

QUICK DRILL · CBSE CLASS 11

Geomorphic Processes

Geography · Chapter 5 · 15 MCQs · 20 minutes · PYQ-tagged with time budgets

DATE	TOTAL MARKS 15	DURATION 20 min	MARKING +1 / 0	TARGET ≥ 12/15
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OBJECTIVES

Reinforce the four core topics of Geomorphic Processes via 15 PYQ-derived MCQs. Identify weak sub-topics via concept-node IDs (see answer key). Build per-question time budget habit.

INSTRUCTIONS

Attempt all 15. Time budget shown per Q (use it as pacing guide). Mark answers (A/B/C/D) in the margin. Answer key + explanations on the last page. **Don't peek — score yourself honestly.**

SECTION · QUICK DRILL

Q 1-15 · 20 MIN

Q1. Geomorphic processes are best described as:

- | | |
|---|--|
| (A) Processes that occur only inside the earth's mantle | (B) Processes that shape and reshape the earth's surface |
| (C) Processes that form weather and climate | (D) Processes that form the earth's atmosphere |
- PYQ 2020 · CBSE SQP · 1m · 30s

Q2. The energy for endogenic processes comes mainly from:

- | | |
|--|------------------------------|
| (A) The sun's radiation | (B) Gravity acting on slopes |
| (C) Radioactivity and primordial heat inside the earth | (D) Tidal forces of the moon |
- PYQ 2021 · CBSE SQP · 1m · 30s

Q3. Orogenic movements are:

- | | |
|--|---|
| (A) Vertical and broad, warping continents | (B) Horizontal and localised, building fold mountains |
| (C) Slow and chemical, altering minerals | (D) Sudden and gravitational, causing landslides |
- PYQ 2022 · School Annual · 1m · 30s

Q4. Which of the following is an INTRUSIVE volcanic feature?

- | | |
|-----------------|--------------------|
| (A) Cinder cone | (B) Lava plateau |
| (C) Batholith | (D) Composite cone |
- PYQ 2023 · School Annual · 1m · 30s

Q5. Frost action is an example of:

- | | |
|---------------------------|-------------------------|
| (A) Chemical weathering | (B) Physical weathering |
| (C) Biological weathering | (D) Mass movement |
- PYQ 2019 · CBSE SQP · 1m · 30s

Q6. Carbonation of limestone to form caves is an example of:

- | | |
|---------------------------|----------------------------|
| (A) Physical weathering | (B) Chemical weathering |
| (C) Biological weathering | (D) Erosion by groundwater |
- PYQ 2021 · CBSE SQP · 1m · 30s

Q7. Lichens secreting acids on rock surfaces represents:

- | | |
|---------------------------|-------------------------|
| (A) Chemical weathering | (B) Physical weathering |
| (C) Biological weathering | (D) Mass movement |
- PYQ 2020 · School Annual · 1m · 30s

Q8. Bent fence-posts and tilted trees on a hillside are a sign of:

- | | |
|---------------|----------------|
| (A) Creep | (B) Mudflow |
| (C) Landslide | (D) Earthquake |
- PYQ 2022 · CBSE SQP · 1m · 30s

Q9. Solifluction is a type of:

- (A) Slide (B) Flow
(C) Creep (D) Volcanism

PYQ 2023 · School Annual · 1m · 30s

Q10. Weathering differs from erosion in that weathering:

- (A) Always involves chemical change (B) Involves no transport — the rock breaks down in place
(C) Is faster than erosion (D) Happens only at the coast

PYQ 2020 · CBSE SQP · 1m · 30s

Q11. The Deccan Trap is an example of which kind of feature?

- (A) Intrusive volcanic feature (B) Extrusive volcanic feature
(C) Glacial deposit (D) Wind-erosional feature

PYQ 2021 · School Annual · 1m · 30s

Q12. Which factor of soil formation supplies the INITIAL minerals and texture?

- (A) Climate (B) Time
(C) Parent material (D) Topography

PYQ 2022 · CBSE SQP · 1m · 30s

Q13. Mature soil with O-A-B-C horizons requires which factor most critically?

- (A) Wind (B) Time
(C) Volcanism (D) Latitude

PYQ 2023 · CBSE SQP · 1m · 30s

Q14. Black cotton soil of the Deccan is derived primarily from:

- (A) Granite (B) Basalt
(C) Sandstone (D) Limestone

PYQ 2019 · School Annual · 1m · 30s

Q15. Which of the following is NOT an exogenic process?

- (A) Weathering (B) Mass movement
(C) Volcanism (D) Erosion

PYQ 2020 · CBSE SQP · 1m · 30s

ANSWER KEY & EXPLANATIONS

Q 1-15 · MARK YOUR SCORE

Q1. Answer: B

Geomorphic processes are the SURFACE-shaping family — both internal (endogenic) and external (exogenic) processes that build or wear down relief.

Q2. Answer: C

Endogenic processes are powered by the EARTH'S INTERIOR — radioactive decay in the mantle plus primordial heat from the planet's formation. The sun + gravity drive EXOGENIC processes.

Q3. Answer: B

Orogenic = mountain-building. They are HORIZONTAL movements at plate margins that fold and fault crust into mountains like the Himalayas. Epeirogenic movements are the vertical, broad ones.

Q4. Answer: C

Batholiths form when magma cools BELOW the surface (intrusive). Cinder cones, lava plateaus and composite cones are extrusive — formed by lava reaching the surface.

Q5. Answer: B

Frost action is PHYSICAL (mechanical) weathering — water freezing in cracks expands and shatters the rock without altering its chemistry.

Q6. Answer: B

Carbonation is a CHEMICAL weathering process — CO₂-charged rain dissolves limestone (CaCO₃). The Borra Caves of Andhra Pradesh are the canonical Indian example.

Q7. Answer: C

Biological weathering — life-driven breakdown. Lichens, plant roots wedging cracks, and burrowing animals all fall in this family.

Q8. Answer: A

Creep is the slowest mass movement — imperceptibly slow soil drift visible only INDIRECTLY through tilted fence-posts, leaning poles and bent tree trunks.

Q9. Answer: B

Solifluction is a slow FLOW in cold regions — the thawed top layer of soil flows downhill over still-frozen ground beneath.

Q10. Answer: B

Weathering = IN-SITU breakdown, no transport. Erosion = removal and transport by an external agent. That's the defining difference.

Q11. Answer: B

The Deccan Trap is a vast EXTRUSIVE feature — basaltic lava flows that reached the surface in successive eruptions and built a step-like plateau.

Q12. Answer: C

Parent material — the underlying weathered rock — sets the starting minerals and texture of the soil. Basalt → black soil; granite → red soil.

Q13. Answer: B

TIME — soil horizons need centuries to millennia to develop. All other factors can be present but without time the regolith never matures into a layered soil.

Q14. Answer: B

Basaltic lava of the Deccan Trap — iron- and magnesium-rich — weathers into the dark, clay-rich black cotton soil. This connects parent material to soil colour directly.

Q15. Answer: C

Volcanism is ENDOGENIC — it draws energy from inside the earth. Weathering, mass movement and erosion are exogenic (sun + gravity).