

D-6632

M.Sc. (IIIrd Semester) Examination, 2020

BOTANY

(Principles of Ecology)

Time Allowed : Three Hours

Maximum Marks : 70

SECTION - A

Note : Attempt any ten questions. Each question carries

1 mark.

10×1=10

Q. 1. Objective type :

- (1) The earth summit held in 1992, was organised at _____.
- (2) _____ is an agreement to mitigate emission of green-house gases.
- (3) Transition zone between two structurally different ecosystems is called _____.

(2)

- (4) The food chain, in which miroorganisms break down the energy rich compounds synthesized by producers is _____ food chain.
- (5) CITES stands for _____.
- (6) The evolution of new specie is known as :
 - (a) Succession
 - (b) Development
 - (c) Speciation
 - (d) Adaptation
- (7) Ecological pyramids were developed by :
 - (a) Charles Elton
 - (b) Crick Elton
 - (c) Mark Elton
 - (d) Merc Elton

(3)

(8) The rate at which organic matter is stored

after the basic metabolic process is :

- (a) Biomass
- (b) Metabolism
- (c) Net primary productivity
- (d) None

(9) Group of species exploiting a common

resource are called :

- (a) Ecological interactions
- (b) Guilds
- (c) Resource sharing
- (d) Competition

(10) In which process seeds germinate while they

still attached with mother plant ?

(4)

(a) Endospermy

(b) Gymnasium

(c) Protoandry

(d) Vivipary

(11) Capability of an organism of survive and

reproduce in a particular environment is

known as :

- (a) Adaptation
- (b) Ecological interactions
- (c) Succession
- (d) Life cycle

(12) Ramsar convention is based on :

- (a) Soil conservation
- (b) Wetland
- (c) Watershed
- (d) Climatic amelioration

(5)

SECTION - B

Note : Attempt any five questions. Each question carries
2 marks. **5×2=10**

Q. 2. Write notes (very short answer in 25-30 words
only):

- (1) Environment
- (2) Ecology
- (3) Ecosystem
- (4) Biodiversity
- (5) Producer
- (6) Edge species
- (7) Niche

SECTION - C

Note : Attempt any five questions. Each question carries
4 marks. **5×4=20**

Q. 3. Write short answer in 250 words :

D-6632

P.T.O.

(6)

- (1) Global warming
- (2) Agricultural pollution
- (3) Life form
- (4) Kyoto Protocol
- (5) Seed
- (6) Climate change
- (7) Seedling ecology

SECTION - D

Note : Attempt any three questions. Each question
carries 10 marks. **3×10=30**

Q. 4. Write essay type answer with internal choice where
necessary (more than 500 words) :

- (1) Comments on evolutionary ecology and
environmental concepts.
- (2) Describe the food chain, food web and energy
flow in an ecosystem.

D-6632

(7)

- (3) Explain the ecological succession with suitable diagrams.
- (4) Describe biodiversity conservation under changing climatic context.

OR

Describe the various types of environmental pollution with management aspects.

—————