

**Q: Consider the following statement regarding Proton Beam Therapy (PTB):**

1. It is a viable alternative to radiation for treating solid tumours.
2. The PBT uses protons to tackle cancer.
3. This therapy damages the other adjoining organ.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- The PBT is considered a viable alternative to radiation for treating solid tumours, especially head and neck cancers.
- Unlike radiation which uses X-rays, the PBT uses protons to tackle cancer.
- While radiation can prove toxic to the whole body, protons can destroy cancer cells precisely by targeting tumours, thus saving adjoining organs.
- This has proved useful in the cases of young women whose ovaries and reproductive function could be salvaged through the therapy.

**Q: Consider the following statement regarding Antarctic Peninsula:**

1. It is the most southern and coldest region of Antarctica
2. It is the largest reservoir of frozen water on Earth.
3. It is home to a rich marine ecosystem of seals, penguins and whales.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: b

Explanation:

- The Antarctic Peninsula is the largest reservoir of frozen water on Earth.
- It is estimated that between 1992 and 2017, melt water from the glaciers increased global sea levels by around 7.6 mm. How that may change in the future is one of the big uncertainties in modelling climate change.
- The Antarctic Peninsula is the most northern and warmest region of Antarctica. It has a 1,000 km long mountainous spine, similar to the length of the east coast of Great Britain, and home to a rich marine ecosystem of seals, penguins and whales.
- Along the west coast of the peninsula, the glaciers drain ice from the ice sheet directly into the Southern Ocean.

**Q: Consider the following statement regarding the recent projection of National Statistical Office (NSO):**

1. Current India's GDP slowed down as compared to the last quarter.
2. Manufacturing sectors represented a negative growth.

Choose the correct option from the codes given below:

- a) 1 Only
- b) 2 Only
- c) 1 and 2
- d) None of the above

Ans: c

Explanation:

- India's GDP growth slowed to 4.4% in the October-December 2022 quarter, from 6.3% in the second quarter (Q2) of 2022-23 as per the National Statistical Office (NSO), which retained its full-year growth estimate for the economy at 7%, despite revising the preceding fiscal's GDP growth figure 40 basis points higher to 9.1%.
- Economists termed the manufacturing sector's persistent slack a negative surprise that brought Q3 growth levels lower than their projections.
- The NSO had persisted with the 7% growth hopes for 2023 as projected in early January, implied that GDP growth would improve to 5.1% in the ongoing final quarter of the year, which was higher than "current expectations".

**Q: Consider the following statement regarding International Court of Justice:**

1. It was established by the United Nation Charter.

2. It headquarters is situated in New York.
3. It has two types of jurisdictions.

Choose the correct option from the codes given below:

- a) 2 Only
- b) 3 Only
- c) 1 and 2 Only
- d) 1 and 3 Only

Ans: d

Explanation:

- ICJ was established in 1945 by the United Nations charter and started working in April 1946.
- It is the principal judicial organ of the United Nations, situated at the Peace Palace in The Hague (Netherlands).
- Unlike the six principal organs of the United Nations, it is the only one not located in New York (USA).
- The ICJ has two types of jurisdictions: contentious and advisory.

**Q: Consider the following statement:**

1. COP-27 failed to narrow their differences on critical issues such as reducing greenhouse gas emissions.
2. Small Island Developing (SID) states are most vulnerable to rising temperatures and sea levels.
3. Samoa launched an initiative, through the UNGA, to seek an advisory opinion to prevent the adverse effects of climate change.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- The recently concluded 27th UN Climate Change Conference (COP-27) where countries failed to narrow their differences on critical issues such as reducing greenhouse gas emissions perfectly exemplifies the failure of the international community to get its act together on the issue of climate change.
- Small Island Developing (SID) states such as Vanuatu are most vulnerable to rising temperatures and sea levels.
- Accordingly, in September 2021, Vanuatu launched an initiative, through the UNGA, to seek an advisory opinion from the ICJ to “clarify the legal obligations of all countries to prevent and redress the adverse effects of climate change”. Since then, the initiative has gathered momentum with more than 100 countries backing the idea.