

Total No. of Printed Pages—3

5 SEM TDC BOT M 7

2018

(November)

BOTANY

(Major)

Course : 507

(Plant Ecology, Phytogeography and Evolution)

Full Marks : 48

Pass Marks : 19/14

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. (a) Express in one word : 1×3=3
- (i) The succession resulting from changes brought about by factors external to the community
 - (ii) Species confined to a particular area
 - (iii) The transitional zone between terrestrial and aquatic ecosystems
- (b) Fill in the blanks : 1×2=2
- (i) Lawrence's principle is related with _____ phytogeography.
 - (ii) Jean Baptiste de Lamarck published his theory in the book _____.

(2)

(c) Give precise accounts on the following :
3×3=9

- (i) Pyramid of biomass
- (ii) IUCN and Red Data Book
- (iii) Raunkaier's law of frequency

2. Define ecosystem. Write about the structure and function of ecosystem. 2+4+4=10

Or

What is plant community? Describe elaborately the analytical and synthetic characters of plant community. 2+4+4=10

3. What is greenhouse effect? What are the present and possible impacts of global warming? Mention the role of IPCC towards global warming threat. 3+5+4=12

Or

Answer/Explain the following : 4×3=12

- (a) Define and distinguish between *ex situ* and *in situ* conservations.
- (b) Morphological differences between hydrophytes and xerophytes
- (c) WWF

(3)

4. Write precise notes on the following : 6+6=12

- (a) Brief outline on phytogeographical regions of India

Or

Principles of phytogeography

- (b) Modern theory regarding biochemical origin of life

Or

Geological time scale

★ ★ ★