Total No. of Printed Pages:2

SUBJECT CODE NO:- 2084
FACULTY OF SCIENCE AND TECHNOLOGY
B.Sc. F.Y Sem. II
Examination March/April-2022 (To Be Held In June/July-2022)
Zoology Paper-V
Genetics – I

[Time: 1.53 Hours] **[Max.Marks:50]**

Please check whether you have got the right question paper.

N.B i) Attempt all questions
ii) Illustrate your answer with suitable labeled diagram

Q.1 Describe in detail mendels law of independent assortment with suitable example. 20

OR

Give an account of blood group system in man add a not on its importance 20

Q.2 What is gene interaction? Explain any three modified medelian ratio 20

OR

Write a short note on any four 20

a) Phenylketonuria (pku)
b) Gynandromorph
c) Inhibiting factor
d) Albinism
e) Lethal gene
f) Kappa particles in paramecium

Q.3 Select and write correct answer from the given alternatives in each question 10

1) When a single character is controlled by two or more pairs of alleles independently the gene are called ---------- gene.
a) Triplicate b) Duplicate c) Dominant d) Recessive

2) Which of the following blood group belonging to the category of universal recipient
a) A b) AB c) B d) O

3) A phenotypic ratio of 9:3:3:1 obtained in F_2 generation is called ---------- cross.
a) Trihybrid b) monohybrid c) Dihybrid d) Tetrahybrid

4) Hypertrichosis is common in
a) India b) Shrilanka c) Both A & B d) None

5) A pair of gene located at corresponding positions on a pair of homologous chromosome is
a) Alleles b) Lethal gene c) Linked gene d) Antigen

6) Cytoplasmic inheritance was first described by
   a) Correns b) Boycott c) Mendel d) Sonneborn

7) Anterior – posterior gynandromorphs is commonly in
   a) Beetles b) Drosophila c) moth d) bees

8) Cri- du – chat syndrome was first described by
   a) Langdon b) Patau c) Edward d) Lejeune

9) DNA Fingerprinting is applicable in
   a) Gene therapy b) Cloning c) Forensic science d) Hybridization

10) Tyrosine is converted in to DOPA and DOPA serves as a precursor for
   a) Adrenaline b) Melanin c) non- adrenaline d) All of these