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SUBJECT CODE NO:- B-2080
FACULTY OF SCIENCE & TECHNOLOGY
B. Sc. S.Y. (Sem- III)
Examination November/December- 2022
Zoology Paper-VIII
Genetics- II

[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 population genetics. Explain gene pool. 20

OR

Define gene. Explain transcription of gene.

Q.2 Define microbial genetics, explain transduction. 20

OR

Write short note on any FOUR of the following.

a. Hemophilic
b. Dizygotic twins
c. Turner's syndrome
d. PKU
e. Phase Vector
f. Hardy Weinberg's Law

Q.3 **Multiple Choice Questions: -** 10

1) Sex linked characters are _____
   a) Recessive b) Forend only in Man c) Dominant d) Not inherited

2) Conjoined twins are also known as _____
   a) Fraternal twins b) Siamese twins c) Dizygotic twins d) None of the above

3) Red blindness is called _____
   a) Night blindness b) Protonopia c) Deuteronopia d) Albinism

4) Name the bacteria which were used by Griffith for his experiments.
   a) E. coli b) Diplococcus Pneumonia c) Lacto bacillus d) Salmonella Typhi

5) Which of the following enzyme is not a tool for a DNA technology?
   a) Endonuclease b) polymerase c) Lipase d) Ligases

6) First licensed drug produced through genetic engineering is _____
   a) Interferon b) Insulin c) Penicillin d) Somatotropin

7) Mongolian syndrome is due to _____
   a) One extra chromosome
   b) One extra sex chromosome
   c) One extra chromosome in 21st pair
   d) One less sex chromosome

8) Albinism is a congenital disorder resulting from the lack of which enzyme?
   a) Tyrosinase b) Xanthine oxidase c) Catalase d) Fructokinase

9) Which of the following are non-sense codons?
   a) AUG b) GUG c) UAA d) UCU

10) Restriction enzymes are also called _____
   a) Restriction sites
   b) Restriction endonuclease
   c) Restriction polymerase
   d) Endonuclease