PART C —  $(5 \times 8 = 40 \text{ marks})$ 

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 600 words.

(a) 'Environmental awareness in part of human life'- Discuss.

Or

- (b) Write an essay on Biogeochemical cycle.
- (a) Examine the biotic and abiotic components of the grassland eco system.

Or

- (b) With suitable diagram explain the morphological and anatomical adaptations of hydrophytes.
- (a) Explain the Raunkiaer's life forms of flowering plants.

Or

- (b) Give elaborate note on migration and cesis process.
- 19. (a) Elucidate the sources of Xenobiotics.

Or

- (b) What is biosensor? Explain the important components of biosensor.
- (a) Describe the vegetation types seen in India.
   Or
  - (b) Write an essay on principle of phytogeography.

Page 4 Code No.: 11579 E

Reg. No. : .....

Code No.: 11579 E Sub. Code: JMPB 63

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2019. Sixth Semester

Plant Biology and Biotechnology - Main PLANT ECOLOGY AND PHYTOGEOGRAPHY (For those who joined in July 2016 onwards)

Time: Three hours

Maximum: 75 marks

PART A —  $(10 \times 1 = 10 \text{ marks})$ Answer ALL questions.

Choose the correct answer:

- 1. What is the name given to study the interrelationship between organism and their environment?
  - (a) Ecology
- (b) Eco system
- c) Phyto geography (d)
- (d) Ethology
- 2. What type of light waves are coming from sun?
  - (a) Electromagnetic
- b) Longitudinal
- (c) Transverse
- (d) All of these
- 3. What is the level of green plants in food chain?
  - (a) First trophic level
  - (b) Second trophic level
  - (c) Third trophic level
  - (d) None of these

4.	How does the pyramid of number in a pond ecosystem appear?
	(a) Irregular (b) Inverted (c) Upright (d) Spindle shaped
5.	<ul> <li>What is the name given to species variation in different ecosystems of geographical area?</li> <li>(a) Ecological unit</li> <li>(b) α - indese diversity</li> </ul>
	<ul> <li>(c) Ecosystem diversity</li> <li>(d) β-indese diversity</li> </ul>
6.	How many stages are there in hydro sere succession?
	(a) 6 (b) 7
	(c) 8 (d) 9
7.	What is the common organism found in polluted water?
	(a) E.Coli (b) Chlorella
	(c) Fungi (d) None of these
8.	When large amount of sewage waste is dumped in river, what will happen to its biological oxygen demand?
	(a) Slightly decrease (b) Remain unchanged
	(c) Increase (d) More decrease
9.	Which of the following part of India have more every green forests?
	(a) Assam (b) Rajasthan
III X	(c) Odisha (d) Utter pradesh
	Page 2 Code No. : 11579 E

Remote sensing refers to 10. Aircraft based Satellite (b) (d) None of these Both (a) and (b) PART B —  $(5 \times 5 = 25 \text{ marks})$ Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words. Explain the soil profile with diagram. Write short notes on: Symbiosis Mycorrhizal association. Describe the different types of ecological pyramids with examples. Or Explain the physiological adaptations of xerophytes. 13. Write about colonization. Or Describe the line transect method of vegetation analysis. Discuss the types of endemism in plants. (a) 14. Or Write notes on bio indicator. What is continental drift? Discuss its salient 15. (a) features. Or

Describe the uses of biosensor.

Page 3

Code No.: 11579 E