up. 20

OR

Write short notes on any four of the followings:

- a) Law of segregation
- b) Sex chromosomes
- c) Measures of breeding efficiency
- d) Pedigree selection
- e) Out crossing
- f) Effects of in breeding

Q.3 Write correct answer of the following multiple choice questions: 10

- 1) ----- is reductional cell division
 - a) Meiosis
 - b) Mitosis
 - c) Usual division
 - d) None of above
- 2) ----- is the diploid cell formed by fertilization.
 - a) Embryo
 - b) Zygote
 - c) Foetus
 - d) All above
- 3) In mendel's monohybrid cross phenotypic ratio is -----
 - a) 1:2:1
 - b) 2:1:1
 - c) 3:1
 - d) 1:3
- 4) In ----- mutation usually one character is affected at one time.
 - a) Chromosomal
 - b) Gene
 - c) a and b
 - d) none of above

- 5) ----- is the cause of hereditary variation.
- a) Food
 - b) Light
 - c) Temperature
 - d) Mutation
- 6) In breeding involves the mating of related individuals within ----- generations.
- a) 4-6
 - b) 6-8
 - c) 6-7
 - d) 8-10
- 7) ----- is the mating of animals of different breeds.
- a) In breeding
 - b) Out crossing
 - c) Species hybridization
 - d) Cross breeding
- 8) In ----- bulls can be selected on the milk records of their female relatives.
- a) Pedigree selection
 - b) Progeny testing
 - c) Performance testing
 - d) None of above
- 9) Cryptorchidism is the example of ----- sterility.
- a) Anatomical
 - b) Accidental
 - c) Nutritional
 - d) Genetical
- 10) ----- cause of sterility is mainly due to disturbed co-ordination and imbalance among the various hormones .
- a) Nutritional
 - b) Accidental
 - c) Physiological
 - d) Anatomical