

Name..... ID.....

EAS 233 - Sample mid-term test material based on previous year

Note: This material is provided to illustrate the format of the test. The content of the actual test will cover any of the material covered so far in the class. Do not confine your review to the material in this example!

Time allowed: 1 hour 15 minutes.

Answer all the questions.

Take care to show the constructions and calculations you used to arrive at your answer.

Note that presentation and accuracy are important in the evaluation of your answers. Make sure that your answers show orientation, scale, and legend information to explain any symbols you use that are not in the original question.

Put your name and ID on each sheet. Leave this question paper and all your working materials face down on your desk when you are done.

1. You are provided with a drawing that shows a fold exposed in **profile view** in a vertical cliff. An enlarged portion shows structures that indicate younging direction. On the drawing, mark one of each of the following features. (20%)
 - a. Hinge point
 - b. Crest or trough point
 - c. Inflection point
 - d. Axial trace
 - e. Facing direction

Classify the fold as completely as you can, using the following lists (Check one box in each list.) (20%)

- f. Sub-horizontal
 Gently plunging
 Moderately plunging
 Steeply plunging
 Sub-vertical
 Cannot determine
- g. Recumbent
 Gently inclined
 Moderately inclined
 Steeply inclined
 Upright
 Cannot determine

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h.

- Gentle
- Open
- Tight
- Isoclinal
- Fan
- Cannot determine

i.

- Antiform
- Synform
- Cannot determine

j.

- Anticline
- Syncline
- Cannot determine

2. You are provided with a map of an area of sedimentary rocks that includes a fault and an unconformity. Using structure contours, determine the strike and dip of the fault and the strike and dip of the unconformity.

Fault.....

Unconformity.....

(40%)

3. Plot both the orientations from question 2 on a stereographic projection. Determine the plunge and trend of their line of intersection

Orientation:.....

(20%)

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