PART-A
PHYSICAL GEOGRAPHY

NUMBER OF QUESTIONS ASKED IN CUET-PG GEOGRAPHY (2022 to 2024)

SECTION		2022	2023	2024
1	GEOMORPHOLOGY	9	8	7
2	CLIMATOLOGY	3	5	6
3	OCEANOGRAPHY	3	4	7
4	BIOGEOGRAPHY	1	5	9
5	PHYSICAL GEOGRAPHY OF INDIA	4	7	2

CHAPTER 1 GEOMORPHOLOGY

Topic Cover: *Origin of the earth, Earth's interior, Geological Time scale, Earth's Materials and Minerals, Rocks classification and characteristics, Earth surface configuration, Order of landforms, Wegner's theory, Plate tectonics. Folds, Fault, Dome and their resultant landforms, Earthquakes and Volcanic activities, Causes, Resultant landforms and world distribution. Weathering, Mass wasting and resultant landforms, Formation of regolith and Soil, Geomorphic agents and processes, Fluvial, Glacial, Coastal, Arid and Karst landforms, Geomorphic hazards.*

[Previous Year Exam Questions]

(CUET PG 2022)

1. Mount Fujiyama of Japan is a volcanic mountain of which type?

(1) Basalt cone (2) Basal dome
(3) Strato Cone (4) Cinder Cone

(CUET PG 2022)

2. Who has postulated the concept of "Present is key to the past"?

(1) James Hutton (2) Charles Lyell
(3) A. Penck (4) W.M. Davis

(CUET PG 2022)

3. Shale is a:

(1) Strong igneous rock
(2) Weak igneous rock
(3) Weak sedimentary rock
(4) Strong metamorphic rock

(CUET PG 2022)

4. Given below are two statements:

Statement I: Chemical weathering is mainly brought about by the minerals reacting chemically with water.

Statement II: It occurs mainly in hot and humid climates where heat and moisture are in abundance.

In the light of the above statements, choose the most appropriate answer from the options given below:

(1) Both Statement I and Statement II are true.
(2) Both Statement I and Statement II are false.
(3) Statement I is true but Statement II is false.
(4) Statement I is false but Statement II is true.

(CUET PG 2022)

5. Which of the following is misfit among glacial depositional features?

(1) Esker (2) Kame
(3) Drumlins (4) Cirques

(CUET PG 2022)

6. Which of the following are soil forming processes?

A. Eluviation
B. Ablation
C. Leaching
D. Deflation
E. Illuviation

Choose the correct answer from the options given below:

(1) A, B, C only (2) E, C, D only
(3) A, C, E only (4) B, C, E only

(CUET PG 2022)

7. Solifluction is which type of Physical process?

(1) Physical weathering
(2) Chemical weathering
(3) Both physical and chemical weathering
(4) Mass wasting

(CUET PG 2022)

8. Rift valleys fall under which order of relief features?

(1) Third order
(2) First order
(3) Second order
(4) Fourth order

(CUET PG 2022)

9. Which of the following statements are true?

A. Granite and basalt are the two major igneous rock types.
B. Granite rocks make up about 95 percent of all extrusive rocks
C. About 95 per cent of all intrusive rocks are basaltic

Choose the correct answer from the options given below:

(1) A, B and C only (2) B and C only
(3) A only (4) C only

(CUET PG 2023)

10. Subduction zone is also known as

(1) Wadati-Benioff Zone`
(2) Jig-saw puzzle
(3) Vine-Matthews Zone
(4) zone of magnetic reversals

(CUET PG 2023)

11. Which one of the following is NOT a polycyclic landform?

(1) Valley in valley (2) Tarn
(3) Incised Meanders (4) Knick point

(CUET PG 2023)

12. Arrange the following elements in descending order of their share in earth's crust.

A. Iron
B. Silicon
C. Oxygen
D. Aluminium

Choose the correct answer from the options given below:

(1) C,D,B,A (2) B,C,D,A
(3) C,B,D,A (4) B,D,A,C

(CUET PG 2023)

13. Identify the correct statements.

A. Pot holes, alluvial fans and waterfalls are fluvial erosional landforms.
B. Blow holes and Yardangs are erosional landforms produced by winds.
C. Crag and Tail landform is the result of differential rates of erosion.
D. Eskers and Kames are glacio-fluvial landforms.

Choose the correct answer from the options given below:

(1) A and B only (2) B and C only
(3) B and D only (4) C and D only

(CUET PG 2023)

14. Read the following statements about weathering and mass wasting carefully and identify the correct statements.

A. The process of disintegration and decomposition of rocks in situ is called weathering.
B. In desert areas wind velocity and presence of silt content determines the rate of weathering.
C. Soil creep and Solifluction are rapid mass movement.
D. Mass movement is downslope movement of rock material under the influence of gravity.

Choose the correct answer from the options given below:

(1) A and B only (2) A and D only
(3) B and D only (4) A and C only

(CUET PG 2023)

15. Read the following statements about Richter Scale carefully and identify the correct statements.

A. It is a logarithmic scale developed in 1935 by Charles Richter.
B. As an intensity scale it uses observed property damage to estimate the level of seismic jolt.
C. Each unit of increase in magnitude equates to a roughly 32 -fold increase in the energy released.
D. Ground motion change for a magnitude 6 earthquake is 10 times greater than produced by an earthquake of 5 magnitude.

Choose the correct answer from the options given below:

(1) A, B and C only (2) B, C and D only
(3) A, B and D only (4) A, C and D only

(CUET PG 2023)

16. Match List-I with List-II:

List-I (Continent)		List-II (Desert)	
A	North America	I	Taklamakan
B	Asia	II	Nubian
C	Africa	III	Simpson
D	Australia	IV	Mojave

Codes:

	A	B	C	D
(1)	IV	I	II	III
(2)	IV	III	II	I
(3)	III	IV	I	II
(4)	III	II	IV	I

(CUET PG 2023)

17. Match List-I with List-II:

List-I (Rock Type)		List-II (Example)	
A	Intrusive Igneous	I	Schist
B	Extrusive Igneous	II	Rhyolite
C	Sedimentary	III	Breccia
D	Metamorphic	IV	Diorite

Codes:

	A	B	C	D
(1)	III	IV	II	I
(2)	IV	III	II	I
(3)	II	IV	I	III
(4)	IV	II	III	I

(CUET PG 2024)

18. _____ proposed the Planetesimal Hypothesis of origin of Earth.

(1) Chamberlin and Moulton
(2) Hoyale
(3) Banerjee
(4) James and Jeffrey

(CUET PG 2024)

19. Quartzite is a metamorphosed form of _____.

(1) Sandstone (2) Shale
(3) Slate (4) Marble

(CUET PG 2024)

20. The point of origin of an earthquake is called_____

(1) Epicenter (2) Hot spot
(3) Focus (4) Median Point

(CUET PG 2024)

21. An oval-shaped mound composed of glacial drift is called_____.

(1) Esker (2) Drumlin
(3) Kame (4) Moraine

(CUET PG 2024)

22. Identify the correct statements

(A) The direction of movement of particles in P-waves is to and fro.
(B) The path followed by P-waves through the interior of earth is convex.
(C) The motion of particles in Rayleigh waves is in elliptical orbit in the plane of propagation.
(D) S-waves can pass through solid and liquid.

Choose the correct answer from the options given below:

(1) (B) and (D) only (2) (B) and (C) only
(3) (A), (B), and (D) only (4) (A) and (C) only

(CUET PG 2024)

23. Match List-I with List-II

List-I (Process)		List-II (Landform)	
A	Fluvial	I	Saddle
B	Glacial	II	Demoiselles
C	Coastal	III	Tombolo
D	Arid	IV	Levee

Codes:

	A	B	C	D
(1)	IV	I	III	II
(2)	I	III	II	IV
(3)	II	I	IV	III
(4)	I	IV	II	III

(CUET PG 2024)

24. Pir Panjal range lies in_____

(1) Trans-Himalaya (2) Greater Himalaya
(3) Outer Himalaya (4) Lesser Himalaya

Answer Key									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
(3)	(1)	(3)	(4)	(4)	(3)	(4)	(1)	(3)	(1)
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
(2)	(3)	(4)	(2)	(4)	(1)	(4)	(1)	(1)	(3)
21	**22**	**23**	**24**						
(2)	(4)	(1)	(4)						

[Practice Questions]

1. Which theory proposes that the planets, including Earth, formed from a spinning disk of dust and gas surrounding a young Sun?

(1) Steady State Theory
(2) Big Bang Theory
(3) Nebular Hypothesis
(4) Pulsating Universe Theory

2. Which of the following layers of the Earth is primarily composed of iron and nickel?

(1) Crust (2) Mantle
(3) Outer Core (4) Lithosphere

3. The longest span of time in Earth's history is called a/an:

(1) Epoch (2) Period
(3) Era (4) Eon

4. Which of the following is the correct chronological order (oldest to youngest) of eras in Earth's history?

(1) Paleozoic, Mesozoic, Cenozoic
(2) Mesozoic, Paleozoic, Cenozoic
(3) Cenozoic, Paleozoic, Mesozoic
(4) Paleozoic, Cenozoic, Mesozoic

5. Which of the following minerals is known for its perfect cleavage in one direction?

(1) Feldspar (2) Mica
(3) Quartz (4) Olivine

6. Which of the following is an example of a sedimentary rock?

(1) Granite (2) Basalt
(3) Limestone (4) Marble

7. Metamorphic rocks are primarily formed through which of the following processes?

(1) Melting and solidification
(2) Compaction and cementation
(3) Heat and pressure
(4) Weathering and erosion

8. Which of the following is an example of an erosional landform?

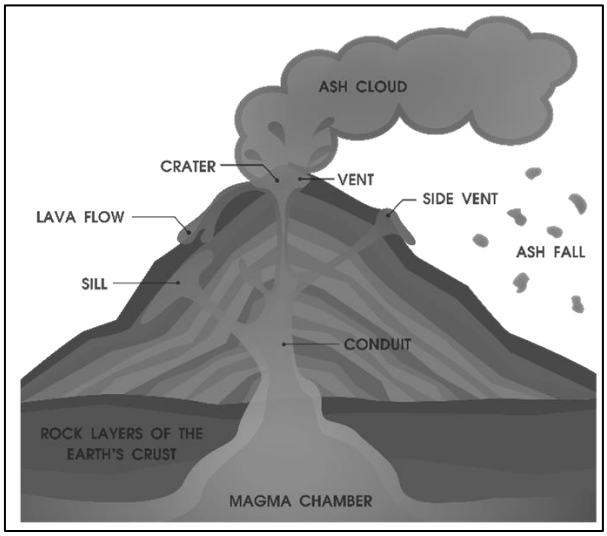
(1) Delta (2) Canyon
(3) Alluvial fan (4) Floodplain

Answer Key									
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
(3)	(3)	(4)	(1)	(2)	(3)	(3)	(2)	(2)	(2)
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
(1)	(2)	(3)	(2)	(1)	(1)	(4)	(3)	(2)	(3)
21	**22**	**23**	**24**	**25**					
(3)	(1)	(3)	(2)	(3)					

EXPLANATIONS

[Previous Year Exam Questions]

1. Correct Answer is (3): Mount Fujiyama (Mount Fuji) in Japan is a stratovolcano (also known as a strato cone). Stratovolcanoes have a conical shape with steep profiles, formed from layers of hardened lava, tephra, pumice, and ash. They result from explosive eruptions followed by lava flows. Mount Fuji, a stratovolcano, is known for its steep cone and highly viscous lava, leading to violent eruptions.



Other option

Basalt Cone: Formed from low-viscosity basaltic lava, these volcanic cones have broad, gently sloping sides due to the fluid lava spreading over large areas. They result in less explosive eruptions and create wide, shield-like volcanoes, such as those in the Hawaiian Islands.

Basal Dome: Also called a lava dome, it forms when thick, viscous lava (rich in silica) erupts slowly and piles up near the vent, creating a rounded, dome-like shape. These domes are smaller and result from lava that doesn't flow far due to its high viscosity.

Cinder Cone: Small, steep-sided volcanic cones formed from pyroclastic material like ash and cinders during explosive eruptions. They are short-lived, smaller than stratovolcanoes, and have loose, erodible sides. An example is Parícutin in Mexico.

2. Correct Answer is (1): Uniformitarianism, introduced by James Hutton in the late 18th century, is the idea that geological processes like erosion and sedimentation have operated consistently throughout Earth's history. The phrase "the present is the key to the past" summarizes this concept. First presented in 1785 and published fully in 1795, this theory revolutionized geology by suggesting Earth's features formed gradually over long periods through observable processes.

3. Correct Answer is (3): Shale is a fine-grained sedimentary rock made of compacted clay, silt, and particles. It forms from the deposition and cementation of sediments in environments like lake beds or river deltas. Shale is considered weak because it easily splits into thin layers (fissile) and is prone to weathering and erosion. Unlike igneous and metamorphic rocks, shale forms through sediment compaction rather than from cooling magma or heat and pressure.

4. Correct Answer is (4): Statement I is false but Statement II is true.

(S-I) is false because chemical weathering is not solely caused by reactions with water. Other processes, such as oxidation, carbonation, and hydration, also play a role, involving agents like oxygen and carbon dioxide alongside water. While water is important, it is not the only factor in chemical weathering.

(S-II) is true because chemical weathering is most effective in hot and humid climates, where the combination of high temperature and abundant moisture accelerates the chemical reactions that break down minerals.

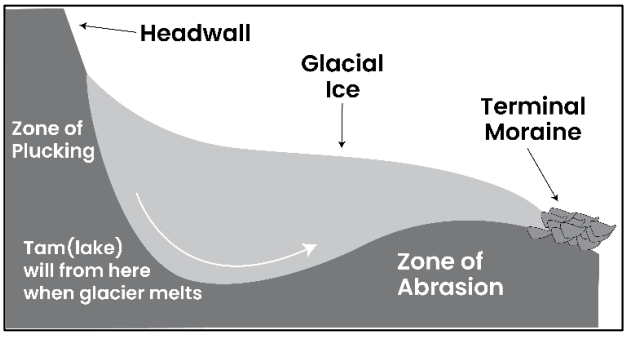
5. Correct Answer is (4): Cirques are erosional features—bowl-shaped, steep-walled depressions carved into mountains by glaciers. Formed by the glacier's erosive action, they are typically found in mountainous regions where glaciers once existed.

Other option

Esker: A long, winding ridge of sand and gravel formed by meltwater streams within or beneath a glacier, deposited as the glacier melts. Eskers can stretch for several kilometers.

Kame: A hill or mound of sand and gravel deposited by meltwater flowing off a glacier, forming irregularly shaped hills as the glacier retreats.

Drumlin: An elongated, oval-shaped hill made of glacial till, shaped by the movement of glaciers. Drumlins are smooth and often found in groups called "drumlin fields."



6. Correct Answer is (3): Soil forming processes involve the movement and transformation of materials within the soil. The relevant processes from the options are:

Eluviation: The process of removal of materials (such as minerals and organic matter) from the upper layers of soil due to water movement. This is a key process in soil formation.

Leaching: The removal of soluble substances or nutrients from the soil by water. It is another essential soil-forming process, particularly in humid climates.

***Illuviation*:** The deposition or accumulation of leached material (such as clay, iron, or organic matter) in a lower soil layer, forming a horizon.

Other option

Ablation: This refers to the removal of material from glaciers or ice masses, not a soil-forming process.

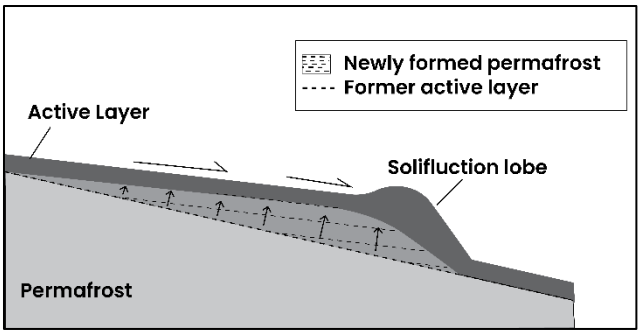
Deflation: This is the removal of fine soil particles by wind, which is an erosional process, not directly related to soil formation.

7. Correct Answer is (4): Solifluction is a type of mass wasting, where water-saturated soil slowly flows downslope over impermeable material like permafrost or bedrock. It typically occurs in cold climates with freeze-thaw cycles. The movement is driven by gravity, causing the saturated soil to flow over frozen or impermeable layers.

Other option

Physical Weathering: Also called mechanical weathering, it breaks rocks into smaller pieces without changing their chemical composition. It occurs due to temperature changes, abrasion, and biological activity (e.g., freeze-thaw cycles).

Chemical Weathering: Involves the chemical breakdown of rocks through reactions with water, acids, oxygen, and carbon dioxide. Processes like oxidation, hydration, and carbonation alter the rock's minerals (e.g., limestone dissolving in acidic rainwater).



8. Correct Answer is (1): Rift valleys are typically classified as third-order relief features. While they are significant landforms, they are smaller than the major features classified as second-order relief (such as mountain ranges and plateaus).

Other option

First Order: Major features like continents and ocean basins.

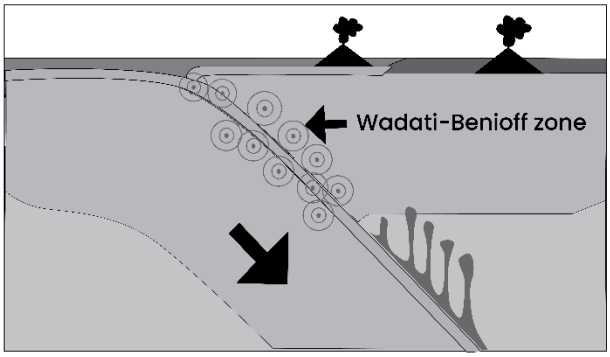
Second Order: Major landforms like mountain ranges and plateaus.

Third Order: Features like rift valleys, hills, and smaller valleys.

9. Correct Answer is (3): Granite and basalt are the two major igneous rock types: This statement is true. Granite is an intrusive igneous rock, and basalt is an extrusive igneous rock, both representing the two major types of igneous rocks.

10. Correct Answer is (1): A subduction zone is where one tectonic plate is forced beneath another into the Earth's mantle, causing deep earthquakes, oceanic trenches, volcanic arcs, and mountain formation. The Wadati-Benioff Zone refers to the zone of seismic activity within the subducting plate, where earthquakes occur at increasing depths. It is named after seismologists Kiyoo Wadati and Hugo Benioff, who studied these patterns.

Other option



Jig-saw puzzle refers to the matching coastlines of continents like South America and Africa, illustrating continental drift.

Vine-Matthews Zone relates to magnetic anomalies and seafloor spreading, not subduction.

Zone of magnetic reversals refers to areas where the Earth's magnetic field has flipped, recorded in seafloor rocks, not directly related to subduction zones.

11. Correct Answer is (2): A polycyclic landform is a landform that has been shaped by multiple cycles of erosion, deposition, or other geological processes over long periods of time. *Tarn:* A tarn is a small mountain lake formed in a cirque (a bowl-shaped depression) carved by glacial activity. Since it typically forms from a single glacial process, it is not considered a polycyclic landform.

Other option

Valley in valley: A polycyclic landform where a newer valley forms within an older one due to multiple erosion cycles.

Incised meanders: Polycyclic landforms created by a river cutting deeply into its bed over multiple periods due to uplift or sea level changes.

Knick point: A sharp change in river gradient, shaped and reshaped by multiple erosion cycles, making it polycyclic.

12. Correct Answer is (3): The Earth's crust is composed of a variety of elements, but a few of them dominate in terms of their relative abundance. The key elements in question—Oxygen, Silicon, Aluminium, and Iron are among the most common.

Oxygen (46.6%): Oxygen is the most abundant element in the Earth's crust. It forms a significant part of silicate minerals, which make up most of the rocks on Earth. Silicates, such as quartz, feldspar, and mica, are composed of silicon and oxygen. Oxygen is also found in oxides like hematite and magnetite.

Silicon (27.7%): Silicon is the second most abundant element in the Earth's crust, after oxygen. It is a key component of silicate minerals, which make up about 90% of the Earth's crust. Silicon is primarily found in the form of silicon dioxide (SiO_2), commonly known as quartz, and in various silicate minerals.

Aluminum (8.1%): Aluminum is the third most abundant element in the Earth's crust. It is mostly found in bauxite ores, from which aluminum metal is extracted. Aluminum is also a major component of feldspar minerals, which are one of the most common minerals in the crust.

Iron (5%): Iron is the fourth most abundant element in the Earth's crust. It is typically found in the form of iron oxides, such as hematite (Fe_2O_3) and magnetite (Fe_3O_4). Iron is also present in silicate minerals and is important in the formation of igneous and metamorphic rocks.

13. Correct Answer is (4):

(S-C) is correct: Crag and Tail, This landform occurs when a large, resistant rock (the crag) protects softer rock behind it from erosion. As a result, the softer rock erodes at a slower rate, leaving a long tail-like structure. This is a classic example of differential erosion, where different types of rock erode at different rates. The crag acts as a barrier, causing the tail to form.

(S-D) is also correct: **Eskers:** These are long, winding ridges composed of sand, gravel, and other sediments. They form within ice-walled tunnels by streams that flowed within and under glaciers. When the glaciers melt, the stream deposits remain, creating the esker.

Kames: These are mounds or hummocks of sand and gravel deposited by meltwater streams flowing on or within the glacier. When the glacier melts, the sediment is left behind as a mound.

14. Correct Answer is (2):

(S-A) is correct: **Weathering** is the breakdown of rocks in their original place (in situ) without being moved. It can occur through mechanical, chemical, or biological processes. **Disintegration** refers to the physical breakdown (mechanical weathering), while decomposition refers to the chemical alteration (chemical weathering) of rocks.

(S-D) is also correct: Mass movement (also called mass wasting) is indeed the movement of soil, rock, and other debris downslope due to gravity. It