Q.1) Consider the following statements about 'Build Back Better World'.

1. It is an initiative launched by the QUAD Grouping.
2. It is aimed at tackling China's Belt and Road Initiative.
3. International North–South Transport Corridor (INSTC) is an integral part of the BBBW.

Select the correct code:

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

Q.1) Solution (b)

Build Back Better World

- Build Back Better World or B3W is an initiative undertaken by **G7 countries**.
- Launched in June 2021, the initiative is designed to **counter China's strategic influence of the BRI Project (Belt and Road Initiative)** by providing an alternative to the Belt and Road Initiative for the infrastructure development of the low and middle income countries.
- Led by the United States, the G7 countries will work to address the $40 trillion worth of infrastructure needed by developing countries by 2035.
- The initiative aims to catalyze **funding for quality infrastructure** from the private sector and will encourage private-sector investments that support "climate, health and health security, digital technology, and gender equity and equality".
- The initiative builds on the **Blue Dot Network**, a collaboration that aims to build a global network through lending-based financing to build roads, bridges, airports, ports, power plants.

Q.2) Abnormal yellowing of leaf tissue is called chlorosis. Which of the following is/are the reason for chlorosis?

1. Poor drainage
2. Damaged roots
3. Low soil pH
4. Nutrient deficiencies

Which of the above statements is/are correct?

a) 1 and 3 only
b) 1, 2 and 4 only
c) 2, 3 and 4 only
d) 1, 2, 3 and 4

Q.2) Solution (b)

Abnormal yellowing of leaf tissue is called chlorosis. Leaves lack the essential green pigment chlorophyll. Possible causes include poor drainage, damaged roots, compacted roots, high soil pH, and nutrient deficiencies in the plant.

Nutrient deficiencies may occur due to insufficient amount in the soil or because the nutrients are unavailable due to high pH soil. Or nutrients may not be absorbed due to injured roots or poor root growth.

The most common nutrient problem associated with chlorosis is lack of iron, but yellowing may also be caused by manganese, zinc, or nitrogen deficiencies.

Q.3) What is the logic behind coming up with the 'Global Minimum Tax Deal'?

1. Discourage multinationals from shifting profits and tax revenues to low-tax countries.
2. Put an end to decades of tax competition between governments to attract foreign investment.
3. Ensure companies pay a fair share of tax in the countries they operate in.

Select the correct code:

a) 1 and 2
b) 2 and 3
c) 1 and 3
d) All of the above

Q.3) Solution (d)

Global Minimum Tax Deal

A global deal to ensure big companies pay a minimum tax rate of 15% and make it harder for them to avoid taxation has been agreed by 136 countries, according to OECD.

Why?

- With budgets strained after the COVID-19 crisis, many governments want more than ever to discourage multinationals from shifting profits – and tax revenues – to low-tax countries regardless of where their sales are made.
- Increasingly, income from intangible sources such as drug patents, software and royalties on intellectual property has migrated to these jurisdictions, allowing companies to avoid paying higher taxes in their traditional home countries.
- The minimum tax and other provisions aim to put an end to decades of tax competition between governments to attract foreign investment.
- The OECD, which has steered the negotiations, estimates the minimum tax will generate $150 billion in additional global tax revenues annually.
- Taxing rights on more than $125 billion of profit will be additionally shifted to the countries were they are earned from the low tax countries where they are currently booked.

Q.4) Consider the following statements with respect to the 'Significant Economic Presence' (SEP)

1. The concept of SEP was introduced under Income-tax Act, 1961 vide Finance Act, 2018.
2. It expands the scope of income of a non-resident which accrues or arises in India that results in a 'business connection' in India for that non-resident.

Select the correct code:

a) 1 Only
b) 2 Only
c) Both 1 and 2
d) Neither 1 nor 2

Q.4) Solution (c)

The concept of 'Significant Economic Presence' (SEP) was introduced in India's domestic tax law (Income-Tax Act, 1961 ('ITA') in 2018, with the intent of bringing income of non-residents

operating in the online / digital space (such as e-commerce, online streaming, etc.) within the ambit of India-sourced income.

Q.5) Consider the following statements

1. The Aegean Sea is connected to the Sea of Marmara by the Dardanelles.
2. The Kerch Strait connects the Black Sea to the Sea of Marmara.
3. Black Sea is connected to the Sea of Azov by the Bosporus Strait.

Select the correct statements

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

Q.5) Solution (a)

Statement Analysis:

Statement 1	Statement 2	Statement 3
Correct	**Incorrect**	**Incorrect**
The Aegean Sea is connected to the Sea of Marmara by the Dardanelles. 	The Bosporus connects the Black Sea to the Sea of Marmara. 	Black Sea is connected to the Sea of Azov by the Kerch Strait. 

Q.6) What is meant by the term "Gain of function research," seen recently in news:

a) To study the relationship of microorganisms with one another and with their environment.
b) Discovering new strains of bacteria to help astronauts grow their own food.
c) Deliberately introducing mutation in a pathogen to study its transmissibility and virulence.
d) Process of developing useful proteins with enhanced functional properties.

Q.6) Solution (c)

Gain-of-function research

- In virology, gain-of-function research involves deliberately altering an organism in the lab, altering a gene, or introducing a mutation in a pathogen to study its transmissibility, virulence and immunogenicity.
- It is believed that this allows researchers to study potential therapies, vaccine possibilities and ways to control the disease better in future. "Gain-of-function research involves manipulations that make certain pathogenic microbes more deadly or more transmissible.
- This is done by genetically engineering the virus and by allowing them to grow in different growth mediums, a technique called as serial passage.
- Some forms of gain-of-function research reportedly carry inherent biosafety and biosecurity risks and are thus referred to as 'dual-use research of concern' (DURC).