

Total No. of Printed Pages—3

**5 SEM TDC ZOO M 5**

**2 0 1 7**

( November )

**ZOOLOGY**

( Major )

Course : 505

**( Environmental Biology and Wildlife )**

*Full Marks : 48*

*Pass Marks : 19/14*

*Time : 2 hours*

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

1. Fill in the blanks :

1×5=5

(a) The relationship between biotic and abiotic factors is known as \_\_\_\_\_ .

(b) Population density  $d = \frac{n/a}{t}$  where  
 $n$  = number of individuals,  $a$  = \_\_\_\_\_ ,  
 $t$  = time.

(c) \_\_\_\_\_ cycle has no atmospheric phase.

(d) The community that ends a succession is termed as \_\_\_\_\_ .

(e) Manas National Park is situated in the district \_\_\_\_\_ .

( 2 )

2. Distinguish between the following (any *two*) :  
4×2=8

- (a) Biome and Ecotone
- (b) Biotic factors and Abiotic factors
- (c) Pyramid of number and Pyramid of biomass

3. Write short notes on any *two* of the following :  
5×2=10

- (a) River dolphin
- (b) Man and wildlife conflict
- (c) Biodiversity hot spot

4. Define population with examples. Explain how immigration and emigration affect population density.  
2+6=8

Or

Write about the Shelford's law of tolerance. 8

5. What is ecological backlash? Justify that agrochemicals are used for crop production but it creates environmental problem. 2+6=8

Or

Define ecological succession and write about main types of succession. 2+6=8

( 3 )

6. Write about the non-renewable resources of North-East India. 9

Or

What is biogeochemical cycle? Discuss the cycling of nitrogen in ecosystem. 2+7=9

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