

American University of Beirut Stratigraphy (Geol. 214) Final exam



3 Feb. 2000

1- Chronostratigraphy (total 34 pts):

- a) List (in order from the oldest to the youngest) the series/stages of the Early (4 pts), Middle (4 pts) and Late (3 pts) Jurassic
- b) Mention the numerical age of the Permian/Triassic boundary (3 pts)
- c) Explain the variability of oxygen isotope throughout the Earth and the correlation by stable oxygen isotope events (20 pts)
- 2- Sequence stratigraphy (total 21 pts):
- a) Draw sea level analysis, with figures representing: I)- stratigraphic cross section (7 pts), II)- chronostratigraphic chart (7 pts) and III)- regional chart of cycles or relative coastal onlap (7 pts)
- 3- Biostratigraphic units (total 45 pts):
- a) Explain (4 pts) the graphic method for correlating by taxon range zone, with graphs showing I) the ranges of few fossil species in 2 sections (7 pts), II)- a graphic correlation plot (7 pts), and, III)- a hiatus (7 pts)
- b) Explain (10 pts) the principal categories of zones, showing the graph of the principal kinds of interval zones (10 pts)

