Assignment 9

The due date for submitting this assignment has passed.

Due on 2019-10-02, 23:59 IST.

Assignment 9

1. Which type of layer underlying boudinage?
   - Incomplete layer
   - Complete layer
   - Both complete and incomplete layer
   - All of the above
   
   *No, the answer is incorrect.*

   *Acceptable Answers: Complete layer
   *Score: 1 point*

2. A layer parallel extension tool is placed in two directions and causes the layer to break apart, which type of structure is supposed to form?
   - Fissile boudinage
   - Chalcopyrite boudinage
   - Fiss mid boudinage
   - Fiss and wall structure
   
   *No, the answer is incorrect.*

   *Acceptable Answers: Chalcopyrite boudinage
   *Score: 1 point*

3. A, B, C and D correspond to principal axes of strain, then choose the condition most likely that would result in formation of chocolate-chip boudinage in a single deformation event?

   \[ A \times 1.25 \times A \]
   \[ B \times 1.25 \times B \]
   \[ C \times 2 \times C \]
   \[ D \times 2 \times D \]

   *No, the answer is incorrect.*

   *Acceptable Answers: B × 1.25 × B
   *Score: 1 point*

4. A, B, C and D correspond to principal axes of strain, then choose the condition most likely that would result in formation of folded chocolate-chip boudinage in a single deformation event?

   \[ A \times 1.25 \times A \]
   \[ B \times 1.25 \times B \]
   \[ C \times 2 \times C \]
   \[ D \times 2 \times D \]

   *No, the answer is incorrect.*

   *Acceptable Answers: B × 1.25 × B
   *Score: 1 point*

5. Choose the correct statement:
   - Transverse section of zone of boudinage is observed in XY sections of strain ellipses, and boudins are more complete than the surrounding host rock.
   - Transverse section of zone of boudinage is observed in KZ sections of strain ellipses, and boudins are more complete than the surrounding host rock.
   - Transverse section of zone of boudinage is observed in 2D sections of strain ellipses, and boudins are more complete than the surrounding host rock.
   - Transverse section of zone of boudinage is observed in 2D sections of strain ellipses, and boudins are more complete than the surrounding host rock.

   *No, the answer is incorrect.*

   *Acceptable Answers: B × 1.25 × B
   *Score: 1 point*

6. Choose the correct statement:
   - If the variation around a porphyroclast then it indicates the porphyroclast has grown after tectonic deformation.
   - If the variation within a porphyroclast and the foliation external to it completely matches each other's orientation, then it indicates the porphyroclast was present before the tectonic deformation.
   - If the variation within a porphyroclast and the foliation external to it completely matches each other's orientation, than it indicates the porphyroclast has grown after the tectonic deformation.
   - All the above statements are incorrect.

   *No, the answer is incorrect.*

   *Acceptable Answers: A, B, C
   *Score: 1 point*

7. Choose the correct statement:
   - If a foliation varies around a porphyroclast than it indicates the porphyroclast has grown after tectonic deformation.
   - If the variation within a porphyroclast and the foliation external to it completely matches each other's orientation, then it indicates the porphyroclast was present before the tectonic deformation.
   - If the variation within a porphyroclast and the foliation external to it completely matches each other's orientation, than it indicates the porphyroclast has grown after the tectonic deformation.
   - All the above statements are incorrect.

   *No, the answer is incorrect.*

   *Acceptable Answers: A, B, C
   *Score: 1 point*

8. A basal has a strike of 235° and dip of 45° towards North. Plot pole to the plane using stereonet and choose the correct option

   \[ 089° \]
   \[ 230° \]
   \[ 259° \]
   \[ 320° \]

   *No, the answer is incorrect.*

   *Acceptable Answers: 230°
   *Score: 1 point*

9. A basal has a strike of 235° and dip of 45° towards North. Plot pole to the plane using stereonet and choose the correct option

   \[ 089° \]
   \[ 125° \]
   \[ 259° \]
   \[ 320° \]

   *No, the answer is incorrect.*

   *Acceptable Answers: 259°
   *Score: 1 point*

10. A, B, C, D correspond to principal axes of strain, then choose the condition most likely that would result in formation of chocolate-chip boudinage in a single deformation event?

   \[ A \times 1.25 \times A \]
   \[ B \times 1.25 \times B \]
   \[ C \times 2 \times C \]
   \[ D \times 2 \times D \]

   *No, the answer is incorrect.*

   *Acceptable Answers: A × 1.25 × A
   *Score: 1 point*

11. D is an example of a metamorphic system is exposed. The attitude of the two limbs of the synform is 25°, 325°, and 089°, 329°. With the help of stereonet plot the attitude of the limbs and choose the correct option

   - The axial plane is horizontal and fold has no ridges
     - The axial plane is steep and fold has no ridges
     - The axial plane is horizontal and fold has ridges
     - The axial plane is steep and fold has ridges

   *No, the answer is incorrect.*

   *Acceptable Answers: D
   *Score: 1 point*