

TABLE OF CONTENTS

BYJU'S The Learning App

A. GS 1 Related
ART AND CULTURE
1. In Rakhigarhi, anxiety trumps history
B. GS 2 Related
POLITY AND GOVERNANCE
1. Assam at the centre of fresh border row
2. Cabinet approves Bill to regulate surrogacy
3. Centre set to revamp IT Act
HEALTH
1. Virus cases emerging faster globally: WHO
C. GS 3 Related
ENVIRONMENT AND ECOLOGY
1. Committee to study Ulsoor lake pollution
ECONOMY
1. Cabinet gives clearance for Technical Textiles Mission
INTERNAL SECURITY
1. When to call in the Army
D. <u>GS 4 Related</u>
E. Editorials
INTERNATIONAL RELATIONS
1. Signs and substance
INTERNAL SECURITY
1. Still no finality, the third time round
ENVIRONMENT AND ECOLOGY
1. Debating water quality
F. <u>Prelims Facts</u>
G. <u>Tidbits</u>
1. IAF aircraft lands in Wuhan with medical supplies
H. UPSC Prelims Practice Questions
I. UPSC Mains Practice Questions

A. GS 1 Related

Category: ART AND CULTURE

1. In Rakhigarhi, anxiety trumps history

Background:

Iconic sites:

- The <u>Union Budget</u> proposes the development of **five archaeological sites** of Rakhigarhi in Haryana, Hastinapur in Uttar Pradesh, Shivsagar in Assam, Dholavira in Gujarat and Adichanallur in Tamil Nadu into iconic sites.
- Based on the above proposal, work has already been initiated to develop the Harappan site at Haryana's Rakhigarhi village as an iconic site and set up a national museum. This will help develop the site as a tourist hub.

<u>Rakhigarhi:</u>



- Rakhigarhi is the site of a **pre-Indus Valley Civilization settlement** going back to about 6500 BCE. Later, it was also part of the **mature Indus Valley Civilization**, dating to 2600-1900 BCE. Interestingly, the site indicates **both early and mature Harappan phases.**
- The site is located in the Saraswati river plain, close to the seasonal Ghaggar river.
- Rakhigarhi encompasses a set of seven mounds, and there are many more settlement mounds in the immediate vicinity. Not all of them were occupied at the same time. In January 2014, the discovery of additional mounds resulted in it becoming the largest Indus Valley Civilization site, overtaking Mohenjodaro.
- The size and uniqueness of Rakhigarhi have drawn much attention of archaeologists all over the world. It indicates the spread of the Indus Valley Civilization east across North India.
- Notably, only about 5% of the Rakhigarhi site has been excavated so far by the ASI and Deccan College, Pune. Among the major findings from the site were a 4,600-year-old female skeleton, fortification and bricks.

Details:

- The site is currently under Archaeological Survey of India's protection and the ASI has started planning the project.
- The ASI has been able to get under its control just 83.5 acres of the 350-hectare site that spans 11 mounds, after first taking over the site in 1996, due to **encroachments** and pending court cases.
- As part of encroachment removal at the Rakhigarhi heritage site, 152 households are being shifted to flats.
- The proposal of the government has caused both excitement and concern among the residents of the two villages in Haryana's Hisar district Rakhi Khas and Rakhi Shahpur known as Rakhigarhi.
- Villagers fear the loss of land, as Centre moves to turn the Harappan site into a tourist hub. The concerns are mainly regarding the issues of rehabilitation of homes.

For more information on this issue refer to the February 3rd 2020 Comprehensive News Analysis.

B. GS 2 Related

Category: POLITY AND GOVERNANCE

1. Assam at the centre of fresh border row

Context:

Inter-State border row in the northeastern region.

Background:

- Recently, there had been an alleged bid by the Assam police to camp at Umlawi in West Khasi Hills of Meghalaya, bordering Assam's Kamrup district.
- Similarly, a Nagaland group has been reported to have attempted to grab land in eastern Assam's Jorhat district.

Details:

• Assam is again at the centre of a fresh inter-State border row in the northeastern region, with the Mizoram government seeking the revision of the boundary with Assam, based on the **Bengal Eastern** Frontier Regulation (BEFR), 1873 and the Inner Line of the Lushai Hills Notification of 1993.



- The BEFR allows Arunachal Pradesh, Manipur, Mizoram and Nagaland not to let non-resident Indians in without an inner-line permit for a temporary stay.
- Mizoram used to be the Lushai Hills District of Assam before being made a Union Territory in 1972 and a State in 1987.
- **Mizoram shares a 123-km border with southern Assam** and has been claiming a 509-square mile stretch presently under the control of Assam.

2. Cabinet approves Bill to regulate surrogacy

Context:

The Union Cabinet has approved the Surrogacy (Regulation) Bill, 2020.

Details:

Provisions:

- The Bill is aimed at **banning commercial surrogacy and allowing altruistic surrogacy**.
- The Bill allows a willing woman to be a surrogate mother and it is expected to benefit widows and divorced women besides infertile Indian couples.
- The Bill allows only Indian couples to opt for surrogacy in the country.
- The Bill also proposes the establishment of the National Surrogacy Board and State Surrogacy Boards to regulate surrogacy in the country.
- The proposed **insurance cover for a surrogate mother** has been increased from 16 months to 36 months.

Recommendations:

- The Cabinet approved the Surrogacy (Regulation) Bill after incorporating the **recommendations of a Rajya Sabha Select Committee.**
- 15 major changes were suggested by the 23-member committee to the Surrogacy (Regulation) Bill, 2019.
- A major recommendation included **deleting the definition of "infertility**" as the inability to conceive after five years of unprotected intercourse on the ground that it was too long a period for a couple to wait for a child.

For more information on this topic refer to Feb 6th Comprehensive News Analysis.

3. Centre set to revamp IT Act

Context:

• The Minister for Electronics and IT has stated that the central government is likely to start the **process** of revamping the Information Technology Act, 2000.

Details:

• An expert committee with members from the government as well as the industry is being proposed for discussion on the new IT Act.

Significance:



- The process of revamping the nearly 20-year old Information Technology Act, 2000, will keep it in tune with the technological advancements of the times.
- Given the fact that cyber issues have not been adequately responded to in the present IT Act, a new act will also enable the development of a **stronger framework to deal with the increasing intensity and sophistication of cybercrimes.**

Challenges:

- The biggest challenge is the **large scale of consumers** consuming Information Technology in India.
- Given the fact that technology has become the centre of digital payments and delivery of services such as GST and UPI, the technology will only find increased usage and importance in India.
- The new Act will also have to **factor-in larger issues**, **including the Supreme Court's judgment on privacy**.
- Newer issues like **data sovereignty** will also need to be dealt with.

Category: HEALTH

1. Virus cases emerging faster globally: WHO

Context:

• Statement by the World Health Organization chief.

Background:

• Governments worldwide are scrambling to prevent the spread of the new coronavirus referred to as <u>COVID-19</u> after a surge of infections in Italy, Iran and South Korea.

Details:

- 78,190 cases of COVID-19 had been registered in China, including 2,718 deaths. While 2,790 cases and 44 deaths have been reported across 37 other countries, the World Health Organization has stated that the **epidemic in China peaked and has been declining since**.
- The WHO has claimed that currently there are more new cases of COVID-19 reported each day outside China than inside China.
- Iran, Italy and South Korea share the largest burden of infections outside China. The WHO chief has stated that the sudden increase of cases in these countries was deeply concerning.
- **Germany** with 20 confirmed cases has stated that it *was heading for a coronavirus epidemic* and has urged regional authorities, hospitals and employers to review their pandemic planning.
- The hike in cases outside China had prompted a push for a pandemic to be declared.

C. GS 3 Related

Category: ENVIRONMENT AND ECOLOGY

1. Committee to study Ulsoor lake pollution

Context:

• The Southern Bench of the <u>National Green Tribunal (NGT</u>) has taken suo moto cognizance of water pollution in the Ulsoor lake of Bengaluru.



- Media reports had indicated that the water quality had come down owing to illegal activities being carried out while **discharging untreated sewage**, effluents and the dumping of garbage into the waterbody.
- The water pollution, apart from affecting the quality of the water, was also proving **detrimental to the ecology and aquatic life of the lake**, thus severely affecting the **ecological sustenance of the lake**.
- Given the **direct correlation between the quality of the water in the lake and the groundwater quality**, the pollution of the lake would affect the health of the people who are likely to consume the **poor quality of water**, not in conformity with the norms provided for drinking purpose.

Details:

- The NGT bench has ordered the constitution of a joint committee to take water samples from the lake and neighbouring areas to ascertain whether the lake is being polluted owing to illegal activity.
- The panel has also been tasked with carrying out an analysis of the water in the lake. The water analysis should include measurement of parameters like **Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) limit, Total Coliforms and Faecal Coliforms** and should also ascertain the presence of **heavy metals like Arsenic, Phosphorus, etc.**, which are likely to affect human health.
- The committee has been directed to find out the source of pollution and take action against those responsible. The panel should **suggest remedial measures** required to restore the water quality if it is found to be inadequate.

Category: INTERNAL SECURITY

1. When to call in the Army

Context:

• Riots in North-East Delhi and the statements by the Chief Minister of Delhi requesting the Home Ministry to bring in the Army to control the situation.

Details:

• The Armed Forces are generally called in by the civil power when **public security is in manifest** danger from an unlawful assembly which is refusing to disperse despite the efforts of the local police forces.

Code of Criminal Procedure (CrPC):

- The Sections 130 to 132 of the Code of Criminal Procedure (CrPC) of 1973 provides for the procedure for use of Armed Forces in such instances.
- Chapter 10 of the CrPC under the title 'Maintenance of Public Order and Tranquillity' provides the process for calling in the Armed Forces for help.
- Section 129 deals with the dispersal of a violent mob using civil forces.
- In the event of failure of the local police forces, Section 130 can be used.
- The provision empowers the Executive Magistrate of the highest rank, in situations of gravest danger to public security, to seek help from the armed forces to disperse the assembly.
- **Rioters can also be arrested or confined** in order to either disperse the mob or punish them in accordance with the law.
- The provision allows the Armed Forces officer-in-command concerned to comply with the Magistrate's requisition for aid in a manner as he deems fit. But in dispersing the unlawful assembly



and restoring calm, the Armed Forces should use **as little force as possible and cause as little damage as possible.**

• Section 132 protects the officers and members of the Armed Forces from prosecution for acts done in good faith in the course of their duties to contain the riot.

The Defence Service Regulations:

- The Defence Service Regulations provide extensive guidelines regarding the procedure for calling in the Armed Forces.
- The Defence Service Regulations specify that requisition for help from the civilian power to the Armed Forces Officer **should either be in writing or by telegram.** The Forces should immediately come to the aid of the civil power for the maintenance of law and order.
- The strength and composition of the force, the amount of ammunition, arms and equipment to be taken and the manner of carrying out the operations are matters for the Armed Forces alone.
- The regulations also deal with the aspect of **operational guidelines** while on duty, especially in instances where the forces would have to use firepower to restore peace.

Category: ECONOMY

1. Cabinet gives clearance for Technical Textiles Mission

Context:

The Cabinet Committee on Economic Affairs (CCEA) has approved the setting up of a National Technical Textiles Mission.

Details:

- The National Technical Textiles Mission envisages **positioning India as a global leader in technical textiles and increasing the use of technical textiles in the domestic market.**
- The Mission has been sanctioned a total outlay of ₹1,480 Crore.
- The Mission will be implemented for four years from 2020-2021 and will have four components.
- Research and development and innovation:
 - The research will focus on both **fibre level and application-based** in geo, agro, medical, sports and mobile textiles and development of bio-degradable technical textiles.
- <u>Promotion and development of the market for technical textiles:</u>
 - Indian technical textiles segment is estimated at \$16 billion which is approximately 6% of the \$250 billion global technical textiles market.
 - The penetration level of technical textiles in India varies between 5% and 10% against the level of 30% to 70% in developed countries.
 - The Mission aims to take the **domestic market size to \$40-\$50 billion by 2024.**
- Export promotion:
 - The aim is to increase technical textile exports from the country from the current ₹14,000 crores to ₹20,000 crores by 2021-2022. It seeks to maintain a 10% average growth every year during the mission period.
- Education, training and skill development:
 - The component focusses on building up enough **human resources** to ensure the achievement of the set goals.

D. GS 4 Related

Nothing here for today!!!



E. Editorials

Category: INTERNATIONAL RELATIONS

1. Signs and substance

Context:

The U.S. President's visit to India.

Details:

• The U.S. President's visit to India has been described as a historic visit that will open **a new phase in the bilateral relationship** between India and the U.S.

Positives:

- The U.S. President's recent visit to India has catalyzed progress on **outcomes in defence, security and energy cooperation.** Both sides have signalled more **cooperation in defence, military exercises and technology sharing.**
- India would be purchasing \$3-billion worth of U.S. military equipment in the form of Apache and MH-60 Romeo helicopters.
- On security cooperation, the countries have stated the desire to improve coordination between the two in terms of joint military exercises and interoperability, as well as in **fighting international crimes** such as drug trafficking, narco-terrorism, human trafficking, organized crime and violent extremism.
- India is also set to significantly increase its energy imports from the U.S., particularly LNG after ExxonMobil signed a deal to improve India's natural gas distribution network.

Concerns:

- Though the visit has aided U.S.-India ties, there have been some concerns over the fact that the visit's concrete outcomes have not been substantive.
- The External Affairs Ministry had earlier claimed that at least five MoUs would be ready for signing during the visit. However, only three were ready by the visit. The signed MOUs dealt with health care and cooperation on LNG pipeline infrastructure in India.
- A few of the major deals that had been expected could not be completed during the visit. This included the conversion of an MoU for Petronet to invest in American gas company Tellurian into an agreement, as well as a commercial agreement for Westinghouse to build six nuclear reactors in Andhra Pradesh.
- Though both the leaders of India and the U.S. have time and again expressed concerns over China's hegemony in the South China Sea as well as China's <u>Belt and Road Initiative</u>, both have **failed to outline the future course of action in their Indo-Pacific partnership.**
- On the trade front, despite the long term negotiations, even a limited trade deal could not be finalized.

Conclusion:

• The trade sector is one such area where the **full potential for bilateral cooperation has not been realized.** With the political backing of the leaders of the two countries, negotiators must move towards finalizing the much anticipated yet elusive trade deal.



- Several noted economists have noted that **more economic openness would be to the benefit of not only India's trading partners but India also.** The Indian government needs to acknowledge this and take appropriate steps.
- Given the ongoing slowdown in the Indian economy, **meaningful reforms** that improve the efficiency of land and labour allocation, that make investments in infrastructure attractive, and emphasize job creation, will help keep India on a strong footing vis-à-vis its strategic partners.
- The often tried and successful approach which involves a steady upward trajectory in mutual engagement by **capitalizing on synergies and cleverly sidestepping roadblocks** needs to be employed.
- The two governments must now strive to complete the unfinished agreements and set the course for their newly designated 'Comprehensive Strategic Global Partnership'.

For more information on the issue read Feb 25, 2020 Comprehensive News Analysis.

Category: INTERNAL SECURITY

1. Still no finality, the third time round

Background:

- The Ministry of Home Affairs, Assam Government and Bodo groups including the All Bodo Students' Union, United Bodo People's Organisation and all the four factions of the insurgent outfit- National Democratic Front of Bodoland (NDFB) signed an agreement on January 27, 2020.
- The new Accord promises more legislative, executive and administrative autonomy under the Sixth Schedule to Bodoland Territorial Council (BTC) and expansion of the BTC territory in lieu of statehood.
- The Bodoland Territorial Area District (BTAD), the autonomous region governed by BTC, will be known as **Bodoland Territorial Region (BTR)** after demarcation of the augmented territory.

Concerns:

- The provisions of power-sharing and governance under the Sixth Schedule of the Indian Constitution was expected to be the panacea of the ethno-nationalist identity questions in the Northeastern States.
- However, the mixed reaction to the new accord with euphoria as well as anger, reflect the complexities of such ethnocentric power-sharing and governance model.

Autonomy only in letter not in spirit:

- The previous Bodo Accord signed in 2003 led to the creation of the BTC as a new experiment of territorial autonomy under the Sixth Schedule. However, the constitutionally mandated legislative power of the BTC has been reduced to a farce as the Assam Governor has not given assent to any of the legislation passed by the BTC Legislative Assembly.
- There are doubts over the true effectiveness of the newer provisions in truly empowering the BTR.

Activating faultlines:

New demands:

• Though subsequent to the new accord Bodo groups have suspended their statehood movement, the new Accord has also triggered the intensification of the movement for Kamatapur State by organisations of the Koch-Rajbongshi community.



The territory of the demanded Kamatapur State overlaps with the proposed BTR.

Identity-based political mobilization:

- Deeper ethnic faultlines in an ethnocentric power-sharing model will become more obvious when the Koch-Rajbongshis and the Adivasis are granted ST status.
- The reservation of seats of BTC is for the STs and not exclusively for the Bodos and hence, the Bodoland People's Front is also worried that there might be newer claimants to power in the upcoming council elections.
- A shift in the political equilibrium in the BTC resulting from a likely expansion of the ST list in Assam has the potential to keep the Bodos out of power in the BTC and push **Bodo organizations to revive their homeland demand.**

Lack of proper representation of the non-bodos:

- Like in nine other autonomous councils under the Sixth Schedule in Assam, Meghalaya, Mizoram and Tripura, the ST populations are an overwhelming majority in BTAD. In BTAD, the ST communities account for 33.50% of the total population and the Bodos account for over 90% of the ST population in the BTAD.
- There have been concerns that the **present model of elections and reservations allows the minorities to govern the majorities.**
- This demographic composition in the BTAD has allowed the space for political mobilization of other non-Bodo communities. The organizations of these communities have been demanding exclusion of villages with less than 50% Bodo population from the BTAD.

The difficulty of ensuring a contiguous area for BTR:

- The new accord promises to appoint a commission by the Assam government to look into the demands for inclusion of villages with ST majority and contiguous to the BTAD, and exclusion of villages which are contiguous to non-Sixth Schedule areas and have majority non-ST population.
- Despite the clearly laid out guidelines, the core area of the BTAD will continue to have many villages with majority non-ST population which were included for contiguity.

Way forward:

• Notably, the framers of the Constitution perceived such complexities and have prescribed **constitutional provisions** after an elaborate debate in the Constituent Assembly on the Sixth Schedule.

Setting up of autonomous regions:

- The Sixth Schedule notes that if there are different Scheduled Tribes in an autonomous district, the Governor may, by public notification, divide the area or areas inhabited by them into **autonomous regions.**
- The provision of setting up **regional autonomous councils under the Sixth Schedule** can be explored to create the space for communities aggrieved by exclusion from the power-sharing model of BTC.

Inclusive solutions:

• There is a need to ensure that **a Bodo solution does not create a non-Bodo problem**. Peace will continue to be fragile in Assam's Bodo heartland until an **all-inclusive power-sharing and governance model** is evolved under the provisions of the Sixth Schedule.

For more information on this issue refer Feb 23rd 2020 Comprehensive News Analysis.

BYJU'S The Learning App Category: ENVIRONMENT AND ECOLOGY

1. Debating water quality

Context:

• The controversy surrounding the **Bureau of Indian Standards (BIS) report** of November 2019 on drinking water status has **politically prioritised the issue of water quality in India**.

Background:

- The 'Jal Jeevan Mission', aims to provide safe piped water to all households by 2024.
- Supply of potable water obviously requires, first the compilation of information on the existing status.
- Bureau of Indian Standards (BIS) report on drinking water status in India was released in November 2019. The BIS report for 21 major Indian cities noted that the drinking water in Delhi was ranked the most unsafe, as the samples failed in 19 out of 28 parameters.
- This was challenged by the Government of Delhi and the Delhi Jal Board (DJB).

Details:

- India is on the verge of a severe water crisis.
- India has witnessed a **gradual reduction in per capita availability of water** due to the rising population on the one hand, and also the reducing availability of potable water, on the other hand, owing to rising and unchecked pollution in the country's rivers and water bodies.
- A 2018 Report of the NITI Aayog has observed that currently, 600 million Indians face high to extreme water stress.
- By 2030, the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people.

Pollution of Indian rivers and water bodies:

- The Central Pollution Control Board estimates that India has a treatment capacity of only about 30% of sewage generated in the major cities. In other urban and rural areas, the sewage is mostly dumped in local water bodies or rivers without treatment.
- The pollution of water bodies will lead to the pollution of groundwater resources **impacting the quality of water available for humans.**

The capital's high pollutant load:

- Though Delhi constitutes less than 1% of the total catchment of the Yamuna, it contributes to more than 50% of the total pollutant load in the river. As of now, there are 18 major drains carrying sewage, garbage and industrial effluents into the Yamuna. This apart from the contribution of the population in unauthorised and even regularised colonies and rural areas with no sewerage system.
- Apart from the **untreated sewage water and industrial effluents, even solid wastes and construction material are being discharged** by individuals, companies and municipal bodies into the Yamuna.

Public health concern:

• There are **multiple threats to human health due to poor water quality**. Though some are more visible and appear as an epidemic, most are largely imperceptible. The consumption of polluted water subjects the population to health problems.



A 2018 Report of the NITI Aayog has observed that about two lakh people die every year due to inadequate access to safe water.

Conventional treatment methods:

- Given the lack of resources and facilities and the increasing demand, a large proportion of water supplied continues to be untreated water.
- Even in big cities like Delhi, only 75.20% of the households are supplied treated water.
- The treatment method is also mere conventional, involving sedimentation, filtration and disinfection through chlorine and chloramine. There is no effort to improve the method given the increased pollution load on the water sources.
- The tri-chloromethane that may be produced during the disinfection process using chlorine is highly carcinogenic. The effect may surface on human health not immediately but over a period of time.

Conclusion:

• Water should be treated as an urgent concern for public health and the ecosystem of the country.

Notably, the Jal Jeevan Mission has begun the important work of gathering information on the scale and scope of the problem and making it available in an open and transparent manner and there is the need to further **enhance technical knowledge on measurement and regulation of water quality in India.**

F. Prelims Facts

Nothing here for today!!!

G. Tidbits

1. IAF aircraft lands in Wuhan with medical supplies

- India sent the Indian Air Force's (IAF) C-17 Globemaster III aircraft to the COVID-19-hit Wuhan in China. This is the third aircraft that India has sent for the evacuation of citizens from the COVID-19-hit region.
- The heavy-lift military transport aircraft carried 15 tonnes of **medical supplies** and will bring back around 120 citizens and five infants while flying back to India.
- Apart from Indian nationals, the flight is also expected to bring back citizens of neighbouring countries.
- With reports of an **increasing number of cases in South Korea, Iran and Italy**, the Union Health Ministry has issued an additional travel advisory asking Indians to refrain from non-essential travel to the stated countries.

H. UPSC Prelims Practice Questions

Q1. Which of the following pairs of the Harappan sites and the respective states is wrongly matched?



- a. Rakhigarhi: Haryana
- b. Alamgirpur: Punjab
- c. Kalibangan:Rajasthan
- d. Surkotada:Gujarat

Answer: Option b

Explanation:

Alamgirpur: Uttar Pradesh

Q2. Which of the following statements are correct?

- 1. National Technical Textiles Mission focuses on increasing the use of technical textiles in the domestic market and also increasing technical textile exports from India.
- 2. National Technical Textiles Mission will have a four-year implementation period from 2020-21 to 2023-24.

Options:

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

Answer: Option c

Explanation:

- National Technical Textiles Mission envisages positioning India as a global leader in technical textiles and increasing the use of technical textiles in the domestic market.
- The Mission will be implemented for four years from 2020-2021 and will have four components.
- Research and development and innovation.
- Promotion and development of the market for technical textiles.
- Export promotion.
- Education, training and skill development.

Q3. Which of the following statements are correct?

- 1. Jal Jeevan Mission aims to provide Functional Household Tap Connection (FHTC) to every rural household by 2022.
- 2. Jal Jeevan Mission aims at providing potable water in adequate quantity i.e. 155 litre per capita per day (lpcd) of prescribed quality i.e. BIS Standard of IS: 10500 on regular basis.

Options:

a. 1 only

b. 2 only

c. Both 1 and 2

d. Neither 1 nor 2

Answer: Option d



• Jal Jeevan Mission aims to provide Functional Household Tap Connection (FHTC) to every rural household by 2024.

• Jal Jeevan Mission aims at providing potable water in adequate quantity i.e. 55 litre per capita per day (lpcd) of prescribed quality i.e. BIS Standard of IS: 10500 on regular basis.

Q4. Which of the following statements are correct?

- 1. Biochemical oxygen demand is generally less than Chemical oxygen Demand.
- 2. Higher Biochemical oxygen demand implies lower water pollution.

Options:

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

Answer: Option a

Explanation:

- Biochemical oxygen demand (BOD) is the amount of dissolved oxygen needed by aerobic biological organisms to break down bio-degradable matter present in a given water sample at certain temperature over a specific time period.
- Chemical oxygen demand (COD) is the amount of oxygen necessary to oxidize all of the compounds completely to CO2 and H2O.
- BOD is generally less than COD as COD oxidizes both organic and inorganic matter.
- Higher Biochemical oxygen demand implies higher water pollution.

I. UPSC Mains Practice Questions

- 1. Though the recent U.S. president's India visit has aided bilateral ties and catalyzed progress in defence, security and energy cooperation, there have been concerns over the fact that the visit's concrete outcomes have not been substantive. Critically examine. (10 marks, 150 words)
- 2. Water is an urgent concern for public health and the ecosystem of a country, more so for a country like India. Comment. (15 marks, 150 words)



