

GY 112 PRACTICE LAB EXAM 3

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Note: This examination is like the one you will have as a final in GY 112 (except it is shorter). It has 2 components. 1) physical specimens (rocks and fossils); 2) written questions. The actual final will take about 1 hour (there will be 12-15 stations and you will have 3 minutes a station to answer the questions). At the end of the exam, you will have 15 minutes of re-think time.

ALL STATIONS ARE OF EQUAL VALUE (5 points per station)

Station 1: *Fossil Associations.* This station consists of 1 unlabelled specimen.

1a) To which phylum does this beastie belong? _____ (1 point)

1b) To which class does this beastie belong? _____ (1 point)

1c) What is the mode(s) of preservation of the beastie? _____ (1 points)

1d) Which other phylum\phyla might you confuse with this fossils and how are they best distinguished? (2 points)

Station 2: *Writing Question. Modes of preservation.* Many of you had problems with the way that fossils can be preserved in the rock record (me too sometimes), but it is important to be able to distinguish between types of preservation. So..... What is the difference between replacement and perimineralization? (5 points)

Station 3: *Sedimentary Rock Associations.* This station consists of 2 specimen.

2a) What is the name of sedimentary rock 3a? _____ (1 point)

2b) What is the name of sedimentary rock 3b? _____ (1 point)

2c) What kind(s) of fossils does 3a contain? (there may be more than 1)

_____ (1 point)

2d) How are the fossils in 3a preserved _____ (1 point)

2e) In what depositional environment was 3b deposited? _____ (1 point)

Station 4: Fossil Associations. This station consists of one unlabelled fossil specimen.

4a) To which phylum and class does this beastie belong? _____, _____ (2 points)

4b) What is its more common name? _____ (1 point)

4c) Name 2 of the 3 subclasses comprising the class you identified in 4a (2 points)

_____, _____

Station 5: Writing Question. Alabama Geology. If you wanted to look for trilobites in Alabama, where would you go to look and why? (5 points)

Station 6: Writing Question. Trace fossils. What are the major differences between borings and burrows? (5 points)

Station 7: Sedimentary rocks & fossil associations. This station consists of 2 labelled specimens.

7a) What is the proper geological name for specimen 7a? _____ (1 point)

7b) What is the proper geological name for specimen 7b? _____ (1 point)

7c) What is the most likely depositional environment(s) of these rocks? (2 points)

7a _____ 7b _____

7d) Which fossils (if any) would you expect to see in 7b? _____ (1 point)

Station 8: Fossil Associations. This station consists of one unlabelled rock specimen.

8a) What is the common name of this “rock”? _____ (1 point)

8b) What fossils are commonly found in this “rock”? _____ (1 point)

8c) Name three other animals that belong to the same phylum as the beastie you identified in 8b (3 points)

Station 9: Fossil associations. This station consists of 2 unlabelled specimens.

9a) To which phylum does specimen 9a belong? _____ (1 point)

9b) To which class does specimen 9a belong? _____ (1 point)

9c) To which phylum does specimen 9b belong? _____ (1 point)

9d) To which class does specimen 9b belong? _____ (1 point)

9e) How would you describe the symmetry of specimen 9b (careful)? (1 point) _____

Station 10: Fossil and Rock Associations. This station consists of 1 unlabelled specimen.

10a) What is the name of this rock? _____ (1 point)

10b) In what depositional environment was it deposited? _____ (1 point)

10c) To which phylum do the beasties in the rock belong? _____ (1 point)

10d) To which class do these specimens belong? _____ (1 point)

10e) This is a Mesozoic fossil. In which part of Alabama would you go to find it? (1 point)

_____ (Choose from north, south or middle)

SEDIMENTARY ROCKS TO BE FAMILIAR WITH

Quartz arenite	
lithic sandstone	dolostone
greywacke	coal
arkose	amber
conglomerate	halite
breccia	
red shale	
black shale	
green shale	
fossiliferous limestone	
chalk	
oolite	
non-fossiliferous limestone	
coquina	

