M.Sc. Zoology (First Semester)
Term End Examination Dec.-2020
Compulsory/Optional
Group-
Paper –III

Name/ Title of Paper: Quantitative Biology [Maximum Marks : 80
Time : Three Hours] Minimum Marks : 29

नोट :दोनों खण्डों से निदेशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

1- Answer each of the following question in one sentence only: 1X10
 (a) What is matrix?
 (b) Write the types of statistical dater?
 (c) What is histogram?
 (d) What is Binomial Distribution?
 (e) What is F-test-?
 (f) What is correlation?
 (g) Write the methods of study variance?
 (h) Write about degree of freedom?
 (i) Write the types of models used in mathematical modelling.
 (j) What is simulation.

Answer the following questions. 2X5

(a) Explain diagrammatical presentation of duster.
(b) what is +-test
(c) Write the property of profanity.
(d) write notes on regression.
(e) Determine mode from the following data.

50	62	48	50	63	65	50	48	43	62	50	50

Section-B

Answer all question: 15X4

2- Give an account of matrics and vertors.

Or

Write the methods of data collection and presentation.

Unit-II

3- Calculation mean $(\overline{X})$ from the following data.

Roll No.	1	2	3	4	5	6	7	8	9	10
Marks	33	35	44	34	41	45	39	46	36	37

Or

Write short notes on following
1- T-test
2- Chi-square test

Unit-III

4- A bag contain 10 white and 6 black balls. Two ball's are drowns at random one after the other with out replacement find the probability that both the balls drawn are black.

Or

Explain the analysis process of variance

Unit-IV

5- Explain different types of mathematical modelling.

Or

Define mathematical models and explain its properties?