

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1

ENVIRONMENTAL BIOLOGY

SECTION -A (UNIT- I)

1. Autecology
2. Synecology
3. Precipitation
4. Hard water
5. Soft water
6. Buoyancy
7. Secchi disc
8. PH or Hydrogen ion concentration
9. Epilimnion
10. Hypolimnion
11. Thermocline or metalimnion
12. Humus
13. Humification and mineralization

SECTION B

1. Write about the divisions of ecology
2. Write notes on scope of ecology
3. Write about the Forms of water
4. Write about the types of water
5. Define about Soil and explain the types of soil
6. Explain about the soil profile in detail

SECTION C

1. Describe about the properties of water
2. Describe in detail about the thermal adaptations
3. Describe pedogenesis and add notes on the factors influencing pedogenesis

SECTION A (UNIT II)

1. Epilimnion
2. Hypolimnion
3. Thermocline or metalimnion
4. Eurythermal
5. Stenothermal
6. Poikilothermic animals or thermo confirmers
7. Homiothermic or thermo regulators
8. Gloger's rule
9. Bergman's rule
10. Allen's rule
11. Jordan's rule
12. Rensch's rule
13. Heat coma and chill coma
14. Diurnal migration
15. Hibernation
16. Aestivation
17. Diapause
18. Euphotic zone
19. Despotic zone
20. Apotic zone
21. Thiamine dimer
22. Photomorphogenesis
23. Photokinesis
24. Phototaxis
25. Phototrophism
26. Photoperiodism
27. Circadian rhythm
28. Lunar rhythm
29. Swarming of palolo worm

30. Grunion
31. Atmosphere
32. Stratosphere
33. Lithosphere
34. Hydrosphere

SECTION B

1. Explain about thermal stratification
2. Discuss about the thermal adaptations
3. Explain about the effect of temperature on morphology
4. Discuss about the effect of temperature on cyclomorphosis
5. Write notes on hibernation
6. Write short notes on diapause
7. Explain about the influence of light on locomotion and movement
8. Explain about the Leibig's law of minimum

SECTION C

1. Explain about thermal adaptation in detail
2. Temperature as a limiting factor- Discuss
3. Light as a limiting factor- Discuss
4. Write about the Shelford's law of tolerance

SECTION-A (UNIT III)

1. Neutralism
2. Commensalism
3. Mutualism
4. Symbiosis
5. Parasitism
6. Predation
7. Predator and prey
8. Antagonism
9. Antibiosis

10. Competition
11. Gause's principles or competitive exclusive principle
12. Animal Association
13. Social Organisation
14. Colony Formation

SECTION B

1. Write short notes on Antagonism
2. Write short notes on Mutualism
3. Write short notes on Parasitism
4. Write short notes on Predation
5. Give an account on animal association
6. Give an account on Social organisation
7. Give an account on colony Formation
8. Explain about the competitive principle or Gause's Principle

SECTION C

1. Explain about the Gaseous cycle and sedimentary cycle/ Explain Bio Geo Chemical cycles in detail.
2. Explain about Commensalism
3. Explain about Mutualism
4. Describe about the interspecific animal association

SECTION-A (UNIT-IV)

1. Natality or Birth rate
2. Mortality or Death rate
3. Vital index
4. Migration
5. Emigration
6. Immigration
7. Ecotone and edge effect

8. Ecological niche
9. Sere and climax
10. Monoclimax theory
11. Polyclimax theory
12. Climax pattern theory

SECTION-B

1. Explain about age distribution in population
2. Explain about population growth
3. Discuss about population fluctuations
4. Write about wild life management.
5. Describe about renewable natural resources
6. Describe about non-renewable natural resources

SECTION-C

1. Discuss about ecological succession in detail
2. Describe about the wild life conservation and wild life management act
3. Discuss about the sanctuaries and the national parks in India
4. Explain about the natural resources management

SECTION-A (UNIT-V)

1. Urbanisation
2. Pollution
3. Air Pollution
4. Water Pollution
5. Soil Pollution
6. Emission
7. Deforestation
8. Erosion
9. Aforestation
10. Global warming
11. Climate Change

SECTION-B

1. Describe about environmental ethics
2. Write notes on deforestation
3. Write notes on urbanisation
4. Write notes on population explosion

SECTION-C

1. Describe in detail about the environmental degradation
2. Define pollution and explain the types of pollution in detail.
3. Describe about environmental ethics and laws
4. Discuss about the earth summit and the role of governmental agencies for environmental monitoring.