

MSc Sem.-2 Examination

408

Botany

May-2025

Time : 2-30 Hours]

[Max. Marks : 70

Instructions: All Questions carry equal marks
Attempt all Questions

- Q I What are limiting factors? Write a note on the three laws that explain the principles of limiting factors. 14
- OR
- Q I A. Write a note on Nitrogen cycle. 7
B. What are r-selected and k-selected species? Give their characteristics. 7
- Q II Give the characteristics and stages of Hydrosere in detail. 14
- OR
- Q II A. What is speciation? Explain the types of speciation. 7
B. Write about the roles of GSBB and NBA in biodiversity conservation. 7
- QIII Write a detailed note on Environmental Impact Assessment. What are the drawbacks of EIA which limits its effectiveness and how can they be solved according to you? 14
- OR
- Q III A. Write a note on consequences of Climate Change. 7
B. Note on sources, trends and role of various greenhouse gases in inducing climate change. 7
- Q IV Write a note on principles, types and components of remote sensing. 14
- OR
- Q IV A. Write a note on applications of Remote Sensing. 7
B. What are the common software and satellite data sources used in remote sensing? Write the advantages offered by Bhuvan database. 7
- Q V Attempt any 7 out of 12 MCQs/Short question (One- or Two-line answer)/ Fill in the blanks/True or False etc. 14
- 1 What do the symbol “-, 0” denote in terms of ecological interaction? 2
- 2 Limiting factor for primary production in open sea is 2
A) Constant tides
B) Low nutrients
C) High salinity
D) High temperature
- 3 Which among the following is FALSE about r-selected species? 2

(P.7.0)

- A) Long maturation time
 - B) Large number of offsprings
 - C) Short life cycle
 - D) Require little or no parental care
- 4 Explain the term 'Quadrat'. 2
- 5 If the milk is left open, lactose is fermented first to produce lactic acid by lactic acid bacteria. This is followed by an attack of proteolytic bacteria which again increases the pH. Finally, the milk fats are degraded which results in rancidity (spoilage of milk). This is an example of 2
- A) Ecological succession
 - B) Antagonism
 - C) Interference competition
 - D) Microevolution
- 6 Define beta and gamma diversity. 2
- 7 "The phenomenon of Carbon dioxide (CO₂) enrichment, which is a consequence of climate change, is advantageous for C3 plants but not C4 plants." The given statement is TRUE or FALSE? 2
- 8 Explain the term 'Phytostabilization'. 2
- 9 The ozone layer is found in _____ layer of the atmosphere. 2
- 10 What is the full form of 'RADAR'? 2
- 11 What is the full form of 'PSLV'? 2
- 12 "Remote sensing is a non-contact recording of information". The given statement is TRUE or FALSE? 2
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