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V—74—2017

FACULTY OF SCIENCE

B.Sc. (Second Year) (Fourth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2017

BOTANY

Paper IX

(Ecology and Environmental Biology)

(MCQ & Theory)

(Monday, 13-11-2017)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—40

- N.B. :—**
- (i) Attempt All questions.
 - (ii) All questions carry equal marks.
 - (iii) Draw well labelled diagram wherever necessary.
 - (iv) Choose the correct answer for MCQs.

MCQ

1. Multiple Choice Questions :

- (i) The term ecosystem was coined by :
 - (a) Nagelli
 - (b) Hanstein
 - (c) Stanley
 - (d) Tansley A.G.
- (ii) The non-living factors of the environment are called factors.
 - (a) Biotic
 - (b) Abiotic
 - (c) Both (a) and (b)
 - (d) None of these
- (iii) Casuarina and Nerium are Xerophytes.
 - (a) Ephemerals
 - (b) Succulents
 - (c) Non-succulents
 - (d) None of these

P.T.O.

- (iv) Some halophytes produces negatively geotrophic breathing roots called as :
- (a) Pneumatophores (b) Spermatophores
(c) Chromatophores (d) None of these
- (v) The final stage of hydrarch represent stage.
- (a) Phytoplankton (b) Marsh Meadow
(c) Reed Sedge (d) Climax Forest
- (vi) The arrangement of organisms in different layers in a community is :
- (a) Diversity (b) Niche
(c) Stratification (d) None of these
- (vii) The pyramid of biomass is always :
- (a) Upright (b) Curved
(c) Inverted (d) None of these
- (viii) Plant absorbs nitrogen in the form of :
- (a) Nitrate (b) Nitrite
(c) Ammonium (d) All of these
- (ix) Soil erosion can be prevented by :
- (a) Overgrazing (b) Removal of vegetation
(c) Afforestation (d) Deforestation
- (x) Chipko movement was held under the leadership of :
- (a) Vinoba Bhawe (b) Pandurang Hegde
(c) Prof. Madhav Gadgil (d) Sunderlal Bahuguna

Theory

2. What are ecological factors ? Describe light and atmosphere as ecological factors.

WT

(3)

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Or

Write notes on :

- (a) Temperature as ecological factor
- (b) Anatomical adaptations in *Nymphaea* petiole.

3. What are Xerophytes ? Describe morphological and anatomical adaptations in Xerophytes.

Or

Write notes on :

- (a) Biotic components of ecosystem
- (b) Food Web.

4. Describe causes and control of Soil Pollution.

Or

Write notes on :

- (a) Deforestation
- (b) Food Chain.

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