

Competitive Exams: Revision Terminology Part 1

- Transition zone between adjacent biome – Eco tone.
- In ecosystem one species Dominates & other excludes = Gause's principle
- Most productive & Biodiversity = coral reef.
- Intertidal zone – Cladophora, Polysiphonia, Dictyota, Ulva, focus.
- Carrying capacity – upper asymptote
- Chemotaxonomy – used to study plant relationships
- Colpidium – indicates degree of pollution in water
- Infective stage of taenia solium- cysticercosis
- Extinct primitive arthropods – trilobites
- Heterothallism – prevent interbreeding
- Johnston's organ – antenna of mosquito
- On gills fertile layer bearing basidia = Hymenium
- Ascospore = endogenous
- Basidiospore = exogenous
- Norin – 10 – Japan – dwarf gene of wheat.
- Dee geo woo gen – Taiwan – dwarf gene of rice.
- Ordovician period – age of invertebrates/age of giant Mollusca.
- Devonian period – age of fishes.
- Carboniferous period – age of amphibians
- Jurassic period - age of reptiles
- Holocene epoch – age of man
- Inheritance of acquired character = Lamarck. (France)
- Natural selection = Darwin coworker – Wallace (by Malthus essay on popl)
- Survival of fittest – spencer

- Neo Darwinism = mutation germplasm DNA+ natural selection
- Ancon sheep – short & curved legs – mutation – in Seth wright farmer in Massachusetts America
- Evolution of new species -> geographic isolation
- Evolutionary divergence -> reproductive isolation
- People with common gene pool -> demes -> species
- Sympatric Speciation = Reproduction isolation
- Allopatric Speciation = Geographical isolation
- Dollo Law – evolution irreversible
- Copi's Law - Evolution size increment
- Bergman Law – Warm-blooded animal large in northern & cold regions.
- Allen's Law – Cold animal have small ears & tails
- Gause Law/ Competitive exclusive principle – 2 species of same ecological requirement cannot continue to occupy same habitat
- Gloger's Rule – Warm blooded live in warm & moisture develop more melanin pigment.
- Jordan's rule – fisher of low temperature (cold atmosphere) – more vertebrae pressure
- Hibernation = winter sleep
- Aestivation = summer sleep
- BGA endospore = bacocyte
- PSI – inner surface of thylakoid – P₇₀₀ – Ferredoxin
- PSII – outer surface of thylakoid – P₆₈₀ – Granna
- Chl. a – C₅₅H₇₂O₅N₄Mg – CH₃ group
- Chl. b – C₅₅H₇₀O₆N₄Mg – CH₀ group
- Lichens are sensitive to SO₂
- Burning plastics – polychlorinated Biphenyls
- Aldehyde – irritate gastrointestinal & respiration tract
- Nitrogen oxide – photochemical & respiration tract
- O₃ – harden rubber, destroy chlorenchyma
- MIC gas at bhopal in union carbide factory manufacturing Sevin phosgene2 **gas**

- CO used by ficus verigata, Phaseolus Vulgaris, Coleus Blumeri.
- NO₂ used by Pinus, Juniperus, Quercus, vitis
- Putrescibility – decay & decomposition of organic matter due to bacteria.
- Laundry detergents contain phosphate
- India – biggest sea good exporter
- Minamata victims – numbness of limbs, lips, tongue.
- Tidal power station = France
- Algin = Sargassum & Turbinaria
- Non leguminous plant fixing N₂ = Casaurina, Almus, Hippophae
- Texture of soil => (1) water holding capacity (2) aeration
- Earth is an open system for energy (close for material)
- Halophyte – Salsola & triple
- Gross primary productivity – Rate of organic matter by producers per unit time & area.
- Net primary productivity – rate of organic matter built up in bodies per unit time & area
- Secondary productivity – increment in biomass in heterotrophs.
- Photosynthesis cyclic – Red – O₂ not evolved.
- Non-Photosynthesis cyclic – Red/Blue - O₂ evolved.
- LDH = Lactate dehydrogenase 5 forms isoenzymes (same action difference structure)
- Enteric group – facultative aerobic bacteria
- E.g. E.coli in water indicates contamination by sewage
- Archaeobacteria – Branched chain lipids.
- Taxonomy – identification, to nomenclature & classification of organisms
- Copeland – 4 Kingdom Classification.
- Whittaker – 5 Kingdom Classification
- Amoeboid stage of slime mould = plasmodium devoid of cell wall
- Total stem parasite – Cuscuta
- Total root parasite – Orobanche
- Partial root parasite – Santalum

- Partial stem parasite – Loranthus, Viscum
- Narcotics – Suppress CNS
- Stimulants – increase CNS
- Cornea – No Blood supply
- CNS Stimulant = Amphetamines
- CNS depressant = Barbiturates
- Artificial pace maker in right Ventricle
- 1st open heart surgery – 1953
- 1st pesticide by man = Rotenone
- Sporeine = Bio insecticide
- Artificial Kidney = Passive filtration process
- World war II = organophosphate Never gas inhibit cholinesterase
- Agent orange is ausein derivative used by USA Vietnam
- Rotenone – roots of Devris elliptica
- Pyrethrum – inflorescence of chrysanthemum cinerariifolium
- Producers = Transducers
- Ecosystem = integrated of system of living & nonliving things
- Color changes = Metachrosis e.g. Chameleon & Hyla
- Proteus arguinus (cave salamander) = eyeless
- Sharks & cattle are color – blind.
- Light intensity measured by lux meter or photometer
- Tanning – synthesis of melanin in chromatophore
- LDP = Radish spinach, henbane, sugar beet, oat, baray, wheat
- SDP = Xanthium, chrysanthemum, Cannabis, Rice, sugarcane, Soybean
- SLDP – wheat nice
- LSDP – Bryophyllum
- Day neutral = cotton, Tobacco, Potato, maize, cucumber
- Daily response of light condition circadian rhythms.

- Long day animal – Turkey, starling
- Short day animal – sheep, goat, deer
- Day neutral animal – guinea pig, ground squirrel
- Regulate species of locomotion by light photo kinesis
- Nyctinasty – flower of Portulaca & leaves of Albizia
- Photonasty – Oxalis.
- Thigmonasty – Drosera.
- Seismonasty – lead of mimosa pudica
- Orientation during locomotion in response -> photo taxis
- Fecundity = reproductive capacity
- Unidirectional trees – flag trees
- Shivering – body temp increases
- Perspiration/Panting – body temperature decreases
- Snails – Calcium content
- Insectivores – N₂ deficient soil
- Fresh water fish – large glomeruli & Expel large amount of hypotonic urine
- Marine water fish – gills extract salts from seawater by active transport.
- Migration – Bison, Caribou (mammals), Anguilla, salmon (fish), Arctic tes, siberion Crane, American golden plover (Birds)
- Stenohaline – withstand only freshwater/ sea water
- euryhaline – withstand difference concentrations of soil & water
- Pedogenesis – formation of soil
- Actinomycetes -> Streptomycin
- Group of individuals belonging to a trophic level which consume a common resource base in similar fashion = Guild (nectar feeding, grazing, browsing, frugivorous animals).
- Bioenergetics = Phillip's.
- Net production = gross production – respiration
- Pyramid of energy – upright
- Pyramid of no energy – upright (inverted (tree ecosystem)).

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- Hila ilisha (Indian shad) can live in both fresh & marine water
- Pyramid of biomass – Aquatic inverted