

# UNIT II: GEOMORPHOLOGY

## Set I

1. What is the primary force responsible for shaping the Earth's surface?

- a) Wind
- b) Water
- c) Tectonic forces
- d) Gravity

**\*\*Correct Answer: d) Gravity\*\***

2. Which of the following landforms is typically associated with glacial erosion?

- a) Mesa
- b) Moraine
- c) Butte
- d) Karst landscape

**\*\*Correct Answer: b) Moraine\*\***

3. Which process involves the removal of individual particles from the Earth's surface by wind, water, or ice?

- a) Weathering
- b) Erosion
- c) Deposition
- d) Mass wasting

**\*\*Correct Answer: b) Erosion\*\***

4. What type of fault is characterized by the hanging wall moving downward relative to the footwall?

- a) Normal fault
- b) Reverse fault
- c) Strike-slip fault
- d) Thrust fault

**\*\*Correct Answer: a) Normal fault\*\***

5. Which type of soil erosion occurs as a thin layer of soil is removed uniformly from the land surface?

- a) Splash erosion
- b) Rill erosion
- c) Sheet erosion
- d) Gully erosion

**\*\*Correct Answer: c) Sheet erosion\*\***

6. What landform is created by the dissolution of limestone or other soluble rocks?

- a) Mesa
- b) Inselberg
- c) Karst landscape
- d) Alluvial fan

**\*\*Correct Answer: c) Karst landscape\*\***

7. The study of landforms that result from the interaction of subsurface geology and surface processes is called:

- a) Geomorphology

b) Hydrology

c) Pedology

d) Geology

**\*\*Correct Answer: a) Geomorphology\*\***

8. Which process involves the downslope movement of rock, soil, and debris under the influence of gravity?

a) Erosion

b) Weathering

c) Mass wasting

d) Deposition

**\*\*Correct Answer: c) Mass wasting\*\***

9. Which type of volcano is characterized by its explosive eruptions and steep-sided profile?

a) Shield volcano

b) Stratovolcano

c) Cinder cone

d) Lava dome

**\*\*Correct Answer: b) Stratovolcano\*\***

10. Which of the following is a depositional landform created by glacial meltwater?

a) Esker

b) Drumlin

c) Horn

d) Arête

**\*\*Correct Answer: a) Esker\*\***

11. Which wind-driven process leads to the formation of sand dunes?

- a) Deflation
- b) Abrasion
- c) Saltation
- d) Alluviation

**\*\*Correct Answer: c) Saltation\*\***

12. What is the term for the process by which rocks and minerals break down into smaller pieces due to physical, chemical, or biological factors?

- a) Erosion
- b) Deposition
- c) Weathering
- d) Sedimentation

**\*\*Correct Answer: c) Weathering\*\***

13. Which type of drainage pattern resembles the branching pattern of a tree?

- a) Dendritic
- b) Rectangular
- c) Trellis
- d) Radial

**\*\*Correct Answer: a) Dendritic\*\***

14. What is the primary agent of chemical weathering in most regions?

- a) Ice
- b) Oxygen

c) Carbon dioxide

d) Running water

**\*\*Correct Answer: c) Carbon dioxide\*\***

15. Which of the following is an example of a coastal depositional landform?

a) Sea stack

b) Fjord

c) Tarn

d) Arroyo

**\*\*Correct Answer: a) Sea stack\*\***

16. Which theory explains the movement of lithospheric plates and the formation of various landforms?

a) Catastrophism

b) Uniformitarianism

c) Plate tectonics

d) Punctuated equilibrium

**\*\*Correct Answer: c) Plate tectonics\*\***

17. What type of glacier flows down a mountain valley from its source region?

a) Ice cap

b) Piedmont glacier

c) Cirque glacier

d) Valley glacier

**\*\*Correct Answer: d) Valley glacier\*\***

18. Which of the following is a type of volcanic rock that forms from the rapid cooling of lava?

- a) Granite
- b) Basalt
- c) Schist
- d) Gneiss

**\*\*Correct Answer: b) Basalt\*\***

19. What is the term for the process by which sediments are transported and deposited by a river as its velocity decreases?

- a) Alluviation
- b) Deflation
- c) Abrasion
- d) Corrasion

**\*\*Correct Answer: a) Alluviation\*\***

20. Which landform is characterized by a steep, V-shaped valley formed by a fast-flowing river?

- a) Canyon
- b) Gorge
- c) Plateau
- d) Mesa

**\*\*Correct Answer: b) Gorge\*\***

21. Which of the following is a common landform associated with volcanic eruptions, often forming a depression at the summit?

- a) Caldera

b) Mesa

c) Butte

d) Cirque

**\*\*Correct Answer: a) Caldera\*\***

22. What type of glacier flows outward from a central point, often found on ice caps or domes?

a) Valley glacier

b) Continental glacier

c) Cirque glacier

d) Piedmont glacier

**\*\*Correct Answer: b) Continental glacier\*\***

23. Which of the following is a primary factor affecting the rate of chemical weathering?

a) Temperature

b) Elevation

c) Wind speed

d) Humidity

**\*\*Correct Answer: a) Temperature\*\***

24. Which process involves the settling or deposition of eroded material, often in rivers and streams?

a) Erosion

b) Mass wasting

c) Deposition

d) Weathering

**\*\*Correct Answer: c) Deposition\*\***

25. What landform is created by the convergence of several cirque glaciers?

- a) Arete
- b) Tarn
- c) Hanging valley
- d) Esker

**\*\*Correct Answer: c) Hanging valley\*\***

26. Which of the following is a type of chemical weathering involving the reaction of minerals with oxygen and water?

- a) Hydration
- b) Oxidation
- c) Carbonation
- d) Biological weathering

**\*\*Correct Answer: b) Oxidation\*\***

27. What type of landform is characterized by a steep-sided hill or mountain composed of resistant rock?

- a) Butte
- b) Pinnacle
- c) Pediment
- d) Karst tower

**\*\*Correct Answer: a) Butte\*\***

te\*\*

28. Which type of drainage pattern resembles a series of parallel, rectangular channels?

- a) Dendritic
- b) Rectangular
- c) Trellis
- d) Radial

**\*\*Correct Answer: b) Rectangular\*\***

29. What is the term for the downslope movement of a mixture of water, rock, and soil, often triggered by heavy rainfall or earthquakes?

- a) Slump
- b) Creep
- c) Landslide
- d) Avalanche

**\*\*Correct Answer: c) Landslide\*\***

30. Which type of volcano is characterized by its broad, gently sloping profile and non-explosive eruptions?

- a) Shield volcano
- b) Stratovolcano
- c) Cinder cone
- d) Caldera

**\*\*Correct Answer: a) Shield volcano\*\***

31. What is the term for the process of sediment deposition by wind in arid regions?

- a) Deflation

- b) Abrasion
- c) Saltation
- d) Loess deposition

**\*\*Correct Answer: d) Loess deposition\*\***

32. Which type of glacier forms in the bowl-shaped depressions on the sides of mountains?

- a) Valley glacier
- b) Continental glacier
- c) Cirque glacier
- d) Piedmont glacier

**\*\*Correct Answer: c) Cirque glacier\*\***

33. Which type of rock is formed from the compaction and cementation of mineral and organic particles?

- a) Igneous rock
- b) Sedimentary rock
- c) Metamorphic rock
- d) Plutonic rock

**\*\*Correct Answer: b) Sedimentary rock\*\***

34. Which landform results from the dissolution of limestone and the subsequent collapse of caves?

- a) Mesa
- b) Inselberg
- c) Karst tower
- d) Lava dome

**\*\*Correct Answer: c) Karst tower\*\***

35. What is the term for the process of sediment transport by rolling and sliding along the ground?

- a) Saltation
- b) Creep
- c) Suspension
- d) Traction

**\*\*Correct Answer: d) Traction\*\***

36. Which type of drainage pattern resembles a series of interconnected, parallel streams?

- a) Dendritic
- b) Rectangular
- c) Trellis
- d) Radial

**\*\*Correct Answer: c) Trellis\*\***

37. Which of the following is a landform created by the accumulation of wind-blown sand?

- a) Moraine
- b) Barchan dune
- c) Drumlin
- d) Kame

**\*\*Correct Answer: b) Barchan dune\*\***

38. Which type of fault results from horizontal compression and leads to the overlying block moving up and over the hanging wall?

- a) Normal fault
- b) Reverse fault
- c) Strike-slip fault
- d) Thrust fault

**\*\*Correct Answer: d) Thrust fault\*\***

39. What is the term for the process of sediment transport by particles being carried in suspension by wind or water?

- a) Saltation
- b) Creep
- c) Suspension
- d) Traction

**\*\*Correct Answer: c) Suspension\*\***

40. Which of the following is a landform associated with coastal erosion and often resembles a cliff or steep slope?

- a) Sea stack
- b) Tarn
- c) Sea arch
- d) Spit

**\*\*Correct Answer: c) Sea arch\*\***

41. Which type of volcano is characterized by its small size and steep sides, often found on larger volcanoes?

- a) Shield volcano

b) Stratovolcano

c) Cinder cone

d) Lava dome

**\*\*Correct Answer: c) Cinder cone\*\***

42. What is the term for the process of sediment transport by particles bouncing along the ground surface?

a) Saltation

b) Creep

c) Suspension

d) Traction

**\*\*Correct Answer: a) Saltation\*\***

43. Which landform is created by the accumulation of sediment at the mouth of a river where it meets a body of water?

a) Delta

b) Alluvial fan

c) Tarn

d) Kame

**\*\*Correct Answer: a) Delta\*\***

44. Which type of fault is characterized by horizontal displacement along a fault plane?

a) Normal fault

b) Reverse fault

c) Strike-slip fault

d) Thrust fault

**\*\*Correct Answer: c) Strike-slip fault\*\***

45. What is the term for the process of sediment transport by particles being rolled and bounced along the riverbed?

- a) Saltation
- b) Creep
- c) Suspension
- d) Traction

**\*\*Correct Answer: d) Traction\*\***

46. Which type of glacier forms a large, continuous ice sheet covering extensive areas?

- a) Valley glacier
- b) Continental glacier
- c) Cirque glacier
- d) Piedmont glacier

**\*\*Correct Answer: b) Continental glacier\*\***

47. Which of the following is a landform created by the deposition of sediment by a glacier?

- a) Arête
- b) Moraine
- c) Cirque
- d) Horn

**\*\*Correct Answer: b) Moraine\*\***

48. Which landform results from the dissolution of gypsum or salt deposits, leading to surface subsidence?

- a) Mesa
- b) Sinkhole
- c) Karst tower
- d) Lava dome

**\*\*Correct Answer: b) Sinkhole\*\***

49. Which of the following is a landform created by the deposition of sediment at the base of a glacier?

- a) Esker
- b) Drumlin
- c) Kame
- d) Tarn

**\*\*Correct Answer: c) Kame\*\***

50. What is the term for the process of sediment transport by particles being slowly dragged or rolled along the ground surface?

- a) Saltation
- b) Creep
- c) Suspension
- d) Traction

**\*\*Correct Answer: b) Creep\*\***

## **Set II**

1. What is the primary force responsible for shaping the Earth's surface?

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- b) Water
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- d) Gravity

**\*\*Correct Answer: d) Gravity\*\***

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- c) Butte
- d) Karst landscape

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**\*\*Correct Answer: b) Erosion\*\***

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37. Which of the following is a landform created by the accumulation of wind-blown sand?

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42. What is the term for the process of sediment transport by particles bouncing along the ground surface?

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- d) Traction

**\*\*Correct Answer: a) Saltation\*\***

43. Which landform is created by the accumulation of sediment at the mouth of a river where it meets a body of water?

- a) Delta
- b) Alluvial fan
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- d) Kame

**\*\*Correct Answer: a) Delta\*\***

44. Which type of fault is characterized by horizontal displacement along a fault plane?

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45. What is the term for the process of sediment transport by particles being rolled and bounced along the riverbed?

- a) Saltation
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**\*\*Correct Answer: d) Traction\*\***

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48. Which landform results from the dissolution of gypsum or salt deposits, leading to surface subsidence?

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- b) Sinkhole
- c) Karst tower
- d) Lava dome

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49. Which of the following is a landform created by the deposition of sediment at the base of a glacier?

- a) Esker
- b) Drumlin
- c) Kame
- d) Tarn

**\*\*Correct Answer: c) Kame\*\***

50. What is the term for the process of sediment transport by particles being slowly dragged or rolled along the ground surface?

- a) Saltation
- b) Creep
- c) Suspension
- d) Traction

**\*\*Correct Answer: b) Creep\*\***

Please note that these questions cover a broad range of topics in geomorphology and may require a deep understanding of the subject matter. Students are encouraged to use these questions as a study resource and consult their textbooks and professors for further clarification on specific topics.