

K-376

Total Pages : 3

Roll No.

MBOT-606

BIOSTATISTICS AND ECOLOGY

M.Sc. Botany (MSCBOT)

4th Semester Examination, 2023 (Dec.)

Time : 2 Hours]

[Max. Marks : 35

Note : This paper is of Thirty Five (35) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

SECTION–A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

(2×9½=19)

1. What is soil profile? Describe it in detail.
2. What are biogeochemical cycles? Discuss Nitrogen cycle in detail.
3. What is biotic community? Give a detailed account of analytical and synthetic characters of a plant community.
4. Discuss the trophic level, food chain and energy flow in an ecosystem.
5. Write detailed notes on any *two* of the following:
 - (a) Variance.
 - (b) Green House Gases.
 - (c) Biodiversity hot spot.
 - (d) Food web.

SECTION-B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only. (4×4=16)

1. What is ecosystem? Give an account of abiotic components of the ecosystem.

2. What do you understand by the depletion of ozone layer?
 3. What is acid rain? Write a note on the process of formation of acid rain and its impacts.
 4. What do you understand by climate change? What are the major impacts of climate change and its mitigation techniques?
 5. Write short notes on any *two* of the following:
 - (a) Ozone Depleting Substances (ODS).
 - (b) Stone leprosy.
 - (c) Degrees of freedom.
 6. Describe levels of Ecology.
 7. Write short notes on any *two* of the following :
 - (a) Applications of computers in biology.
 - (b) Water pollution.
 - (c) Median.
 8. What are ecological pyramids? Describe pyramid of energy in brief.
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