

Total No. of Printed Pages: 02

SUBJECT CODE NO: - Y-2084
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc F.Y. (Sem-II)
Examination March / April - 2023
Zoology Paper-V
Genetics - I

[Time: 1:30 Hours]

[Max. Marks: 50]

Please check whether you have got the right question paper.

N. B

- 1) All questions are compulsory.
- 2) Illustrate your answer with suitable labelled diagram.

Q1 What is genetics? Explain in details mendel's law of dominance with suitable example. 20

OR

Define multiple alleles and describe various coat colour in rabbit.

Q2 Describe in detail theory of sex determination in chickens (birds) 20

OR

- a) Importance of blood groups
- b) Male sterility
- c) Parthenogenesis
- d) Gene mutation
- e) Complementary factor
- f) History of Gregory Johan Mendel

Q3 Select and write correct answer from the given alternatives in each question 10

- 1) Mendel studied the inheritance of different _____ pair of contrasting character
 - a) Eight b) seven c) Six d) Five
- 2) The expression of a single character is controlled by interaction of more than one pair of gene is called
 - a) Factor hypothesis
 - b) Multiple alleles
 - c) Dominant gene
 - d) Inhibitory factor
- 3) The person belonging to blood group "AB" have _____ antibody in plasma
 - a) Anti B or b
 - b) Anti A or a
 - c) Both a & b
 - d) No antibody
- 4) Erythroblastosis foetalis is _____ disease
 - a) Mental b) cancer c) pleotrophy d) haemolytic
- 5) Diploid chromosome number in human is
 - a) 44 b) 48 c) 46 d) 23
- 6) The sex chromosome was first discovered by
 - a) MC clung b) stevens c) Henking d) Bridges

- 7) The mutation is change that is _____
- a) Inherited
 - b) Acquired
 - c) Man made
 - d) Autosome
- 8) Sickle cell anaemia is the classical example in
- a) Hybrid
 - b) Pleotropy
 - c) Mutation
 - d) Haemophilia
- 9) Which of the following ratio show complementary gene interaction?
- a) 9:3:3:1
 - b) 1:2:1
 - c) 3:1
 - d) 9:7s
- 10) The term genetics was first used by
- a) Willam bateson
 - b) mendel
 - c) MC Clung
 - d) Darwin