



BCH-003-1015039 Seat No. _____

B. Sc. (Sem. V) (CBCS) Examination

August – 2021

B - 503 : Botany

(Ecology)

(New Course)

Faculty Code : 003

Subject Code : 1015039

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

Instructions :

- (1) Attempt any five questions out of the following questions.
- (2) Answer with draw labelled diagram wherever necessary.
- (3) Figures to the right side indicated total marks for the questions.

1. (A) Answer the following Objective type questions : 04

- (1) Define world: Ecosystem.
- (2) What is the difference between lotic and lentic ecosystem?
- (3) Who proposed the term ecosystem?
- (4) Write the name of two types of ecosystem.

(B) Write the short note on abiotic component of ecosystem. 02

(C) Write short note on artificial ecosystem. 03

(D) Describe Y shaped energy flow model. 05

2. (A) Answer the following Objective type questions : 04

- (1) Define: Ecology.
- (2) Define: Energy flow.
- (3) Write components of biotic factors.
- (4) Flow of energy is _____

(B) Give chart of types of ecosystem. 02

(C) Write short note on macro and micro consumers. 03

(D) Describe productivity of ecosystem. 05

3. (A) Answer the following Objective type questions :	04
(1) Define: Community	
(2) Give three zone names of deep ponds and lakes.	
(3) Write any two examples of Decomposers.	
(4) Define: Quadrates.	
(B) Write short note on Physiognomy.	02
(C) Explain transit method in details.	03
(D) Describe : Raunkiaer's life form method	05
4.(A) Answer the following Objective type questions :	04
(1) Define: Frequency.	
(2) Define: Density.	
(3) What is habitat?	
(4) Write any two xerophytic (desert) plant species.	
(B) Give two types of quadrates with it means.	02
(C) Discuss any synthetic characters of community structure.	03
(D) Describe qualitative characters of community structure.	05
5.(A) Answer the following Objective type questions :	04
(1) What do you mean by mono specific population?	
(2) Define: Natality rate	
(3) Define: Herbivorous.	
(4) Define: Carnivorous	
(B) Explain: Plant succession.	02
(C) Write a short note on secondary succession.	03
(D) Write a short note on Ecological pyramid.	05
6.(A) Answer the following Objective type questions :	04
(1) Write a formula of population.	
(2) Define: Mortality rate	
(3) Define: Decomposers.	
(4) Which pyramid is always found in upright position?	
(B) Explain causes of succession.	02
(C) Write short note on primary succession.	03
(D) Describe: Hydrosere succession.	05

7. (A) Answer the following Objective type questions :	04
(1) What is biological clock?	
(2) Give a calculating formula of average seed output.	
(3) What is Photobiology?	
(4) What is Synecology?	
(B) Give two principles of limiting factors.	02
(C) Draw only diagram of biological clock	03
(D) Explain two aspects of level of ecological nich.	05
8. (A) Answer the following Objective type questions :	04
(1) What is limiting factors?	
(2) Define: Autecology.	
(3) Define: Phenology.	
(4) Define term ecological niche?	
(B) Write any three method of breaking of seed dormancy.	02
(C) Describe Shelford's law of tolerance	03
(D) Summarise Autecology level.	05
9. (A) Answer the following Objective type questions :	04
(1) Give full form of GPS.	
(2) Give full form of IUCN.	
(3) Give two objectives of environmental education.	
(4) What is non formal environmental education?	
(B) Explain: Goal of environmental education?	02
(C) Write down any three laws related to water.	03
(D) Describe MAB programme.	05
10. (A) Answer the following Objective type questions :	04
(1) World environment day is celebrate on _____	
(2) What is the goal of environment education?	
(3) Give full form of UNESCO.	
(4) Give full form of WHO.	
(B) Write down the name of any two environmental agencies.	02
(C) Write down any three laws related to forest and wildlife.	03
(D) Explain five uses of GPS for environmental application.	05