

Grand Quiz + Final Syllabus

1. The osteichthyans or bony fishes also appeared in the Devonian
2. In porifera.....have sacs with a single chamber lined by flagellate cells Ascon
3. Which of the following is the second major diapsid clade Lepidosaur
4. The best studied embryo fossils of metazoan are doushantuo oration from
5. South china
6. According to.....common pattern would point to an explanation or law of nature
7. Sir Francis bacon
8. The geographic model based on the establishment of geographic Barriers
9. The.....is the morphologically diverse clade of protostome animals The spiralian
10. The armored fishes were abundant in.....seas and lakes Devonian
11. Volatile form of carbon is involved in formation of ----- parts of body Deuterostomes
12. The Cambrian explosion have relatively short span event of -----my? 20
13. One of the most remarkable echinoderm animal -----occur in the upper Ordovician succession of the Craighead inlier, north of the Girvan valley ,
14. southwest Scotland Star fish
15. Radiolarians are like protozoan with siliceous tests Animal
16. Condition that are necessary for the survival of hard parts in the sediments
17. Chemical condition
18. Quantitative techniques to understand the relationships between----- thickness
19. and time. And to make link from locality to locality. Rock
20. The class insect of hexapod have limbs on their body 6
21. The earth today can be divided into main provinces of biogeography Six
 - a. are the beasts that live in or the seabed Benthos
22. The trilobites extinct at the time? End Permian
23. The class cephalopods have subclass Three
24. The mites, scorpion and spiders belong to the subphylum Chelicerata
25. If there is no change in properties during growth, the feature is
26. said to show growth Isometric
27. proof is impossible said Karl popper
28. is and understanding of geological time Stratigraphy
29. is a method of reconstructing phylogeny based on the identification of shared derived characteristics Cladistic
30. The ediacara biota, first impression of soft bodies organism of upper Proterozoic
31. was found in Namibia

32. Early mollusks first rises at.....age Early Cambrian
33. The arachnids arthropods mainly comprises the terrestrial ----- and scorpions Spiders
34. The first pinnate diatoms appeared during paleogene colonization freshwater and this group reached an acme during the Miocene
35. The idea of plastic forces had been largely overthrown by the 1720s
36. The principle of cross cutting relationship If a body or discontinuity cuts across a stratum it must have formed after the Stratum
37. in which males and females show different size, and different specialized feature Sexual dimorphism
38. Bivalve was first named by in 1758? Linnaeus
39. The.....were a sister group to the mollusk Annelid worms
40. A succession of contiguous formation with common characteristics is called Group
41. The is the recent cnidarians Ediacaran
42. First mollusks descendent from like living Flatworms
43. Sphenodon the tuatara of ----- New Zealand
44. Stratigraphic ranges can also be influenced by the Signor- lips effect
45. Track way from middle Ordovician rock in the English lake district suggest that arthropods invade land about 50
46. It is believed that the center of the archaeocyatha origin are now located in East Siberia
47. Human baby tail and excessive hairs related to term Atavisms
48. The parazoan body plan characterized by cells organized in two layers separated by jelly like material punctuated by so called Wandering cells or ameobocytes
49. Wings of birds related to the term Homology
50. Precise biotic and morphological changes along phylogenetic lineage
51. Human arose ma, and fossil evidence point to repeated human migration out of Africa 6-8
52. The first vertebrate fish had no fossils site at changing in china early Cambrian Jaws
53. The subphylum myriads first appeared during the Mid Silurian
54. The.....diversification generated witnessed a staggering increased in biodiversity at the family , genus and species level Ordovician
55. means the rock has been covered by younger rock Burial
56. The is common in the fossils record from the Ordovician through the Devonian. Especially abundant in the Silurian and Devonian Stromatoporoidea
57. Paleontology lies on the border b/w biology and Geology
58. If there is no change is proportions during growth, the feature is said to show Isometric
59. Scottish scientist (1726-1797) challenged no vestige of beginning no prospect of an end James Hutton
60. Species help shape the ecosystem and that can trigger large scale changes if the disappeared Keystone
61. The German scientist suggested that the continents moved across the earth surface on a liquid core, Wegener
62. A classic keystone species is the ----- Elephant

63. Best amount of fossils that are present at sediments water interface
Both epifaunal and infaunal organisms
64. The successfully built reefs in unstable environments Archaeocyaths
65. By the late carboniferous a very diverse fauna had evolved with forms such as the dragonflies and mayflies capable of powered flight? Insect
66. What is the living status of graptolites which belong to phylum hemichordate Extinct
67. Life on earth has evolving for up to billion years 4
68. The oldest known amniotes hylonomus from the mid of Canada Carboniferous
69. The wide hinged fossils are Spiriferide brachiopods
70. More complex with cones bars and blades Euconodont
71. The function of single fossil organisms ----- Paleoecology
72. Infaunal organism live the sediment- water interface Beneath
73. Material forming any stratum were continuous over surface of the earth unless some other solid bodies stood in the way is the ----- of lateral continuity Principle
74. The oldest eukaryote fossils may be Grypania
75. Function of RNA is Protein synthesis
76. The are filter feeding members of the sessile benthos? Sponges
77. The.....mass extinction was the largest of all time End- Permian
78. The astonishing tails and colour of male birds is an example of Breeding
79.fossils comprise of small samples , drill cores and chippings Microfossils
80. Condition that are necessary for the survival of hard part in sediments Chemical condition
81. The oldest jaw bearing fishes were the placoderms such as Cocceus
82. The phylum are usually unsegmented soft bodies animals with a body plan based on four features Mollusk
83. The bryozoans have living species found today? 6000
84. were like to idea of evolution Progressionism
85. Mainly the trilobites and over.....species are known 15000
86.develop a new more objective method in systemic which has come to be called cladistics Hennig
87. in June 1980 km meteorite(asteroid) had hit the earth 10
88. The centrals are type of diatoms prefers -----environment Marine water
89. The are called belly- footed mollusks Gastropods
90. Humans are most closely related to Chimpanzee
91. Population growth and resources availability are to each other Inversely proportional
92. The was the earliest arthropods in geological timescale Trilobites
93. The were heavily hit by the end-Permian mass extinction event and most notably the dinosaurs were key forms through the Mesozoic Reptiles
94. In diploblastic body plan having outer ectoderm and inner ectoderm.
These two layers are separated by A cellular mesogloes

95. Insect had probably already evolved flight before the -----when dragonflies
96. Patrolled the forests Mid – carboniferous
97. A network of collagen fibers on which needlelike crystals of hydroxyapatite (a form of apatite, CaPO_4) accumulate The Skeleton Bone
98. Cartilage are the type of tissues which are progressively mineralized by: Apatite
99. The first vertebrates had a___skeleton Cartilaginous
100. The___appears in the early embryo as a strip of cells where the backbone will develop Jawless Fishes neural crest
101. in___, commonest vertebrates were the conodont animals Late Cambrian and Ordovician
102. Were jawless, generally armored Ostracoderms
103. are the extinct genus of jawless fishes that lived in Devonian period. Hemicyclaspis
104. They occur as phosphatic toothlike microfossils, termed elements. Conodonts
105. Conodonts are divided into___groups 3
106. more complex, with cones, bars and blades Euconodonts
107. The three main morphotypes of conodonts are Coniform, Ramiform, Pectiniform
108. The basal vertebrates, lacked jaws, jaws probably evolved during the___ Ordovician
109. Oldest jawbearing fishes were the___ Placoderms
110. chondrichthyans were the first___like cartilaginous fishes Shark
111. Small fishes, mostly in the range___ in length. 50–200 mm
112. The___are Ancestors of most fishes today Actinopterygians
113. The first good evidence of tetrapods were___long 0.6 and 1 m
114. are 4000 species of mainly small animals that live in or close to water Half-way land animals
115. The oldest fossil form, with reduced limbs, is___ in age Jurassic
116. A part of amniotic egg that collects waste. Allantois
117. are Distinguished by the pattern of openings in the side of the skull Late Carboniferous
118. The three major skull patterns seen in amniotes: anapsid, diapsid and synapsid
119. All modern amniotes produce the_egg Cleidoic

120. The oldest Turtles and relatives were _____ eaters
small insect
121. First synapsids were Grouped loosely as “
_____” Pelycosaur
122. Reptiles typically have _____ bones in the lower jaw Six
123. In mammals, there is a single bone in the lower jaw known as: the dentary
124. As compared to the three tiny bones in human ear, reptiles have only one, known as: stirrup or stapes
125. Dinosaurs famously ruled the Earth for _____ of the
Mesozoic 160 Myr
126. The mammals achieved great diversity and abundance only after the extinction of:
Dinosaurs
127. A group, includes the dinosaurs, pterosaurs, crocodilians and birds. Archosaurs
128. has a lightweight body, Narrow hatchet-shaped skull, a long narrow wing Proficient
flapping flyers
129. First true lizards are: Lepidosaur
130. The theropods and
sauropodomorphs share the primitive _____ pattern reptilian hip
131. All other dinosaurs share a unique hip pattern in which the pubis has swung
back and runs parallel to: Ischium
132. fish-shaped animals, adapted to life in the sea The ichthyosaurs
133. Marine reptile _____ uses snake like neck for hunting the fish in
water. Plesiosaurs
134. The plesiosaur, _____ Swam by beating their paddles in a kind of “flying”
motion. Cryptoclidus
135. The most famous fossils of Oldest known bird were Found in Upper
Jurassic sediments in southern Germany in 1861
136. Examples of Flightless ratites and ancestors of water birds penguins and birds of
prey
137. Small insect eaters in the Late Triassic and Early Jurassic Remained small through
most of the: Mesozoic
138. A classic example of an adaptive radiation due to development of teeth Marsupials
& Placentals
139. are early primates Humans

140. Homo sapiens means: wise person
141. primates have Good___ vision binocular
142. primates radiated in the Paleocene, Eocene and Oligocen asal
143. in Marmosets and spider monkeys are used as extra limbs in swinging through the trees. Prehensile Tails
144. The___ of Southeast Asia are the most primitive living apes Gibbons
145. of the DNA of Gorillas, chimpanzees and humans is identical. >94%
146. In___, two French teams announced human fossils that were 6 Ma. 2001 and 2002
147. The famous skeleton of a female P. afarensis from Ethiopia, called___ by its discoverer Lucy
148. Lucy's brain is small, only___ for a height of 1–1.2 m 415 cm³
149. Another human species, H. erectus had Brain size of___ in a body up to 1.6 m tall 830– 1100 cm³
150. Truly modern humans, H. sapiens, may have arisen as much as___ years ago 400,000
151. had large brains (on average, 1400 cm³) Neandertals
152. , which concentrates on macroscopic (visible with the naked eye) plant remains Paleobotany
153. Palynology is the study of___. fossil pollen and spores
154. Trace fossils are named on the basis of_shape and ornamentation
155. The study of trace fossils is often called ___ Ichnology
156. structures formed in hard substrates, such as limestone, shells or wood, for the purpose of protection Borings
157. non-fecal pellets are regurgitation pellets of birds and reptiles
158. Two models for the diversification of marine invertebrate life over the past 600 myr of good quality fossil records. The Empirical Model, The Bias Simulation Model
159. the plateau appears clearly only in the___ data compilation. family-level
160. A single equilibrium level is easier to understand in terms of a: global equilibrium model
161. The Modern___ radiated dramatically over the last 100 myr "fauna"
162. means change with improvement. Progress

163. are observations of the appearance and disappearance of species. **Patterns**
164. are hypotheses that seek to explain the patterns. **Processes**
165. The replacement of brachiopods by bivalves is a famous example of: **Biotic replacements**
166. _____ Oldest multicellular eukaryotes: reported from rocks _____ in Canada **1200 Ma**
167. A process of reproduction in which a new individual arises by the fusion of two sex cells, or gametes, produced by different individuals **Sexual reproduction**
168. Composed of many kinds of cells – muscle cells, nerve cells, epithelial cells and so on **Differentiated cells**
169. the study of the distribution of species and ecosystems in geographic space and through geological time. **Biogeography**
170. are ideal locations because they allow scientists to look at habitats that new invasive species have only recently colonized **Islands**
171. He noted many of the mammals of North America, such as bears, deer, squirrels, hedgehogs and _____
172. moles, were found also in Eurasia • Travelled via Alaska, when climates were warmer **Georges Buffon**
173. the founder of plant geography **German Alexander von Humboldt**:
174. Augustin de Candolle of Geneva and Lamarck published a map showing France divided into _____
175. regions with different ecological conditions. **five floristic**
176. who was the first to classify the world's flora and show the results on maps? **Danish botanist Joakim Schouw**
177. (113) Evolution – A Dangerous Idea!
178. French Revolution of _____ led to a flowering of French science **1789**
179. Power of the Church was broken **18th century**
180. of Natural History, became a powerhouse of ideas and debate in Europe. **New National Museum**
181. In 1802, _____ suggested that • 'Lower' organisms might also be found earlier in time and that they might gradually change into the 'higher' forms **Jean- Baptiste Lamarck**
182. Geoffroy suggested evolutionary homologies and links between such widely different animals as: **fish and cephalopods**
183. _____ Darwin had spent the after his voyage in detailed research on many other areas of _____

184. biology that provided evidence for evolution 40 years
185. is the central paradigm of the earth sciences and Theory of evolution is of the biological sciences Plate tectonics
186. was the first to make a world map Engler
187. The system of plant regions accepted today is very similar to that of: Engler
188. "all species had been created within the area in which they are found today". • This was first
189. formalized by: British ornithologist Philip Sclater
190. Presented his theory of continental drift in (1912) Pangaea Alfred Wegener
191. Croizat published his ideas in the 1950s and 1960s, his major presentation being his 1958 book: Panbiogeography
192. Plants in High levels of heat and moisture Megatherms
193. Plants in Moderate levels of heat and moisture Mesotherms
194. plants in Low levels of heat and moisture Microtherms
195. James Dana divided the _____ into several different zones based on mean minimum temperature. surface waters
196. in 1856 published Five depth zones and 25 faunal provinces along the coasts of the continents Edward Forbes
197. three British zoologists Assembled _____ of the distributions of fishes based on the patterns of distribution of 27 families. 30 maps
198. Sheer variety and volume of the works published by: Alfred Wallace Candolle
199. New Guinea contributes only _____ of the world's land area and some 10% of its species of terrestrial organism 3%
200. A species that exists as a series of subspecific forms is termed A _____ Species Polytypic
201. All chimpanzee subspecies lie to the north or east of this river River Congo
202. A _____ may be deterred from crossing an area of grassland; or a marsh organism may fail to travel across dry habitats to reach the next area of wetland. forest species
203. First living organisms' bacteria: (3500 Ma)
204. _____ that leaves its forest- floor log, is exposed beetles, shrews and insectivorous birds. Insect

205. Dive for their food and bring vegetable matter to the surface from greater depths.
Coots
206. The coots are messy eaters, and it is not difficult for gadwall to move in and collect some of the loot. This behavior is called Klepto-parasitism
207. Species may evolve in one region, spread to other locations and then become extinct in all but a restricted area where it survives. Species restricted in this way are said to be Endemic
208. the two major factors influencing the degree of endemism in an area: Isolation, Stability
209. 'fossil endemism' is called Palaeo-endemism
210. Anything that tends to make it more difficult for a species to live, grow or reproduce in its environment may prove to be a: limiting factor
211. Any regular change in physical or chemical conditions through space that creates a sequence of replacement of one species by another, among both animals and plants.
zonation
212. the predators can always turn to alternative food species if the numbers of their usual prey should be reduced by climatic or other influences. This is termed. Prey Switching
213. reduce the rate of growth of populations because of their negative influence on general fitness, survival and fecundity. Parasites
214. The removal of certain species could create effects far in excess of what may originally have been expected. Influential species of this kind are known as. Keystone Species
215. _____ The Amazon basin contains approximately _____ flowering plant species, whereas equivalent areas in Africa and in South-East Asia contain only about 40,000 each. 90 000
216. To cope with the physical demands of their environment Species adapt
217. species tolerating one another, or becoming dependent on one another Co- evolution
218. Pointing out that no two species have quite the same needs. Individualistic concept
219. of certain species from an ecosystem would have little or no effect on the functioning of that ecosystem Removal
220. A possible alternative model is based on the supposition that all species are equally important to: ecosystem function
221. certain species play key roles in the ecosystem, and when they are lost there is a sudden drop in the capacity of the ecosystem to function. This is sometimes referred to as: The Rivet Hypothesis

222. is Defined in terms of inertia, or resistance to change. **Stability**
223. Woody savannas – trees > 2 m high, cover only _____ of the land surface **30–60%**
224. Variations in climate also result from the pattern of movement of **air masses**
225. The ‘trade winds’, found in both the Northern and Southern Hemispheres, meet in the region of the equator, and this is known as the: **intertropical convergence zone (ITCZ)**
226. Approximately _____ species of organism have been described **1.8 million**
227. Of the bacteria, only about _____ species have so far been described **4000**
228. have always been most abundant in the low-latitude (tropical) regions. **Angiosperms**
229. Greater extinction rates in the higher latitudes is the instability of climatic conditions over the past _____ years **2 million**
230. High-latitude organisms have _____ than those from the low latitudes. **broader geographical ranges**
231. General feature of biogeography first pointed out by _____ in the 1970s **E.H. Rapoport**
232. Katherine Smith and James Brown examined the diversity of _____ as one proceeds deeper **fish**
233. All the land surface area of the hotspots together comprise only about _____ of the Earth’s terrestrial total **1.4%**
234. The idea that continents could fragment and move across the face of the planet was first suggested by the German meteorologist _____ in 1912 **Alfred Wegener**
235. The surface of the Earth, known as the lithosphere, is occupied by a number of areas known as: **tectonic plates**
236. The _____ move as well as the continents, the study of their movements is known as plate tectonics rather than continental drift **ocean floors**
237. The fossil record suggests that all the early amphibian and reptile groups evolved in the continent called **Euramerica**
238. are all the result of the break-up and dispersal of Gondwana **Southern continents**
239. mainly the result of the appearance and disappearance of land or sea barriers within North America and Eurasia **Northern continents**
240. Apart from humans and the aerial bats, only the _____ spread naturally as far as Australia **rat**

241. Human beings probably arrived ___ years ago and brought the domestic dog (the ancestor of the dingo) about 3500 years ago **60 000 to 40 000**
242. Geological studies show that ___ is the smallest (about 1600 km²) surviving fragment of Gondwana **New Caledonia**
243. New Zealand has Its total area, ___, makes it far larger than any other Pacific oceanic island **270 000 km²**
244. The loss of a ___ can cause an avalanche of local extinctions. **Keystone Species**
245. Microscopic plankton are capable of changing the depth at which they live, depending on conditions, and this can be regarded as a form of: **vertical migration**
246. of a species can be measured by its geographical distribution **Success**
247. A network of collagen fibers on which needlelike crystals of hydroxyapatite (a form of apatite, CaPO₄) accumulate The Skeleton **Bone**
248. Cartilage are the type of tissues which are progressively mineralized by: **Apatite**
249. The first vertebrates had a ___ skeleton **Cartilaginous**
250. The ___ appears in the early embryo as a strip of cells where the backbone will develop Jawless Fishes **neural crest**
251. in ___, commonest vertebrates were the conodont animals **Late Cambrian and Ordovician**
252. Were jawless, generally armored **Ostracoderms**
253. are the extinct genus of jawless fishes that lived in Devonian period. **Hemicyclaspis**
254. They occur as phosphatic toothlike microfossils, termed elements. **Conodonts**
255. Conodonts are divided into ___ groups **3**
256. more complex, with cones, bars and blades **Euconodonts**
257. The three main morphotypes of conodonts are **Coniform, Ramiform, Pectiniform**
258. The basal vertebrates, lacked jaws, jaws probably evolved during the ___ **Ordovician**
259. Oldest jawbearing fishes were the ___ **Placoderms**
260. chondrichthyans were the first ___ like cartilaginous fishes **Shark**
261. Small fishes, mostly in the range ___ in length. **50–200 mm**
262. The ___ are Ancestors of most fishes today **Actinopterygians**
263. The first good evidence of tetrapods were ___ long **0.6 and 1 m**
264. are 4000 species of mainly small animals that live in or close to water **Half-way land animals**

265. _____ The oldest fossil form, with reduced limbs, is _____ in age **Jurassic**
266. _____ A part of amniotic egg that collects waste. **Allantois**
267. _____ are Distinguished by the pattern of openings in the side of the skull **Late Carboniferous**
268. _____ The three major skull patterns seen in amniotes: **anapsid, diapsid and synapsid**
269. _____ All modern amniotes produce the egg **Cleidoic**
270. _____ The oldest Turtles and relatives were _____ eaters **small insect**
271. _____ First synapsids were Grouped loosely as “_____” **Pelycosaurs**
272. _____ Reptiles typically have _____ bones in the lower jaw **Six**
273. _____ In mammals, there is a single bone in the lower jaw known as: **the dentary**
274. _____ As compared to the three tiny bones in human ear, reptiles have only one, known as: **stirrup or stapes**
275. _____ Dinosaurs famously ruled the Earth for _____ of the Mesozoic **160 Myr**
276. _____ The mammals achieved great diversity and abundance only after the extinction of: **Dinosaurs**
277. _____ A group, includes the dinosaurs, pterosaurs, crocodilians and birds. **Archosaurs**
278. _____ has a lightweight body, Narrow hatchet-shaped skull, a long narrow wing **Proficient flapping flyers**
279. _____ First true lizards are: **Lepidosaurs**
280. _____ The theropods and sauropodomorphs share the primitive _____ pattern **reptilian hip**
281. _____ All other dinosaurs share a unique hip pattern in which the pubis has swung back and runs parallel to: **Ischium**
282. _____ fish-shaped animals, adapted to life in the sea **The ichthyosaurs**
283. _____ Marine reptile _____ uses snake like neck for hunting the fish in water. **Plesiosaurs**
284. _____ The plesiosaur, _____ Swam by beating their paddles in a kind of “flying” motion. **Cryptoclidus**
285. _____ The most famous fossils of Oldest known bird were Found in Upper Jurassic sediments in southern Germany in **1861**

286. Examples of Flightless ratites and ancestors of water birds **penguins and birds of prey**
287. Small insect eaters in the Late Triassic and Early Jurassic Remained small through most of the: **Mesozoic**
288. A classic example of an adaptive radiation due to development of teeth **Marsupials & Placentals**
289. are early primates **Humans**
290. Homo sapiens means: **wise person**
291. primates have Good___vision **binocular**
292. primates radiated in the Paleocene, Eocene and Oligocen **asal**
293. in Marmosets and spider monkeys are used as extra limbs in swinging through the trees. **Prehensile Tails**
294. The___of Southeast Asia are the most primitive living apes **Gibbons**
295. of the DNA of Gorillas, chimpanzees and humans is identical. **>94%**
296. In___, two French teams announced human fossils that were 6 Ma. **2001 and 2002**
297. The famous skeleton of a female P. afarensis from Ethiopia, called_____by its discoverer **Lucy**
298. Lucy's brain is small, only_____for a height of 1–1.2 m **415 cm³**
299. Another human species, H . erectus had Brain size of_____in a body up to 1.6 m tall **830– 1100 cm³**
300. Truly modern humans, H . sapiens, may have arisen as much as_____years ago **400,000**
301. had large brains (on average, 1400 cm³) **Neandertals**
302. , which concentrates on macroscopic (visible with the naked eye) plant remains **Paleobotany**
303. Palynology is the study of_____. **fossil pollen and spores**
304. Trace fossils are named on the basis of **shape and ornamentation**
305. The study of trace fossils is often called _____ **Ichnology**
306. structures formed in hard substrates, such as limestone, shells or wood, for the purpose of protection **Borings**
307. _____ non-fecal pellets are regurgitation pellets of **birds and reptiles**
308. Two models for the diversification of marine invertebrate life over the past 600 myr of good quality fossil records. **The Empirical Model, The Bias Simulation Model**

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314. are hypotheses that seek to explain the patterns. Processes
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317. _____ Oldest multicellular eukaryotes:
reported from rocks _____ in Canada 1200 Ma
318. A process of reproduction in which a new individual arises by the fusion of
two sex cells, or gametes, produced by different individuals Sexual reproduction
319. Composed of many kinds of cells – muscle cells, nerve cells, epithelial cells and so
on Differentiated cells
320. the study of the distribution of species and ecosystems in geographic
space and through geological time. Biogeography
321. are ideal locations because they allow scientists to look at habitats that new invasive
species have only recently colonized Islands
322. He noted many of the mammals of North America, such as bears, deer, squirrels,
hedgehogs and
323. moles, were found also in Eurasia • Travelled via Alaska, when climates were
warmer Georges Buffon
324. the founder of plant geography German Alexander von Humboldt:
325. Augustin de Candolle of Geneva and Lamarck published a map showing France
divided into
326. regions with different ecological conditions. five floristic
327. who was the first to classify the world's flora and show the results on maps? Danish
botanist Joakim Schouw
328. (113) Evolution – A Dangerous Idea!
329. French Revolution of _____ led to a flowering of French science 1789
330. Power of the Church was broken 18th century
331. of Natural History, became a powerhouse of ideas and debate in Europe. New National
Museum
332. In 1802, _____ suggested that • 'Lower' organisms might also be found earlier
in time and that they might gradually change into the 'higher' forms Jean- Baptiste
Lamarck
333. Geoffroy suggested evolutionary homologies and links between such widely
different animals as: fish and cephalopods
334. _____ Darwin had spent the after his voyage in detailed research on many
other areas of
335. biology that provided evidence for evolution 40 years
a. is the central paradigm of the earth sciences and Theory of evolution is of the
biological sciences Plate tectonics
336. was the first to make a world map Engler

337. The system of plant regions accepted today is very similar to that of: **Engler**
338. "all species had been created within the area in which they are found today". • This was first
339. formalized by: **British ornithologist Philip Sclater**
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344. plants in Low levels of heat and moisture **Microtherms**
345. James Dana divided the___into several different zones based on mean minimum temperature. **surface waters**
346. in 1856 published Five depth zones and 25 faunal provinces along the coasts of the continents **Edward Forbes**
347. three British zoologists Assembled___of the distributions of fishes based on the patterns of distribution of 27 families. **30 maps**
348. Sheer variety and volume of the works published by: **Alfred Wallace Candolle**
349. New Guinea contributes only_____of the world's land area and some 10% of its species of terrestrial organism **3%**
350. A species that exists as a series of subspecific forms is termed A_____Species **Polytypic**
351. All chimpanzee subspecies lie to the north or east of this river **River Congo**
352. A_____may be deterred from crossing an area of grassland; or a marsh organism may fail to travel across dry habitats to reach the next area of wetland. **forest species**
- a. that leaves its forest- floor log, is exposed beetles, shrews and insectivorous birds. **Insect**
353. Dive for their food and bring vegetable matter to the surface from greater depths. **Coots**
354. The coots are messy eaters, and it is not difficult for gadwall to move in and collect some of the loot. This behavior is called **Klepto-parasitism**
355. Species may evolve in one region, spread to other locations and then become extinct in all but a restricted area where it survives. Species restricted in this way are said to be **Endemic**

356. the two major factors influencing the degree of endemism in an area: Isolation, Stability
357. 'fossil endemism' is called Palaeo-endemism
358. Anything that tends to make it more difficult for a species to live, grow or reproduce in its environment may prove to be a: limiting factor
359. Any regular change in physical or chemical conditions through space that creates a sequence of replacement of one species by another, among both animals and plants. zonation
360. the predators can always turn to alternative food species if the numbers of their usual prey should be reduced by climatic or other influences. This is termed. Prey Switching
361. reduce the rate of growth of populations because of their negative influence on general fitness, survival and fecundity. Parasites
362. The removal of certain species could create effects far in excess of what may originally have been expected. Influential species of this kind are known as. Keystone Species
363. The loss of a___ can cause an avalanche of local extinctions. Keystone Species
364. Microscopic plankton are capable of changing the depth at which they live, depending on conditions, and this can be regarded as a form of: vertical migration
365. of a species can be measured by its geographical distribution Success
366. The term___ is used for animals that play a particular role in the community, such as plant- sucking insects or insectivorous birds guild

367. To cope with the physical demands of their environment **Species adapt**
368. species tolerating one another, or becoming dependent on one another **Co- evolution**
369. Pointing out that no two species have quite the same needs. **Individualistic concept**
370. of certain species from an ecosystem would have little or no effect on the functioning of that ecosystem **Removal**
371. A possible alternative model is based on the supposition that all species are equally important to: **ecosystem function**
372. certain species play key roles in the ecosystem, and when they are lost there is a sudden drop in the capacity of the ecosystem to function. This is sometimes referred to as: **The Rivet Hypothesis**
373. is Defined in terms of inertia, or resistance to change. **Stability**
374. Woody savannas – trees > 2 m high, cover only _____ of the land surface **30–60%**
375. Variations in climate also result from the pattern of movement of **air masses**
376. The ‘trade winds’, found in both the Northern and Southern Hemispheres, meet in the region of the equator, and this is known as the: **intertropical convergence zone (ITCZ)**
377. Approximately _____ species of organism have been described **1.8 million**
378. Of the bacteria, only about _____ species have so far been described **4000**
379. have always been most abundant in the low-latitude (tropical) regions. **Angiosperms**
380. Greater extinction rates in the higher latitudes is the instability of climatic conditions over the past _____ years **2 million**
381. High-latitude organisms have _____ than those from the low latitudes. **broader geographical ranges**
382. General feature of biogeography first pointed out by _____ in the 1970s **E.H. Rapoport**
383. Katherine Smith and James Brown examined the diversity of _____ as one proceeds deeper **fish**
384. The Amazon basin contains approximately _____ flowering plant species, whereas equivalent areas in Africa and in South-East Asia contain only about 40,000 each. **90 000**
385. All the land surface area of the hotspots together comprise only about _____ of the Earth’s terrestrial total **1.4%**

386. The idea that continents could fragment and move across the face of the planet was first suggested by the German meteorologist _____ in 1912 **Alfred Wegener**
387. The surface of the Earth, known as the lithosphere, is occupied by a number of areas known as: **tectonic plates**
388. The _____ move as well as the continents, the study of their movements is known as plate tectonics rather than continental drift **ocean floors**
389. The fossil record suggests that all the early amphibian and reptile groups evolved in the continent called **Euramerica**
390. are all the result of the break-up and dispersal of Gondwana **Southern continents**
391. mainly the result of the appearance and disappearance of land or sea barriers within North America and Eurasia **Northern continents**
392. _____ Apart from humans and the aerial bats, only the _____ spread naturally as far as Australia **rat**
393. Human beings probably arrived _____ years ago and brought the domestic dog (the ancestor of the dingo) about 3500 years ago **60 000 to 40 000**
394. Geological studies show that _____ is the smallest (about 1600 km²) surviving fragment of Gondwana **New Caledonia**
395. New Zealand has Its total area, _____, makes it far larger than any other Pacific oceanic island **270 000 km²**
396. The term _____ is used for animals that play a particular role in the community, such as plant- sucking insects or insectivorous birds **guild**