

Geology

- Q.1** During metamorphism, what happens to the size of crystals:
- They get smaller
 - They get larger
 - No change in the size
 - It is uncontained.
- Q.2** A massive metamorphic rock indicates:
- Directional pressure
 - Overburden pressure
 - Tectonic Pressure
 - None of these
- Q.3** Force per unit area and a measure of deformation in solids are known as respectively:
- Strain and stress
 - Stress and tension
 - Stress and strain
 - Compression and tension
- Q.4** Young's modulus is obtained by:
- Stress
 - Ratio of stress to strain
 - Strain
 - Ratio of transverse strain to longitudinal strain
- Q.5** If a fault plane is inclined with an angle of 35° , then the hade will be:
- 145°
 - 125°
 - 55°
 - 45°
- Q.6** Rock deformation is:
- Brittle
 - Ductile
 - Both brittle and ductile
 - Not known
- Q.7** According to "rule of V's", the outcrop of a horizontal bed forms a 'V' as it crosses a valley and that the apex of the V points:
- Upstream
 - Downstream
 - Diagonal
 - In any direction
- Q.8** Orogeny or tectonic process that includes:
- Folding and faulting
 - Intrusion.
 - Metamorphism
 - All the above.
- Q.9** Altitude of a bed can be measured by:
- Reading the position of the magnetic needle on the outer circle.
 - Reading the angle by clinometer.
 - Ending strike direction by compass and dip by clinometer.
 - Finding strike and dip direction by compass and angle or dip by clinometer.
- Q.10** The apparent dip of any bed towards any direction is:
- Greater than true dip
 - Equal to the true dip
 - Less than the true dip
 - Above conditions depend upon the amount of dip
- Q.11** Younger beds will always be found in the:
- Opposite direction of dip
 - Direction of dip
 - Direction of strike line
 - Inclined direction of dip and strike
- Q.12** If the limbs of a fold are unequal and inclined to the axial plane or of unequal length the fold is known as:
- Asymmetrical
 - Monocline or Monoclinical
 - Recumbent
 - Inclined
- Q.13** The direction and amount of pitch of the drag fold is same as that of the major fold. It is known as:
- Rahad's rule
 - Pumpolly's rule
 - Rittman's rule
 - Eskola's rule

Q.14 Match the following:

Group-I

1. Gentle fold
2. Open fold
3. Close fold
4. Tight fold

Group-II

- (i) Interlimb angle - $120^\circ - 70^\circ$
- (ii) Interlimb angle - $30^\circ - 0^\circ$
- (iii) Interlimb angle - $180^\circ - 120^\circ$
- (iv) Interlimb angle - $70^\circ - 30^\circ$
- (a) 1-i, 2-ii, 3-iii, 4-iv
- (b) 1-iii, 2-i, 3-iv, 4-ii
- (c) 1-ii, 2-iv, 3-iii, 4-i
- (d) 1-iii, 2-i, 3-ii, 4-iv

Q.15 Which fold has got two hinges:

- (a) Fan fold
- (b) Chevron fold
- (c) Isoclinal fold
- (d) Box fold

Q.16 When an anticline and syncline coincides, it results in a:

- (a) Culmination
- (b) Depression
- (c) Both (a) and (b) will result
- (d) Dome

Q.17 The maps which place rocks in their presume position before folding and thrusting are known as:

- (a) Paleogeologic map
- (b) Paleotectonic map
- (c) Paleogeographic map
- (d) Palinspastic map

Q.18 Match the following:

Group-I

1. Class 1
2. Class 2
3. Class 3
4. Parallel folds

Group-II

- (i) Divergent isogons
- (ii) Ideal buckling
- (iii) Convergent isogons
- (iv) Parallel isogons
- (a) 1-i, 2-ii, 3-iii, 4-iv
- (b) 1-ii, 2-iii, 3-iv, 4-i
- (c) 1-iii, 2-iv, 3-ii, 4-i
- (d) 1-iii, 2-iv, 3-i, 4-ii

Q.19 A fold in which the shape of the fold may vary along the axial plane and at right angles to the fold axis is:

- (a) Parallel fold
- (b) Similar fold
- (c) Homocline fold
- (d) Isoclinal fold

Q.20 The kink bands and chevron folds are characterised by their:

- (a) Straight limbs
- (b) Sharp angular lines
- (c) Symmetrical nature
- (d) Both (a) and (b)

Q.21 The stress-strain relationships in rocks are controlled by:

- (a) Confining pressure and strain rate
- (b) Temperature
- (c) Nature of chemical environment
- (d) All the above

Q.22 In chevron folds, the interlimb angle is around:

- (a) 30°
- (b) 45°
- (c) 60°
- (d) 90°

Q.23 An appressed fold is:

- (a) Plung inclined in one direction
- (b) Combination of two anticline folds
- (c) Having very small interlimb angle
- (d) In which interlimb angle is more than limb angle

Q.24 Faults occur along cracks because of the:

- (a) Cohesion of the material across the cracks is lost
- (b) Cohesion of the material across the cracks is increased
- (c) Forces are acting in one direction only
- (d) All above statements are correct

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Answers Astronomy

1. (b) 2. (b) 3. (c) 4. (b) 5. (c) 6. (c) 7. (a) 8. (d) 9. (d) 10. (c)
11. (b) 12. (a) 13. (b) 14. (b) 15. (d) 16. (b) 17. (d) 18. (d) 19. (b) 20. (d)
21. (d) 22. (c) 23. (c) 24. (a)