

KATHMANDU UNIVERSITY
End Semester Examination
February/March, 2018

Marks Scored:

Level: B. Sc./B. Tech.
Year : II

Course : ENVS 211
Semester : I

Exam Roll No. : Time: 30 mins.

F. M. : 20

Registration No.:

Date MAR 06 2018

SECTION "A"

[20 Q. × 0.5 = 10 marks]

Mark "X" in the most appropriate box:

1. Which method is used for estimating absolute density?
 Traps Quadrate Questionnaire Pellet count
2. Survivorship curve, indicating high loss early in life, followed by a period of much lower and relatively constant losses
 Type I Type II Type III Type IV
3. Population interactions in which one species benefitted other not affected is
 Mutualism Amensalism Commensalism Protocoperation
4. Which is not the community characteristic?
 Dominance Growth form Trophic structure Density
5. Which ecosystem variable does not fall in analyzing ecosystem from descriptive point of view?
 Energy circuit Organic matter Producer Climate regime
6. An urn shaped pyramid indicates _____ population.
 Increasing Stable Decreasing Rapidly increasing
7. Rates of storage of organic matter not used by heterotrophs _____ productivity.
 Net community Net Primary Gross primary Primary
8. Which of the following is not used for measuring primary productivity of an ecosystem.
 Harvest Transect Oxygen Carbon dioxide
9. Population interaction, in which population 1 inhibited, Population 2 not effected is
 Commensalism Mutualism Parasitism Amensalism
10. Large animals exhibit _____ survivorship curve.
 Highly convex Highly concave Diagonal Stair-step
11. Number per unit total space is _____ density.
 Ecological Specific Crude Absolute

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12. Island Biogeography theory is related to Population _____.
 Dispersal Age distribution Growth form Density
13. Ecological attributes, Life cycles of organisms during developmental stages is
 High Long Short Complex
14. Aquatic organism resting or swimming on the surface
 Nekton Benthos Periphyton Neuston
15. Zone, bottom and deepest water area, which is beyond the depth of effective light penetration
 Littoral Limnetic Profundal Pool
16. Lakes, permanently stratified, as a result of chemical differences in hypo-epilimnion layers
 Dimictic Meromictic Polymictic Meromictic
17. Inherent ability of population to increase is called
 Natalty Mortality
 Population age distribution Population internal distribution
18. Species with wide geographical ranges, developing locally adapted population are
 Ecological equivalents Sympatry
 Ecotypes Allopatry
19. When completion between individuals in ecosystem is severe or where there is positive antagonism, then population internal distribution is
 Uniform Clumped Random Uniform clumped
20. Laws of minimum is given by
 Blackman Leibigs Shelford Vernadsky

SECTION "B"

[20 Q × 0.5=10 marks]

Fill in the blanks:

21. An example of density independent factors _____.
22. Average longevity of the individual of a populations under given condition _____.
23. The tendency for biological systems to resist change and to remain in a state of equilibrium _____.
24. An example of units to measure biomass of an ecosystem _____.
25. Competition when the organisms seeking resource harm one another in the process, even if the resource is not in short supply _____.
26. Organisms having wide range of tolerance for temperature are called _____.

27. Species groups, which largely control the energy flow and strongly effect the environment of all the other species are _____.
28. Transition zone/junction, between two or more diverse communities _____.
29. Study of individual organisms in an ecosystem is _____.
30. Food chain, which goes from dead organic matter into microorganisms and then to detritus feeding organisms and then predators is _____.
31. One of the three ecological ages, listed in population age distribution is _____.
32. The whole sequence of communities that replaces one another in given area is called _____.
33. Lakes, deep with hypolimnion layer than epilimnion and have low primary productivity _____.
34. One example of pattern in communities is _____.
35. When a stationary and stable age distribution exists, the specific growth rate is called _____.
36. The logistic equation of J- shaped growth form can be expressed as _____.
37. Index of Similarity between two samples is given by _____.
38. Evenness index is given as _____.
39. Population interaction favorable to both but not obligatory is _____.
40. The tendency for increased variety and density at community junctions is known as _____.

