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1604E233

Candidate's Seat No :_____

M.Sc. Sem.-4 Examination

510

Statistics (EC)

April-2025

Time : 2-30 Hours] **[Max. Marks : 70**

Q-1 (A): Explain the method of data collection in environmental statistics in detail. [07]

Q-1 (B): Explain the significance of sustainable development goals in environmental statistics. [07]

=OR=

Q-1 (A): Explain the method of questionnaire in environmental statistics with the help of a suitable chart. [07]

Q-1 (B): Differentiate between primary data and secondary data in terms of environmental statistics. [07]

Q-2 (A): State the properties of Poisson distribution from environmental perspective. [07]

Q-2 (B): State the uses and limitations of chi square test from environmental perspective. [07]

=OR=

Q-2 (A): Explain frequency distribution from ecological and environmental perspective. [07]

Q-2 (B): Explain cross tabulation concept and its application in environmental statistics. [07]

Q-3 (A): Describe the Predator Prey Model in environmental statistics and state its assumptions. [07]

Q-3 (B): Write a short note on Point Source Pollution from environmental perspective. [07]

=OR=

Q-3 (A): Describe the Gaussian Plume Model under ecological perspective. [07]

Q-3 (B): Describe the Box Model in environmental statistics. [07]

Q-4 (A): Discuss the phenomenon of ONE WAY ANOVA classification along with general assumptions. [07]

Q-4 (B): Write a short note on Randomisation, Replication and Local Control in environmental statistics. [07]

=OR=

Q-4 (A): Explain regression analysis from environmental perspective in detail. [07]

(P.T.O)

Q-4 (B): Explain the phenomenon of multiple regression from environmental perspective. **[07]**

Q-5: ANSWER IN SHORT: [ANY 7] **[14]**

1. Define Type I error in environmental statistics. Give an example.
2. Define Type II error in environmental statistics. Give an example.
3. Define Environmental Sampling. Give an example.
4. State the types of correlation from environmental perspective. Give an example.
5. Define Environmental Inferential Research Approach. State its nature.
6. How many climate zones are there? Give an example of environmental data of various climate zones.
7. State any two statistical tools for data analysis in environmental statistics.
8. What do you mean by formal experimental design in environmental statistics? Give an example.
9. State any one measure to deal with air pollution and soil erosion.
10. Say True or False: "Euler Lotka equation in environmental studies gives the intrinsic growth rate." Also justify your answer.
11. Define Simple Hypothesis in environmental research. Give an example.
12. Define Composite Hypothesis in environmental research. Give an example.

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