IASbaba's Daily Prelims Test [Day 40]

TOPIC: World Geography (Physical)- Landforms, Environment and Current Affairs

1. Continental Drift theory by Wegener changed the perceptions about the Earth's crust.

Consider the statements regarding this theory.

1) Sialic masses used to float over the Sima without any resistance being offered by Sima.
2) Earlier all land masses were united to form a massive landmass known as 'Panthalasa'.
3) Ocean floors were considered to be stable and never moved.

Choose the correct statement/s from the following.

1) 1 only.
2) 1, 3 only.
3) 2, 3 only.
4) None of the above.

Answer: 2

Continental Drift theory by Wegener tried to solve the problem of location of young fold mountains.

2nd statement: panthalasa was the name given to single vast ocean and pangaea was the name given to united massive landmass.

2. Consider the statements regarding different types of plates in 'Plate Tectonic Theory'.

1) Destructive plate boundary is one in which continuous upwelling of molten material ie lava takes place.
2) Divergent plate boundary is one which two plates slide past one another thus neither creating nor destroying continental landmass.
3) Convergent plate boundary is one in which one plate overrides the other plate.

Choose the correct statement/s from the following code.

1) 1, 2 only.
2) 2 only.
3) 3 only.
4) All the above.

Answer: 3

Divergent plate boundary or constructive plate boundary:

A tectonic boundary where two plates are moving away from each other and new crust is forming from magma that rises to the Earth's surface between the two plates. The middle of the Red Sea and the mid-ocean ridge (running the length of the Atlantic Ocean) are divergent plate boundaries.

Convergent plate boundary or destructive plate boundary:

It is a tectonic boundary where two plates move towards each other. If thetwo plates are of equal density, they usually push up against each other,forming a mountain chain. If they are of unequal density, one plate usuallysinks beneath the other in a subduction zone. The western coast of SouthAmerica and the Himalayan Mountains are convergent plate boundaries.Also called active margin , collision zone.

Transform plate boundary:

Transform plate boundary is one in which two plates slide past one another thus neither creating nor destroying continental landmass.

3. Consider the statements regarding geysers which are special type of hot springs.

1) Hot water and vapour spouts from geyser tube intermittently.
2) It represents the minor form of broader processes of vulcanicity.
3) It is found only in tropical regions.

Choose the incorrect statement/s from the following code.

1) 2, 3 only.
2) 1, 2 only.
3) 2 only.
4) 3 only.

Answer: 4

A geyser is a spring characterized by intermittent discharge of water ejected turbulently and accompanied by steam.

Over one thousand known geysers exist worldwide. At least 1,283 geysers have erupted in Yellowstone National Park, Wyoming,United States, Valley of geysers, Russia etc. Thus It is found also in the temperate regions.

4. Consider the statements regarding earthquake (seismology).

1) Primary waves are analogous to sound waves and it can travel through liquid medium.
2) Secondary waves are analogous to water ripples and it cannot pass through liquid medium.
3) Surface waves are most destructive and slowest among the three waves (primary, secondary, surface waves).

Choose the incorrect statement/s from the following codes.

1) 1, 2 only.
2) 3 only.
3) 2, 3 only.
4) None of the above.

Answer: 4

Primary waves (P-waves) are compressional waves that are longitudinal in nature. These waves can travel through any type of material, including fluids, and can travel at nearly twice the speed of Secondary waves.

Secondary waves (S-waves) are shear waves that are transverse in nature. S-waves can travel only through solids, as fluids (liquids and gases) do not support shear stresses.

5. Consider the statements regarding volcanoes.

1) More than 95% of the global volcanoes are along the plate boundaries.
2) High intensity volcano types like Visuvius type, Peelean type etc are concentrated in the convergent plate boundaries.
3) Low intensity volcano types like Hawaiian type etc are concentrated in the divergent plate boundary regions.

Choose the correct statement/s from the following codes.

1) 1, 2 only.
2) 2, 3 only.
3) 1, 3 only.
4) All the above.

Answer: 4

In the convergent plate boundaries, one plate is subdued by the other plate and the plate which is pushed underneath the other plate goes to greater depth and starts melting, this result in high intensity volcanoes.

While in divergent plate boundaries, the plate move away from each other thus thinning the crust and thus volcano rises easily to the surface without any force being needed to apply to rise to the Earth's surface.

6. Every relief can be classified into different types of reliefs.

Match the following.

1) 1st Order relief --- continental plates.
2) 2nd Order relief --- plains and deltas.
3) 3rd Order relief --- fold mountains.

Choose the correctly matched pair from the following codes.

1) 1 only.
2) 1, 2 only.
3) 1, 3 only.
4) None of the above.

Answer: 1

2nd Order reliefs are the one formed because of endogenic events like volcano, earthquake or plate movents either constructive or destructive plate boundaries. Ex: fold mountains, block mountains etc.

3rd Order reliefs are the formed because of exogenic events. Ex: flood plains, deltas etc.

7. Weathering is the basic and first step in soil formation.

Consider the statements regarding weathering.

1) The rate of weathering increases with increasing steepness of the slope.
2) Mechanical weathering is higher in humid regions than in drier regions.
3) Chemical weathering is higher in drier regions than in humid regions.

Choose the correct statement/s from the codes below.

1) 1 only.
2) 2, 3 only.
3) 1, 3 only.

4) All the above.

Answer: 1

Steepness increases the weathering rate. The weathered rocks are easily removed by gravity, flowing water, moving wind etc if the steepness is higher thus exposing new rocks for weathering thereby increasing its rate.

Mechanical weathering is higher in drier regions as there exists higher diurnal temperature.

Few minerals are water soluble like calcium carbonate etc thus humid region favours the chemical weathering. Moreover water is the main agent of chemical weathering in the rocks.

8. Mass wasting or mass movement is a common phenomenon at the foothills of big, steep mountains like Himalayas, Atlas etc.

Consider the following statements regarding mass wasting.

1) Rock debris that moves down the hill is mainly derived from weathering.
2) The rock debris moves down mainly because of earthquake, volcano, moving water etc.

Choose the correct statement/s from the following codes.

1) 1 only.
2) 2 only.
3) Both.
4) None of the above.

Answer: 1

Rock debris move under the influence of Gravitational force and this movement is aided or triggered by volcano, earthquake, moving water etc.

9. Natural levees are depositional landforms on either side of the banks of a river. What are the disadvantages of natural levees.

1) Levees if breached can cause catastrophic floods.
2) Levee forming regions cannot be used for agricultural purposes.
3) Levee formation leads to sedimentation of river basins.

Choose the correct disadvantage/s from the following codes.

1) 1, 2 only.
2) 2, 3 only.
3) 1, 3 only.
4) All the above.

Answer: 3

Levee forming regions are good for agricultural purposes as its soil is renewed every year thus imparting fertility.

As the levee limits the flow of river water within its boundaries the river sheds its sediments only in the river basin thus making river basins narrower and shallow thus increasing the risks of floods.

10. Arcuate deltas are the most common type of deltas, example being Ganga delta, Rhine delta, Nile delta etc.

Consider the following statements regarding this type of delta.

1) It is formed when river water is denser than sea water.
2) It is formed when river water is as dense as sea water.
3) It is known as growing delta.

Choose the correct statement/s from the following codes.

1) 1 only.
2) 2 only.
3) 1, 3 only.
4) 2, 3 only.

Answer: 4

It is known as growing delta because the sedimentation from the river grows towards the sea every year.

Delta formed when river water is denser than sea water is known as estuarine. Ex: Narmada River which flows westwards and joins Arabian sea and forms estuary.

Bird-Foot delta is formed when the river water is less dense than the sea water. Ex: Mississippi delta.

11. Consider the following statements regarding 'Prevention of Money Laundering Act 2002'

1. To Prevent & control money laundering to confiscate & seize property.
2. PMLA was, enacted in 2002, but was amended first in 2005, then in 2009, then in 2012.
3. It extends to whole of India including J&K
4. Acts covered under PMLA includes offences related to Custom Act, Prevention of Corruption Act, Environment Protection Act and Wildlife Protection Act.

Choose the correct options from above

1) 1, 2, 3 and 4

2) 2, 3 and 4

3) 1, 2 and 3

4) Only 3

Solution- 1

The offences listed in the Schedule to the Prevention of Money Laundering Act, 2002 are scheduled offences in terms of Section 2(1)(y) of the Act. The scheduled offences are divided into two parts - Part A & Part C. In part A, offences to the Schedule have been listed in it comprises of offences under Indian Penal Code, offences under Narcotic Drugs and Psychotropic Substances, offences under Explosive Substances Act, offences under Unlawful Activities (Prevention) Act, offences under Arms Act, offences under Wild Life (Protection) Act, offences under the Immoral Traffic (Prevention) Act, offences under the Prevention of

Corruption Act, offences under the Explosives Act, offences under Antiquities & Arts Treasures Act etc. Part 'C' deals with trans-border crimes, and is a vital step in tackling Money Laundering across International Boundaries.

Acts covered under Schedule

(a)Indian Penal Code, 1860; (b) NDPS Act, 1985; (c) Unlawful Activities (Prevention) Act, 1967; (d) Prevention of Corruption Act, 1988; (e) Customs Act, 1962; (f) SEBI Act, 1992; (g) Copyright Act, 1957; (h) Trade Marks Act, 1999; (i) Information Technology Act, 2000; (j) Explosive Substances Act, 1908; (k) Wild Life (Protection) Act, 1972; (l) Passport Act, 1967; (m) Environment Protection Act, 1986; (n) Arms Act, 1959.

The act extends to whole of India including J&K

12. Consider the following Statements regarding International Criminal Court and International Court of Justice

1. ICC is an older organization than ICJ
2. Both works on international jurisdiction with UN approval
3. Both are based in Hague, Netherland

Select the correct code

1. 1 and 3
2. Only 2
3. 1, 2 and 3
4. Only 3

Solution- 4

ICJ is older than ICC. ICC is intergovernmental organization and tribunal that sits in Haque in Netherland. And The ICJ is justice branch of UN, located in Haque, Netherland

13. Consider the following regarding Curative Petition

1. There is a time limit for filling of curative petition.
2. A curative petition is filed generally immediately after the impugned judgment is passed, with the intention of expressing dissatisfaction and seeking an instant relook at the same facts of the case
3. The court could impose "exemplary cost" to the petitioner if his plea lacks merits

Select the correct code/s

1. 1, 2 and 3
2. 1 and 2
3. 2 and 3
4. Only 3

Solution- 4

In a curative petition, the petitioner is required to aver specifically that the grounds mentioned therein had been taken in the review petition filed earlier and that it was dismissed by circulation. This has to be certified by a senior advocate. The curative petition is then circulated to the three senior most judges and the judges who delivered the impugned judgement, if available. **While no time limit as such is given for filing of curative petitions**, the following stringent limitations exist regarding the admissibility of such a petition:

(1) There must be a clear violation of principles of natural justice in that a party was not a party to the list but the judgment adversely affected his interests or, if he was a party to the lis, he was not served with notice of the proceedings and the matter proceeded as if he had notice or

(2) Where in the proceedings a Judge failed to disclose his connection with the subject-matter or the parties giving scope for an apprehension of bias and the judgment adversely affects the petitioner.

However, curative petitions are treated with great caution by the Supreme Court, with the recent petition in the Bhopal case being dismissed despite the bench expressing its sympathies with the victims, citing the misinterpretation of its former judgment by the State as the reason for non-prosecution and no express decision to that effect as such.

All in all, the highest court of the land expressing its fallibility and then taking that forward to correct its errors by virtue of innovative interpretative means is indeed something commendable in a system of constitutional governance that advocates checks and balances as a tool of accountability.

Second statement is of Review Petition

To entertain the curative petitions, the court has laid down certain specific conditions. Its laid down in order The requirements which are needed in order to accept the curative petitions are:

1. The petitioner will have to establish that there was a genuine violation of principles of natural justice and fear of the bias of the judge and judgment that adversely affected him.
2. The petition shall state specifically that the grounds mentioned had been taken in the review petition and that it was dismissed by circulation.
3. The curative petition must accompany certification by a senior lawyer relating to the fulfillment of the above requirements.
4. The petition is to be sent to the three senior most judges and judges of the bench who passed the judgment affecting the petition, if available.
5. If the majority of the judges on the above bench agree that the matter needs hearing, then it would be sent to the same bench (as far as possible).
6. The court could impose “exemplary costs” to the petitioner if his plea lacks merit.

Source- WIKI

14. Consider the following regarding melting of ice and its effects

1. It will lower down Earth’s temperature
2. It will affect Gravity of Earth
3. Give way to release of more green house gases

Select the correct code/s

1. 1 and 2
2. 2 and 3
3. 1 and 3
4. 1, 2 and 3

Solution- 2

Melting of ice will actually increase Earth's temperature

http://www.livescience.com/48099-antarctica-melting-earth-gravity-changes.html

15. Toxins are poisonous substances and are extremely harmful. Consider the following statements regarding this

1. They are biological agents
2. They can be created synthetically
3. Toxins can be produced from bacteria, fungi, algae and plants

Select the WRONG statement/s

1. 1, 2 and 3
2. 1 and 2
3. 2 and 3
4. 1 and 3

Solution- 2

They are not biological agents. According to an International Committee of the Red Cross review of the Biological Weapons Convention, "Toxins are poisonous products of organisms; unlike biological agents, they are inanimate and not capable of reproducing themselves", and "Since the signing of the Convention, there have been no disputes among the parties regarding the definition of biological agents or toxins". Toxin is a poisonous substance produced within living cells or organisms, synthetic toxicants created by artificial processes are thus excluded.