

Final Lab Exam PRACTICE, Fall, 2011

Invertebrate Paleontology

20 questions, total 40 points

Directions: This is an individual exam, so by yourself, examine each fossil on the tray, (no particular order necessary) and complete the exam. The key to this Practice exam will be available on-line on Wednesday, November 30th. Grade yourself on this and determine where your general weaknesses are. The actual lab final will be similar, but not exactly like, this practice exam.

1A. This assemblage is characteristic of (circle the correct answer)
 Early Paleozoic Late Paleozoic Late Mesozoic Late Cenozoic

1B The environment it represents is (circle the correct answer)
 Inner shelf deep ocean rocky coast sandy shore

2A This assemblage is characteristic of (circle the correct answer)
 Silurian Permian Cretaceous Tertiary

2B The assemblage here dominated in a (circle the correct answer)
 Coral reef sponge reef crinoid thicket shell hash

3A This trilobite molt is the part of the exoskeleton known as (circle the correct answer)

Cephalon thorax pygidium genal spine

3B Close examination of this molt indicates the time range for this fossil is likely to be

(circle the correct answer)

Early Paleozoic Late Paleozoic Early Mesozoic Late Mesozoic

4A This is a fossil _____ (circle the correct answer)

Sponge coral bryozoan brachiopod

4B The fossilization process here is one of (circle the correct answer)

Carbonization recrystallization replacement unaltered

5A This fossil is a (circle the correct one)

Gastropod

Cephalopod

5B. The distinguishing characteristic between these two groups is
 planispiral coiling presence/absence of septal walls size coiling direction

6A This assemblage is typical of (circle the correct answer)

Early Paleozoic

Late Paleozoic

Mesozoic

Cenozoic

6B The environment it represents is (circle the correct answer)

Inner shelf

outer shelf

deep ocean

rocky coast

7A This is a fossil (circle the correct answer)

Conifer

angiosperm

Fern

algae

7B The preservation conditions involved (circle the correct answer)

Replacement

recrystallization

carbonization

permineralization

8A This is a fossil shell of a (circle the correct answer)

Brachiopod

Bivalve Mollusk (Pelecypod)

8B The correct identification is based on (circle the best group of 3 characteristics)

Vertical symmetry plane

Horizontal symmetry plane

Vertical symmetry plane

pedical opening

pallial line

pedical opening

Hinge features

hinge features

pallial sinus

9A This is a fossil cephalopod typical of the (circle the correct answer)

Nautiloids

Ammonoids

Coleoids

9B The sutures are (circle the correct answer)

Goniatite

Ceratite

Ammonite

Straight-walled

10A This is a fossil cephalopod typical of (circle the correct answer)

Nautiloids

Ammonoids

Coleoids

10B The sutures are (circle the correct answer)

Goniatite

Ceratite

Ammonite

Straight-walled

11A Members of this group all share a common feature, which is the

_____ (fill in the blank)

11B The sedimentary environment that supports them must be (circle the correct answer)

Soft sediment

Hardground

coarse sand and gravel

12A This group all share a common feature, which is _____ (fill in the blank)

12B The environment that supports them must be (circle the correct answer)

Marine

Freshwater

Estuarine

13A These bivalves are typical of (circle the correct answer)

Ordovician

Permian

Cretaceous

Quaternary

13B The extreme thickness of the shells is a response to an increase in (circle the best answer)

predation oxygen

temperature

competition

14A These are fossil _____ (fill in the blank)

14B The characteristics of the environment that supported them included (circle the best group of 3 characteristics)

Deep ocean

shallow clear water

muddy water

volcanics

Carbonate mounds

carbonate mounds

strong current

weak current

weak current

15A These are fossil _____ (fill in the blank)

15B The approximate age of these fossils is (circle the correct answer)

Paleozoic

Mesozoic

Cenozoic

16A The scar marked by the arrow on this bivalve cast indicates the _____ (fill in the blank)

16B The presence of this scar corresponds to (circle the best answer)
 Lophophore tiering pygidium calcifying

17A This wood is preserved by the process of _____ (fill in the blank)

17B This wood is typical of (circle the correct answer)
 Early Paleozoic Mesozoic Cenozoic

18A This cephalopod shows evidence on the outer surface of the mineral (circle the best answer)

Magnetite pyrite aragonite calcite

18B This mineral reverts over time to the mineral (circle the best answer)

Magnetite pyrite aragonite calcite

19A This fossil is preserved as a (circle the best answer)

Mold cast permineralization carbonization

19B This fossil preserves the imprint of a (circle the correct answer)

Brachiopod bivalve mollusk echinoid crinoid

20A These fossils were deposited in (circle the correct answer)

Quiet water water with a current direction storm deposit

20B These fossils are (circle the correct answer)

Brachiopods bivalve mollusks crinoid stems echinoid fragments
