

CURRENT AFFAIRS



MCQ PRACTICE

ENVIRONMENT & GEOGRAPHY



Week 93

THE TUTORS ACADEMY

QUESTION 1

Consider the following plates:

1. Nazca plate
2. Scotia plate
3. Arabian plate
4. Indian plate

What is the correct chronological order of these plates from west to east?

- (a) 3—1—2—4
- (b) 1—2—3—4
- (c) 2—1—3—4
- (d) 2—3—1—4

QUESTION 2

With reference to the artesian aquifer, consider the following statements:

1. It refers to water stored under pressure, between layers of sediments and soil below the earth's surface.
2. The artesian flowing conditions occur in patches only at shallow depth and not at deeper depth.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

QUESTION 3

Consider the following pairs with reference to the glacial lakes and their locations:

1. Gadsar Lake — Uttarakhand
2. Ghepang Ghat Lake — Himachal Pradesh
3. Vasudhara Lake — Jammu and Kashmir

How many of the pairs given above are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

QUESTION 4

Telazol, a premixed ready-to-use combination of Tiletamine and zolazepam is used as

- (a) tranquilisers
- (b) drug given to similar organisms that are able to mate
- (c) drug used to recover loss all of its leaves
- (d) population control among wild animals

QUESTION 5

The Protected Planet Report 2024 is the first report to fully assess the global status of:

- (a) Convention on Biological Diversity
- (b) Paris Agreement
- (c) Kunming-Montreal Global Biodiversity Framework
- (d) Global Ocean Alliance

Week 93

Answers and Explanations

QUESTION 1

Consider the following plates:

1. Nazca plate
2. Scotia plate
3. Arabian plate
4. Indian plate

What is the correct chronological order of these plates from west to east?

- (a) 3—1—2—4
- (b) 1—2—3—4
- (c) 2—1—3—4
- (d) 2—3—1—4

1.Explanation

- ✓ On January 7, an earthquake measuring around 7 on the Richter scale struck Tibet, killing around 100 people and causing damage to approximately 1,000 homes. Its epicentre was around 75 km northeast of Mount Everest and close to Nepal, however no significant damage was reported there.
- ✓ The Earth's whole outermost surface (the crust and upper mantle) is made up of 15 main and minor plates. Earthquakes are caused by movement along faults, which are fractures between tectonic plates.
- ✓ The USGS website notes, "The tectonic plates are always slowly moving, but they get stuck at their edges due to friction. When the stress on the edge overcomes the friction, there is an earthquake that releases energy in waves that travel through the earth's crust and cause the shaking that we feel."
- ✓ The correct chronological order of the plates from west to east is Nazca plate, Scotia plate, Arabian plate and Indian plate.
- ✓ Therefore, option (b) is the correct answer.

QUESTION 2

With reference to the artesian aquifer, consider the following statements:

1. It refers to water stored under pressure, between layers of sediments and soil below the earth's surface.
2. The artesian flowing conditions occur in patches only at shallow depth and not at deeper depth.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

2.Explanation

- ✓ Residents of Taranagar hamlet in Rajasthan's Jaisalmer district experienced a strange event when significant amounts of water began to flow from underneath.
- ✓ An artesian aquifer, according to the United States Geological Survey website, is water retained under pressure between sediment and soil layers beneath the earth's surface. It is sometimes known as "confined" water due to the hard materials above and below it. Hence, statement 1 is correct.
- ✓ What distinguishes it from water flowing usually through tube wells or wells is that artesian water can sprout from the ground on its own and is also located deeper under the surface. It is bordered by weakly permeable rocks, which causes tremendous pressure underground. When a breach occurs (such as during drilling), the underground pressure drives water upward and towards land.



- ✓ Artesian flow conditions occur in patches at both shallow and deep depths. Hence, statement 2 is not correct.
- ✓ The term “artesian” refers to water that is “confined under pressure below layers of relatively impermeable rock.” It reportedly “comes from the town of Artois in France, the old Roman city of Artesium, where the best known flowing artesian wells were drilled in the Middle Ages.”
- ✓ Therefore, option (a) is the correct answer.

QUESTION 3

Consider the following pairs with reference to the glacial lakes and their locations:

1. Gadsar Lake — Uttarakhand
2. Ghepang Ghat Lake — Himachal Pradesh
3. Vasudhara Lake — Jammu and Kashmir

How many of the pairs given above are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

3.Explanation

- ✓ The Uttarakhand State Disaster Management Authority (USDMA) is establishing a thorough action plan for the complete research and regular monitoring of glacial lakes in Uttarakhand, with the goal of enabling early warning systems to reduce the risk of disasters like glacial lake outburst floods.
- ✓ Between 1989 and 2022, the Ghepang Ghat glacial lake (Indus River Basin) at 4,068 m elevation in Himachal Pradesh, India, increased in size by 178%, from 36.49 to 101.30 hectares. The annual rate of increase is approximately 1.96 hectares. Hence, pair 2 is correct.
- ✓ Vasudhara Lake is located in the Dhauliganga Basin of Uttarakhand's Chamoli district. Hence, pair 3 is not correct.
- ✓ Gadsar Lake, also known as Yem Sar, is an alpine high-altitude oligotrophic lake in the Ganderbal district of Kashmir Division, Jammu and Kashmir, India. Hence, pair 1 is not correct.
- ✓ Therefore, option (a) is the correct answer.

QUESTION 4

Telazol, a premixed ready-to-use combination of Tiletamine and zolazepam is used as

- (a) tranquilisers
- (b) drug given to similar organisms that are able to mate
- (c) drug used to recover loss all of its leaves
- (d) population control among wild animals

4.Explanation

- ✓ After three weeks on the run and several failed darting attempts, three-year-old 'runaway' tigress Zeenat was ultimately sedated and apprehended last Sunday in a forest in West Bengal's Bankura. The tigress was then returned to Odisha's Simlipal tiger reserve, where she had been relocated from Maharashtra's Tadoba-Andhari tiger reserve last month.
- ✓ Given the magnitude of the situation, Zeenat's successful sedation came as a huge relief to the combined Bengal and Odisha forest administrations. Though the art and science of tranquillisation have progressed over the past century, injecting a medication into a free-ranging wild animal via a remote delivery method remains a tricky undertaking.
- ✓ Modern alpha-adrenergic tranquillisers, such as Xylazine, are powerful sedatives that can be entirely reversed with an antidote. These medications can heavily sedate animals,



- ✓ particularly ungulates, although external stimulation can disturb such spells, posing a risk of unexpected attacks. To achieve prolonged immobility, Xylazine is typically coupled with a dissociative anaesthetic, such as Ketamine.
- ✓ Telazol, a ready-to-use mixture of tiletamine and zolazepam, is gaining popularity as a replacement for tranquillisers.
- ✓ Therefore, option (a) is the correct answer.

QUESTION 5

The Protected Planet Report 2024 is the first report to fully assess the global status of:

- (a) Convention on Biological Diversity
- (b) Paris Agreement
- (c) Kunming-Montreal Global Biodiversity Framework
- (d) Global Ocean Alliance

5.Explanation

- ✓ The Protected Planet Report 2024 is the first to comprehensively examine the global status of protected and conserved areas in light of Target 3 of the Kunming-Montreal Global Biodiversity Framework.
- ✓ The report compiles the most recent official data submitted by governments and other stakeholders to the Protected Planet Initiative.
- ✓ Target 3 aims to increase the worldwide network of protected and conserved areas to 30% coverage while remaining equitable and respectful of the rights of Indigenous Peoples and local populations. The goal is also to ensure that these regions are efficient, well-connected, and strategically positioned in areas critical for biodiversity and ecological services.
- ✓ Therefore, option (c) is the correct answer.