India Became the World's Fifth-largest Economy

For Prelims: Gross domestic product (GDP), Per capita GDP, Universal Health Coverage (UHC) Index, Human Development Index.

For Mains: Growth and Development in Indian Economy.
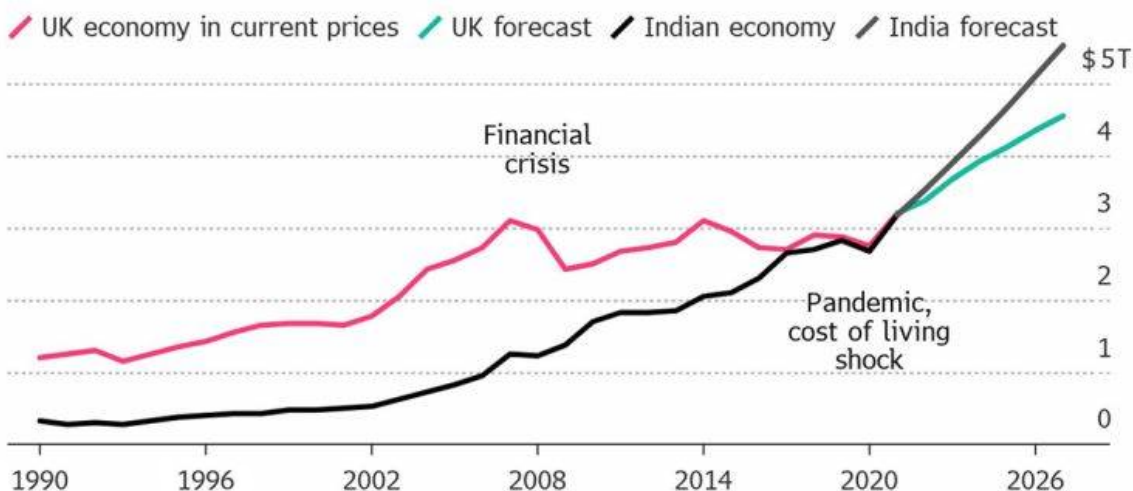
Why in News?

Recently, India became the **world's fifth largest economy by overtaking the United Kingdom.** Now, the United States, China, Japan, and Germany are the only nations with economies larger than India's.

- The real **Gross Domestic product (GDP)** growth of 6-6.5% in a world full of uncertainties is the new normal and **India is set to be the third largest economy by 2029.**

//

Overtaken
The Indian economy is forecast to be a fifth larger than the UK by 2027

/ UK economy in current prices / UK forecast / Indian economy / India forecast

Note: Seasonally adjusted, forecasts from 2022

What are the Key Highlights of this Achievement?

- **New Milestone:**
  - Moving past one of the biggest economies in the world, **especially one that ruled over the Indian sub-continent for two centuries, is a major milestone.**
- **Size of Economy:**
  - The size of the Indian economy in 'nominal' cash terms in the quarter through March, 2022 was USD 854.7 billion while for UK was USD 816 billion.
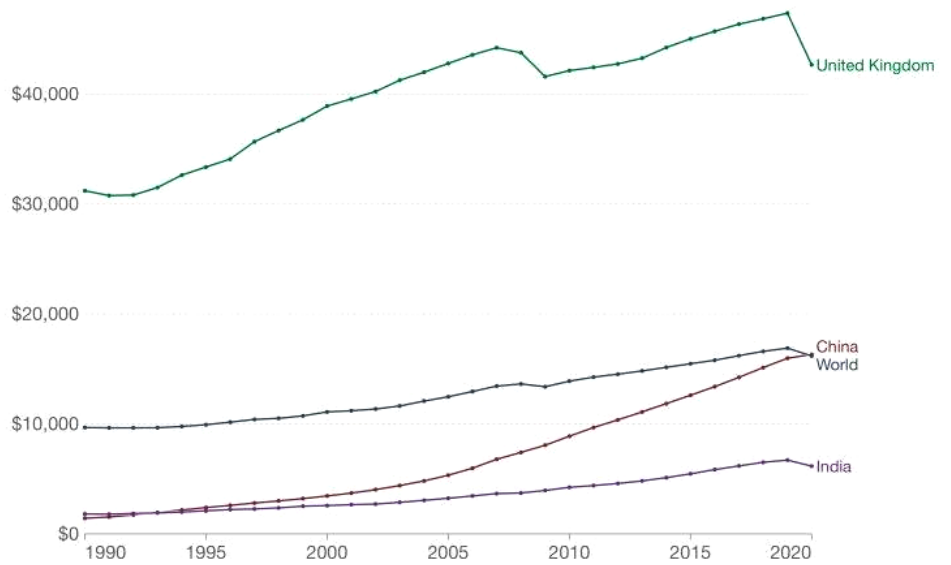
- **Comparison with United Kingdom:**
  - **Population Size:**
    - As of 2022, **India has a population of 1.41 billion while the UK's population is 68.5 million.**
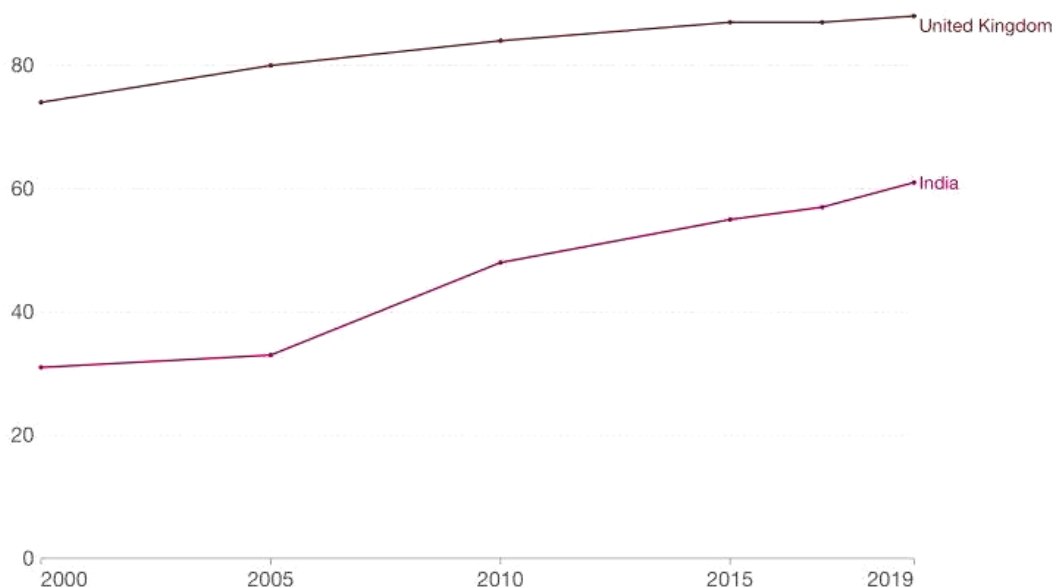 - **GDP Per capita:**

GDP per capita
Measured in constant international-$.

  - GDP per capita provides a more **realistic comparison of income levels because it divides a country's GDP by the population of that country.**
  - The per capita income in India remains very low, India is ranked 122 out of 190 countries in terms of per capita income in 2021.
  - **Poverty:**
    - The low per capita incomes often point to high levels of poverty.
    - **At the start of the 19th century, the UK's share in extreme poverty was considerably higher than India's.**
      - However, **the relative positions have reversed even though India has made giant strides in curbing poverty.**
  - **Health:**

Universal Health Coverage Index, 2000 to 2019

The Universal Health Coverage (UHC) Index is measured on a scale from 0 (worst) to 100 (best) based on the average coverage of essential services including reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access.

- The **Universal Health Coverage (UHC) Index** is measured on a scale from 0 (worst) to 100 (best) based on the average **coverage of essential services** including reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access.
- While faster economic growth and **the government's policy focus on healthcare schemes since 2005** have made a distinct improvement for India, there is still a long way to go.
  - **Human development Index:**
    - The end goal of higher GDP and faster economic growth is to have better human development parameters.
    - **According to HDI (2019), the UK score is 0.932 and India's score is 0.645 which is comparatively far behind the UK.**
      - Despite its secular improvement, **India might still take a decade to be where the UK was in 1980.**
  - **Present outlook:**
    - The dramatic shift has been driven by **India's rapid economic growth over the past 25 years as well as downslides in the value of the pound over the last 12 months**.
      - The **right policy perspective and realignment in global geopolitics** could further, also lead to an upward revision in its estimates for India.

What are the Issues Related to Indian Economy?

- **Slowing Exports and Rising Imports:**
  - The **slowing growth of the manufacturing sector at 4.8%** is an area of worry.
    - Also, imports being higher than exports is a matter of concern.
- **Unpredictable Weather:**
  - There is an **uneven monsoon that is likely to weigh upon agriculture growth and rural demand.**
- **Rising Inflation:**
  - There has been continuous **rise in inflation about 6% for seven straight months.**
    - The Indian economy faces headwinds from **higher energy and commodity prices** that are likely to weigh on consumer demand and companies' investment plans.

What Is Gross Domestic Product (GDP)?

- Gross domestic product (GDP) is the **total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period.**
  - As a broad measure of overall domestic production, it functions as a comprehensive scorecard of a given country's economic health.

[Source: IE](#)

Sedition Law

For Prelims: Sedition Law, Section 124A, Indian Penal Code
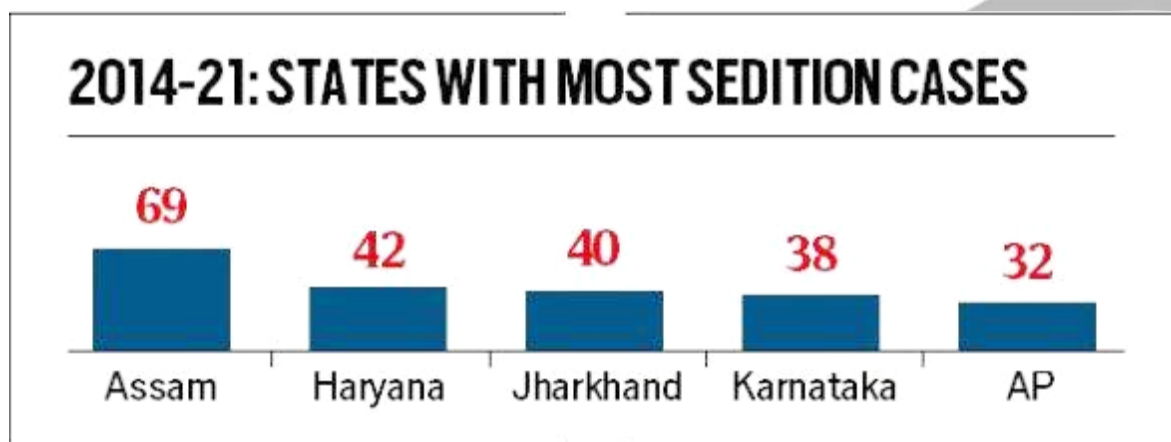
For Mains: Significance of sedition Law and the Related Issues

Why in News?

As per **National Crime Records Bureau (NCRB)** reports, Assam recorded the most number of **Sedition** cases in the country in the last eight years.

What are the Findings of the NCRB?

- Out of 475 sedition cases registered in the country between 2014 and 2021, **Assam accounted for 69 cases (14.52%).**
- After Assam, the most number of such cases were reported from Haryana (42 cases), followed by Jharkhand (40), Karnataka (38), Andhra Pradesh (32) and Jammu and Kashmir (29).
    - These six states **accounted for 250 cases** — more than half the number of total sedition cases recorded in the country — in the eight-year period.
- 76 sedition cases were registered across the country in 2021, **a marginal increase from the 73 registered in 2020.**
- **States and UTs that did not register even one sedition case** in that period were Meghalaya, Mizoram, Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli and Daman and Diu, and Puducherry.

2014-21: STATES WITH MOST SEDITION CASES

Assam	Haryana	Jharkhand	Karnataka	AP
69	42	40	38	32

What is Sedition Law?

- **Historical Background:**
    - Sedition laws were enacted in **17th century England** when lawmakers believed that **only good opinions of the government should survive, as bad opinions were detrimental** to the government and monarchy.
    - The law was originally drafted in 1837 by Thomas Macaulay, the British historian-politician, but was inexplicably omitted when the Indian Penal Code (IPC) **was enacted in 1860.**
    - **Section 124A** was inserted in 1870 by an amendment introduced by **James Stephen** when it felt the need for a specific section to deal with the offence.
    - Today the Sedition is a crime under **Section 124A of the** Indian Penal Code (IPC).
- **Sedition Law Today:**
    - **Section 124A IPC:**
        - It defines sedition as an offence committed when "any person by words, either spoken or written, or by signs, or by visible representation, or otherwise, **brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection** towards the government established by law in India".
        - Disaffection includes disloyalty and all feelings of enmity. However, comments without exciting or attempting to excite hatred, contempt or disaffection, will not constitute an offence under this section.
    - **Punishment for the Offense of Sedition:**
        - It is a **non-bailable offence**. Punishment under Section 124A ranges from **imprisonment up to three years to a life term**, to which a fine may be added.
        - A person charged under this law is barred from a government job.
            - They have to live without their passport and must appear in court at all

times as and when required.

What are the Significance and Issues with the Sedition Law?

- **Significance:**
  - **Reasonable Restrictions:**
    - The constitution of India prescribes reasonable restrictions (under **Article 19(2)**) that can always be imposed on this right (Freedom of Speech and Expression) in order to ensure its responsible exercise and to ensure that it is equally available to all citizens.
  - **Maintaining Unity & Integrity:**
    - Sedition law helps the government in combating anti-national, secessionist and terrorist elements.
  - **Maintaining Stability of State:**
    - It helps in protecting the elected government from attempts to overthrow the government with violence and illegal means. The continued existence of the government established by law is an essential condition of the stability of the State.
- **Issues:**
  - **Relic of Colonial Era:**
    - Colonial administrators used sedition to lock up people who criticised the British policies.
    - Stalwarts of the freedom movement such as **Lokmanya Tilak**, **Mahatma Gandhi**, **Jawaharlal Nehru**, **Bhagat Singh**, etc., were convicted for their "seditious" speeches, writings and activities under British rule.
    - Thus, rampant use of the sedition law recalls the colonial era.
  - **Stand of Constituent Assembly:**
    - The Constituent Assembly did not agree to include sedition in the Constitution. The members felt it would curtail freedom of speech and expression.
    - They argued that the sedition law can be turned into a weapon to suppress people's legitimate and constitutionally guaranteed right to protest.
  - **Disregarding Supreme Court's Judgement:**
    - Supreme Court in *Kedar Nath Singh vs State of Bihar* case 1962, limited application of sedition to "acts involving intention or tendency to create disorder, or disturbance of law and order, or incitement to violence".
    - Thus, invoking sedition charges against academicians, lawyers, socio-political activists and students is in disregard of the Supreme Court's order.
  - **Repressing Democratic Values:**
    - Increasingly, India is being described as an elected autocracy primarily because of the callous and calculated use of sedition law.

Way Forward

- **Section 124A of the IPC** has its utility in combating anti-national, secessionist and terrorist elements. However, dissent and criticism of the government are essential ingredients of robust public debate in a vibrant democracy. They should not be constructed as sedition.
- The higher judiciary should use its supervisory powers to sensitize the magistracy and police to the constitutional provisions protecting free speech.
- The **definition of sedition should be narrowed down**, to include only the issues pertaining to the territorial integrity of India as well as the sovereignty of the country.
- Civil society must take the lead to **raise awareness about the arbitrary use of Sedition law.**

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. With reference to Rowlatt Satyagraha, which of the following statements is/are correct? (2015)

1. The Rowlatt Act was based on the recommendations of the 'Sedition Committee'.
2. In Rowlatt Satyagraha, Gandhiji tried to utilize the Home Rule League.

3. Demonstrations against the arrival of Simon Commission coincided with Rowlatt Satyagraha.

Select the correct answer using the code given below:

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

Ans: (b)

Exp:

- The Rowlatt Committee, also known as Sedition Committee was appointed in 1917 by the British Indian Government with Sidney Rowlatt, an English judge, as its president.
- The Anarchical and Revolutionary Crimes Act of 1919 (known as the Rowlatt Act or Black Act) was based on recommendations of Sedition Committee. Hence, statement 1 is correct.
- This act authorized the government to imprison for a maximum period of two years, without trial, any person suspected of terrorism.
- In response to this unjust law, Gandhi called for a countrywide protest against the Rowlatt Act. A Hartal (or strike) was started on the 6th April, 1919.
- He called upon members of the Home Rule League to participate in Hartal. Hence, statement 2 is correct.
- Rowlatt Satyagraha took place in 1919 whereas, Simon Commission came to India in 1927. **Hence, statement 3 is not correct.**
- **Therefore, option (b) is the correct answer.**

Source: IE

Bail for Women

For Prelims: Bail Provision in CrPC, Types of Bails

For Mains: Process of Arrests in case of women, CrPC & It's Provisions, Types of Bails

Why in News?

Recently, the **Supreme Court of India** granted **interim bail** to activist Teesta Setalvad stating that **"the relief of interim bail is granted to the appellant (Teesta) in the peculiar facts including the fact that the appellant happens to be a lady".**

- **The Chief Justice of India** also made a reference to the bail provision in **Code of Criminal Procedure CrPC** that says **"being a woman is a possible ground for granting bail, even when otherwise it cannot be considered."**

What are the Provisions available for Bail for Women?

- **The Code of Criminal Procedure CrPC:**

- **Section 437 of the CrPC** deals with bail in case of **non-bailable offences.** According to it, **person shall not be released on bail if:**
    - There is **reasonable ground to believe** that he has committed an offence **punishable with death or life imprisonment**, or
    - He has been **previously convicted for an offence** punishable with death, life imprisonment, or for **a term of seven years or more, or**
    - He has been convicted on **two or more occasions** on other offences with a **term between three and seven years.**
- However, **Section 437 of the CrPC** also contains exceptions such as the court may grant bail even in these cases, if such person is **under the age of 16 or is a woman or is sick or infirm.**
- **Other Provisions:**
    - When a police officer requires the **attendance of any person** who he believes is acquainted with a case under investigation, the person **has to appear before the officer** (Section 160).
        - However, **no woman shall be required to do so** at any place other than the place in which she resides.
        - In its 84th and 135th Report in 1980 and 1989, the **Law Commission** suggested that the word **'place'** is ambiguous, and it would be better to amend it to **'dwelling place'.**

What does the CrPC say on the Arrest of a Woman?

- **Process of Arrest:**
    - A police officer **may arrest a person** who has committed a **cognisable offence** without a judicial order or a warrant (Section 41).
        - If the person **does not submit to custody** based on the word or action of the police, **Section 46 enables the police officer to confine the person physically to effect the arrest.**
            - In 2009, a provision was added in CrPC to the effect that where a **woman is to be arrested, only a female police officer may touch the woman's person,** unless circumstances otherwise require.
    - In 2005, through an amendment, a subsection was added to Section 46 to p**rohibit the arrest of a woman after sunset or before sunrise.**
        - **In exceptional circumstances**, a woman police officer can obtain the prior permission of a **judicial magistrate** to make the arrest.
- **In Cases of Non-Appearance:**
    - The police may **seek entry into any premises** where they suspect that a person who is required to be arrested is present.
        - In a situation where any such place is an apartment in the occupancy of a female **(who is not the person to be arrested)** and if the woman is one who does not appear in public, **the police have to give notice to her so that she may withdraw before they enter it** (Provision to Section 47).
            - It adds that they shall **afford her every reasonable facility** for withdrawing before they break open and enter the place.
    - In another exception, a woman who intends to file a **defamation case**, but is one who does not appear in public according to custom, can ask someone else to file the complaint on her behalf.

What are Constitutional Provisions in India against Arrest?

- **Article 22:**
    - **Article 22** of the **Indian Constitution** grants protection to persons who are arrested or detained.
        - **Detention is of two types:**
            - Punitive Detention
            - Preventive Detention
    - **Punitive detention** is to punish a person for an **offence committed by him after trial and conviction** in a court.

- **Preventive detention**, on the other hand, means **detention of a person without trial and conviction by a court.**
- Article 22 has two parts—the first part deals with the **cases of ordinary law** and the second part deals with the **cases of preventive detention law.**

Rights Given Under Punitive Detention	Rights Given Under Preventive Detention
- Right to be **informed** of the grounds of arrest.	- The detention of a person **cannot exceed three months** unless an advisory board reports sufficient cause for extended detention. - The board is to **consist of judges of a high court.**
- Right to **consult** and be **defended** by a legal practitioner.	- **The grounds of detention** should be communicated to the detenu. - However, the facts considered to be against the public interest need not be disclosed.
- Right to be **produced before a magistrate within 24 hours,** excluding the journey time.	- The **detenu should be afforded an opportunity** to make a representation against the detention order.
- **Right to be released after 24 hours** unless the magistrate authorises further detention.	- N/A
- These safeguards are **not available to an enemy alien.**	- This protection is **available to both citizens as well as aliens.**

What is a Bail & Its Types?

- **About Bail:**
  - Bail is the **conditional/provisional release** of a person held under legal custody (**in matters which are yet to be pronounced by the Court**), by undertaking a promise to appear in the Court as and when required. It signifies a security/collateral deposited before the Court for release.
- **Types of Bail in India:**
  - **Regular Bail:**
    - It is a direction given by the Court (any Court within the country) to **release a person who is already under arrest and kept in police custody.**
      - For such Bail, a person can file an application under **Section 437 and 439 of the CrPC.**
  - **Interim Bail:**
    - Bail granted for a **temporary and short period** by the Court till the application seeking **Anticipatory Bail or Regular Bail is pending** before a Court.
  - **Anticipatory Bail:**
    - A direction issued to **release a person on Bail even before the person is arrested.**
      - In this situation, there is apprehension of arrest and the **person is not arrested before the Bail is granted.**
      - For such Bail, a person can file an application under **Sec. 438 of the Code of Criminal Procedure (CrPC).**
      - It is issued only by the **Sessions Court and** High Court.

Effect of the Internet on the Morals and Values of Children

For Mains: Effect of the Internet on the Morals and Values of the Children

Why in News?

In this era of computer and knowledge, moral and social values have essential effects on people and the education process in society.

What are the Positive and Negative Impact of the Internet on Children?

- **Positive Impact:**
    - **Inspiration to Pursue Education:**
        - There are countless stories of how kids have been inspired to pursue education and sports through the help of the media.
            - Additionally, there are **countless stories of how these young people have achieved important goals in their academic careers** and have subsequently went on to do extraordinary things such as becoming professional athletes.
    - **Help in Promoting Social Skills:**
        - It has been found that the **use and exposure to media technology has promoted social skills in young people** that they are able to utilise in their future lives.
            - For example, **it was found that by playing computer and video games, children were learning the ability to think for themselves**, independently and creatively.
    - **Increased Interactivity:**
        - Children also **benefit from the Internet's increased interactivity.**
            - It can be argued that this is one of the biggest advantages of the internet for youngsters because it allows for the exchange of information, knowledge and ideas which are essential for any healthy learning environment.
    - **Enhance Qualities of Moral Aptitude:**
        - The circulation, access of positive information, and interactions with the positive personalities on the internet **imbibe the qualities of empathy, compassion, and moral aptitude.**
- **Negative Impact:**
    - **Increasing instances of Bullying and Cyberbullying:**
        - Cyberbullying and security risks are associated with increased internet usage by children, which degrades moral and value-centered development.
            - **Cyberbullies are those individuals who target other young children or young adults** via various means such as instant messaging and email.
                - Most cases **involve physical confrontation** and one offender threatening or bullying another using the internet.
    - **Impact on Mental Health:**
        - One common effect is that it **can negatively affect the mental health of the individual.**
        - In some cases, it can **lead to depression and suicidal thoughts.**
        - Also, it can lead to a lack of intimacy in relationships and it can also lead to the withdrawal from social groups and activities.

- **Restricts the Scope of Critical Thinking:**
    - **Using readymade information on the internet limits children's ability to learn critically,** affecting their cognitive development.
- **Detachment from Society:**
    - The internet **detaches the children from societal reality**, which may create societal apathy, indifference, etc. among them, which ultimately results in the diminishing of our moral, and cultural values.
    - Moreover, the **societal detachments negatively impact their decision–making, and leadership skills.**

Way Forward

- **Taking a Balanced Approach:**
    - The positive aspects of the internet are difficult to ignore, but **it is crucial to take appropriate Internet safety measures** to ensure that you reap the benefits of technology without being negatively affected.
    - The **restrictions on internet usage by children should be balanced** with their need to access the internet to keep abreast with the latest developments in various fields.
- **Communication is the Key:**
    - The communication gap between the children, and the parents, teachers, etc. enhances the gravity of the issue.
    - **Raising awareness through communication, and explanation** about all the good and evil characteristics of the internet **will reduce the negative emotional impact of technology on children.**
- **Encourage to engage in Real Life Communication:**
    - **Encourage your children to engage in more real-life communication** with people, rather than online networking.
    - They **need to be taught the importance of spending more time in real-life** friendships and activities.
    - Instead of constantly lecturing them about the bad influence of social media on children, encourage other interests or passions they may have, which could be hobbies, sports, social work or anything that is not virtual.
- **Using the Internet Constructively:**
    - Children should be suggested to social media platforms constructively to enhance their learning, or to collaborate with others who have similar interests.
    - It is also important to teach them to differentiate between what has substance and what is not worth spending time on.

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. 'The current internet expansion has instilled a different set of cultural values which are often in conflict with traditional values.' Discuss. **(2020)**

India-South Africa Bilateral Meeting

For Prelims: UPSC, IAS, India-South Africa Relations, Skill Development, National Education Policy, BRICS, IBSA, G20, Indian Ocean Rim Association (IORA), World Trade Organisation (WTO), Make in India, Indian Council for Cultural Relations (ICCR), Pravasi Bhartiya Divas (PBD), World Hindi Conference.

For Mains: Effect of Policies & Politics of Countries on India's Interests, India-South Africa Relations and Way Forward.

Why in News?

Recently, **India and South Africa** agreed to develop institutional mechanisms for **tie-ups between** Higher Education Institutions (HEIs) **&** Skill Institutions.

Why are the Key Highlights of the Meeting?

- **About:**
  - The bilateral meeting was held in **Bali, Indonesia.**
  - It was decided to develop institutional mechanisms for **educational tie-ups.**
  - Also, it was agreed to set up a **Joint Working Group on Education** between the two countries.
- **Significance:**
  - This would further **extend the cooperation** that already exists and also to realise the full potential of bilateral cooperation in education.
  - Introduction of **National Education Policy (NEP)** has already paved the way for the **internationalisation of Indian education.** India and **South Africa** relations are close and friendly and are rooted in shared values and interests.
    - Institutional mechanisms for educational tie-ups would strengthen **the academic & skill development partnerships** and bilateral education cooperation.
    - Further, it will be helpful in **mutual recognition of skill qualifications & capacity building in skill development.**

How has been the India-South Africa Relations?

- **Background:**
  - India's links with the **struggle for freedom and justice in South Africa** date back to the period during which **Mahatma Gandhi** started his Satyagraha movement in **South Africa** over a century ago.
  - **India was** at the forefront of the international community **in its support to the anti-apartheid movement.**
    - It was the first country to sever trade relations with the apartheid Government (in 1946) and subsequently imposed a complete -- diplomatic, commercial, cultural and sports -**embargo on South Africa.**
  - After a gap of four decades, **India re-established trade and business ties in 1993, after South Africa ended** its institutionalised racial segregation (apartheid).
    - In November 1993, **diplomatic and consular relations were restored.**
- **Political Relations:**
  - After South Africa achieved democracy in 1994, it was the **Red Fort Declaration on Strategic Partnership between India and South Africa, signed in March 1997** which set the parameters for a rekindled relationship.
  - The Strategic Partnership between the two countries was again reaffirmed in the **Tshwane Declaration (October 2006).**
    - Both these declarations have been **instrumental mechanisms** that have contributed in the past to both South Africa and India for **achieving their respective national objectives.**
  - India and South Africa have a long history of working together by **coordinating their views and efforts in institutions of global governance/multilateral fora**, in order to achieve greater autonomy and ensure that the agenda of 'South' is prioritised.
    - For Example: BRICS **(Brazil, Russia, India, China and South Africa), IBSA (India, Brazil, and South Africa), G20** , **Indian Ocean Rim Association (IORA) and** World Trade Organisation (WTO).
- **Economic:**
  - In 2016, both the countries agreed to **collaborate in the defence sector, especially in terms of the opportunities available for South African private sector under 'Make in India'** initiative, energy sector, agro-processing, human resource development, and

- infrastructure development.
    - Trade between India and South Africa has **exceeded the USD 10 billion target set by the leaders of the two countries in 2020.**
- **Science & Technology:**
    - The Department of Science and Technology of both countries have collaborated, especially in the Square Kilometer Array (SKA) **project.**
- **Culture:**
    - With the help of the **Indian Council for Cultural Relations (ICCR)**, **an intensive programme of cultural exchanges is organised** throughout South Africa including scholarships for South African nationals.
    - The 9th **World Hindi Conference was held in September 2012** at Johannesburg.
- **Indian Community:**
    - The major part of the **Indian origin community came to South Africa from 1860 onwards as farm labours.**
    - South Africa is home to the **highest number of Indian Diaspora in the African continent**, with a total strength of 1,218,000 thereby constituting 3% of South Africa's total population.
        - Since 2003 onwards, **India has celebrated** Pravasi Bhartiya Divas (PBD) **each year on 9th January** (the day Mahatma Gandhi returned from South Africa to India).

What should be the Way Forward for Both Countries?

- **Academic collaboration and student exchange programmes** should be commenced in the field of **Sanskrit language, Philosophy, Ayurveda and Yoga.**
    - This will pave the way for **broadening the understanding of Hinduism and the shared spiritual, cultural & economic ties.**
- Arrangements for the **collaborations in skilling sector** must be made.
    - It will encourage **tourism preneurship, help build capacities in emerging areas of travel, tourism, hospitality & business and boost people-to-people linkages.**

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. With reference to a grouping of countries known as BRICS, consider the following statements: (2014)

1. The First Summit of BRICS was held in Rio de Janeiro in 2009.
2. South Africa was the last to join the BRICS grouping.

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

Ans: (b)

Mains

Q. "If the last few decades were of Asia's growth story, the next few are expected to be of Africa's." In the light of this statement, examine India's influence in Africa in recent years. **(2021)**

State of the World's Healthcare Facilities

For Prelims: World Health Organization (WHO), United Nations International Children's Emergency Fund (UNICEF), World Water Week, World Health Assembly, Swachh Bharat, National Rural Drinking Water Mission (NRDWM), Sunidhi Toilet project.

For Mains: Significance of Hygiene at Healthcare Facilities.

Why in News?

According to the latest **Joint Monitoring Programme (JMP) report by** World Health Organisation (WHO) **and** United Nations International Children's Emergency Fund(UNICEF), about half of the world's healthcare facilities lack basic hygiene services, putting 3.85 billion people at an increased risk of infections.

- The report was released during **World Water Week held in Stockholm, Sweden**.

What are the Key Highlights of the Report?

- **Lack of Basic Hygiene:**
  - About **half of the world's healthcare facilities lack basic hygiene services, putting 3.85 billion people at an increased risk of infections.**
    - These facilities **do not provide patients with water, soap, or alcohol-based hand rubs.**
    - **Only 51% of healthcare facilities met the requirements** for basic hygiene services.
    - **Some 68% of them provided facilities for handwashing with water and soap at restrooms** and 65% had such amenities at points of care.
      - Furthermore, **just one in 11 medical facilities worldwide has both.**
- **Lethal for Vulnerable Population:**
  - Hospitals and clinics without safe water and basic hygiene and sanitation services are a **potential death trap for pregnant mothers, newborns and children.**
- **Rise of Various Diseases:**
  - Every year, a **whopping 670,000 newborns lose their lives to sepsis.**
    - Sepsis is a potentially **life-threatening condition that occurs when the body's response to an infection damages its own tissues.**
- **Increased Disease Transmission:**
  - Unhygienic hands and environment significantly **influence disease transmission in healthcare facilities and the emergence of antibiotic resistance.**
  - Only 53% of healthcare institutions in the least developed countries have access to a safe water supply.
    - The proportion for **eastern and south-eastern Asia is 90%, with hospitals performing better than smaller healthcare facilities.**
      - Some 11% of the rural and 3% of urban healthcare institutions lacked access to water.

What is the Importance of Hygiene Facilities?

- Hygiene facilities and practices in health care settings are non-negotiable.
- Their improvement is **essential to pandemic recovery, prevention and preparedness.**
- Promoting access to handwashing with water and soap and cleaning is essential for providing **high-quality health care**, especially for safe deliveries.

How Could the Issue be tackled?

- As the coverage of WASH facilities is still uneven across different regions and income groupings.
  - There is a need for countries to **implement their 2019 World Health Assembly commitment to strengthen** water, sanitation and hygiene (WASH) **services in health care facilities.**

What are the Indian Government Initiatives related to Water, Sanitation and Hygiene (WASH)?

- **Present Status:**
  - **Urban Centers Bear the Brunt:**
    - Nationally, **910 million citizens do not have access to proper sanitation.**
      - Despite urban centers housing the majority of India's population, urban sanitation is underfunded.
- **Initiatives:**
  - Swachh Bharat's **Toilet Access and Job Creation:**
    - It aims to **reduce open defecation in India.** Between 2018 and 2019, 93% of households had access to toilets, a noticeable jump from 77% in the previous year.
    - The construction of the sanitation infrastructure is responsible for **employing more than 2 million full-time workers.**
  - **Water in Rural Communities:**
    - Between 2017 and 2018, India's national water mission expanded to become the **National Rural Drinking Water Mission (NRDWM).**
      - While other programs and departments address sanitation in urban centers, NRDWM **cares for the rural regions of India.**
      - One **goal is the institution of piped water supplies to rural households.**
  - **iJal Safe Water Stations:**
    - The Safe Water Network, a **nonprofit organization** created by Paul Newman, has reached communities through its iJal water stations.
      - The locally owned stations **provide access to clean, quality water in communities where water security is scarce.**
  - **WASH Allies:**
    - USAID and UNICEF work in cooperation with the Government of India.
      - As of September 2020, **USAID reported recent achievements**, including greater access to safe drinking water, more household toilets and a decrease in public defecation.

Way Forward

- Hygiene in healthcare facilities cannot be secured without **increasing investments in basic measures, which include safe water, clean toilets and safely managed healthcare waste.**
- UNICEF stresses on demand creation in communities where open defecation is still common, improve supply of sanitation products and services in communities where open defecation is low but there are high proportions of unimproved latrines, and promote innovative financing solutions in communities where basic sanitation coverage is high, but some households (often the poorest and marginalized) have yet to be reached.

UPSC Civil Services Examination Previous Year Question (PYQ)

Source: DTE

Inflatable Aerodynamic Decelerator: ISRO

Why in News?

Recently, the **Indian Space Research Organisation (ISRO)** has successfully tested the **Inflatable Aerodynamic Decelerator (IAD)** technology that could aid cost-effective recovery of spent rocket stages and safely land payloads on other planets.
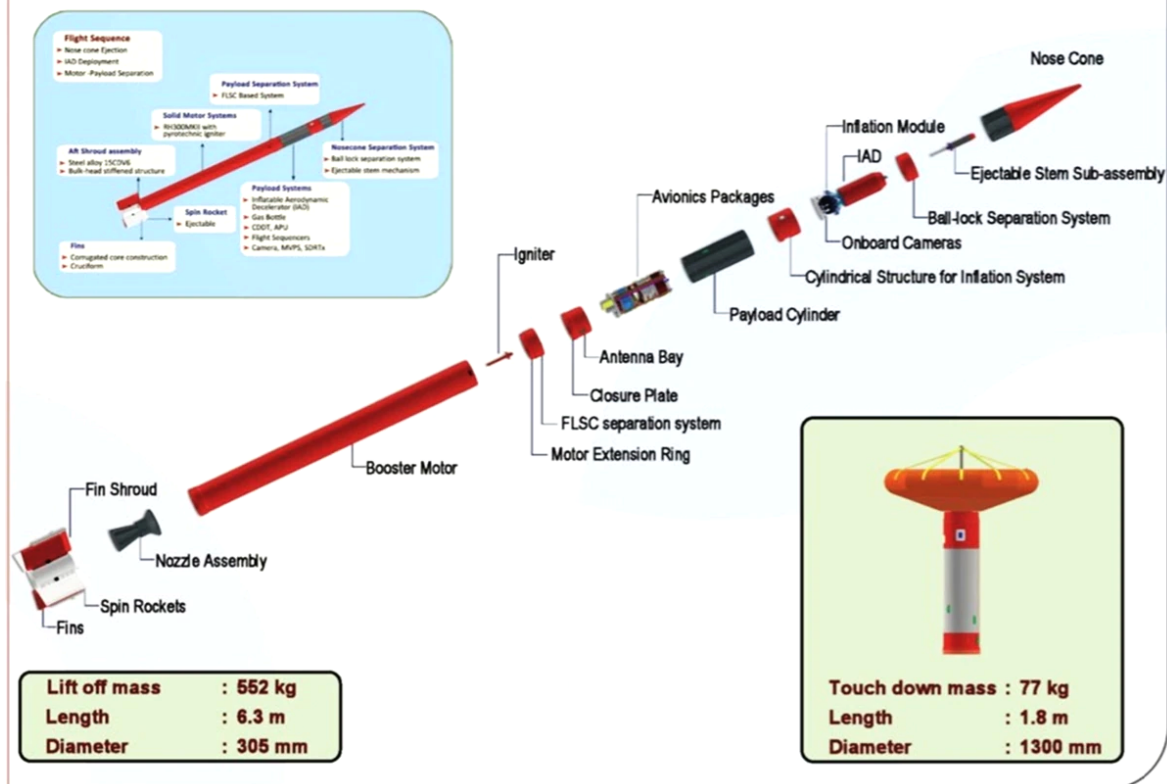
What is IAD?

- **About:**
  - The IAD is designed, developed and successfully test-flown by **ISRO's Vikram Sarabhai Space Centre (VSSC).**
  - The IAD was successfully test flown in Rohini-300 (RH300 Mk II) sounding rocket from Thumba Equatorial Rocket Launching Station.
    - Rohini sounding rockets are routinely used for flight demonstration of new technologies being developed by ISRO as well as by scientists from India and abroad.
  - The IAD serves to **decelerate an object plunging down** through the atmosphere.
  - The IAD was initially folded and kept inside the payload bay of the rocket. At around 84 km altitude, the IAD was inflated and it descended through the atmosphere with the payload part of a sounding rocket.
  - The IAD has systematically **reduced the velocity of the payload through aerodynamic drag** and followed the predicted trajectory.
    - The force on an object that resists its motion through a fluid is called **drag**. When the fluid is a gas like air, it is called **aerodynamic drag** or air resistance.
- **Significance:**
  - The IAD has huge potential in a variety of space applications like **recovery of spent stages of rocket, for landing payloads on to Mars or Venus** and in making space habitat for human space flight missions.

EXPLODED VIEW OF RH300MKII-F22 IAD VEHICLE

Lift off mass	: 552 kg
Length	: 6.3 m
Diameter	: 305 mm

Touch down mass	: 77 kg
Length	: 1.8 m
Diameter	: 1300 mm

What is ISRO?

- ISRO is the space agency under the Department of Space of Government of India, headquartered in the **city of Bengaluru, Karnataka.**
- Its vision is to harness space technology for national development, while pursuing space science research and planetary exploration.
- **Antrix Corporation Limited (ACL)** is a Marketing arm of ISRO for promotion and commercial exploitation of space products, technical consultancy services and transfer of technologies developed by ISRO.
- **Shri S. Somanath** is the incumbent chairman of ISRO.

Source: TH

Dark Sky Reserve in Ladakh

Why in News?

Recently, in a first-of-its-kind initiative, the **Department of Science & Technology (DST)** has announced the setting up of **India's first Dark Sky Reserve in Hanle,** Ladakh.

What is Dark Reserve?

- A Dark Sky Reserve is a **designation given to a place that** has policies in place to ensure that a

tract of land or region **has minimal artificial light interference.**

- The International Dark Sky Association is a U.S.-based non-profit that **designates places as** International Dark Sky Places, Parks, Sanctuaries and Reserves, depending on the criteria they meet.

What are the Key Highlights of the Dark Reserve in Ladakh?

- **MoU for Setting up Dark Reserve:** There was a three-way Memorandum of Understanding was signed among the **Union Territory administration,** Ladakh Autonomous Hill Development Council (LAHDC)**, Leh, and the Indian Institute of Astrophysics (IIA), Bengaluru,** which uses and maintains the telescopes, for launching the Dark Space Reserve.
    - It will have activities to help in boosting local tourism and the economy through interventions of science and technology.
- **Promote Tourism:** To promote **Astro-tourism,** villages around Hanle will be encouraged to promote homestays equipped with telescopes that visitors can use to view the night sky.
    - Villagers and residents will also be **trained to help visitors with astronomical observations.**
        - There will be delineators on roads like you do outside observatories. People can come, park, observe the sky and stay in homestays.
- **Wildlife Awareness:** A visitor centre would also be set up to inform people not only about astronomy but also about the **wildlife and plant life in the adjoining Changthang Wildlife Sanctuary.**

Why was Ladakh chosen for Setting up the Dark Reserve?

- **Cold Desert with Sparse Population:** The Indian Astronomical Observatory, the high-altitude station of IIA, is situated to the north of the Western Himalayas, at an altitude of 4,500 metres above mean sea level.
    - Located atop **Mt. Saraswati in the Nilamkhul Plain in the Hanle Valley of Changthang,** it is **a dry, cold desert** with a sparse human population and has the Hanle monastery as its nearest neighbour.
- **Clear Skies:** The cloudless skies and low atmospheric water vapour make it one of the best sites in the world for optical, infrared, sub-millimetre, and millimetre wavelengths.
- **Other Telescopes situated in Hanle Observatory:** The Himalayan Chandra Telescope (HCT), High Energy Gamma Ray telescope (HAGAR), the Major Atmospheric Cherenkov Experiment Telescope (MACE) and GROWTH-India are prominent telescopes located at the Hanle observatory.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. Consider the following phenomena: (2018)

1. Light is affected by gravity.
2. The Universe is constantly expanding.
3. Matter warps its surrounding space-time.

Which of the above is/are the prediction/predictions of Albert Einstein's General Theory of Relativity, often discussed in media?

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

Ans: (d)

Exp:

- **Space-time is a mathematical model that joins space and time into a single idea called a continuum. This four-dimensional continuum is known as Minkowski Space.** According to this model, Einstein held that matter warps its surrounding space-time. **Hence, 3 is correct.**
- Gravitational Lensing states that gravity bends light. When we observe distant galaxy, gravity of matter between earth and galaxy causes the light rays to bend into different paths. When the same light reaches to telescope multiple images are observed in the galaxy. **Hence, 1 is correct.**
- In 1917, Einstein applied his Theory of General Relativity and suggested a model of a homogenous, static, and spatially curved universe. The problem with the model was that, if gravitation was the only active force, then the universe would collapse – an issue which Einstein addressed by introducing the cosmological constant. By 1932, Einstein accepted and adopted a model of an expanding universe. **Hence, 2 is correct. Therefore, option (d) is the correct answer.**

Source: TH

Hyderabad Liberation Day

Why in News?

The Telangana Government and Central government will observe 75 years of Liberation of Hyderabad on 17th September 2022 to signify the merger of erstwhile Hyderabad State under Nizam rule **with the Indian Union.**

What is the History about Integration of Princely State of Hyderabad into India?

- Hyderabad was one of the largest natives/princely states in India. It was **ruled by the Nizams who accepted the paramountcy** of the British sovereign.
- The Nizam of Hyderabad like the **Nawab of Junagadh** and the ruler of Kashmir did not accede to India before the date of independence, i.e., **15th August 1947.**
- He was encouraged by Pakistan and Muslim natives peoples, **to stay as an independent power** and improve his armed forces to resist the integration.
- During this military improvisation, internal chaos emerged in the state of Hyderabad because of which, on **13th September 1948, the Indian Army was sent into Hyderabad under Operation Polo** (military operation to annex Hyderabad into the Union of India), on the grounds that the law-and-order situation in Hyderabad threatened the peace of South India.
    - The troops met little resistance by the Razakars (the private militia who were resisting the integration), and between the **13th and 18th September, the military took complete control of the state.**
    - The operation led to **massive communal violence with estimates of deaths ranging from the official one of 27,000 to 40,000** to scholarly ones of 200,000 or more.
- After the integration, the **Nizam was retained as the head of state in the same manner** as the other princes who acceded to India.
- He thereupon, disowned the complaints that had been made to the UN and, despite vehement protests from Pakistan and strong criticism from other countries, the UN Security Council did not deal further with the question, and **Hyderabad was absorbed into India.**

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. With reference to Indian history, which of the following statements is/are correct?

1. The Nizamat of Arcot emerged out of Hyderabad State.
2. The Mysore Kingdom emerged out of Vijayanagara Empire.
3. Rohilkhand Kingdom was formed out of the territories occupied by Ahmad Shah Durrani.

Select the correct answer using the code given below:

(a) 1 and 2
(b) 2 only
(c) 2 and 3
(d) 3 only

Ans: (a)

- The **Nizamat of Carnatic (Arcot)** was one of the subas (dependency) of the Mughal Deccan and was **under the legal purview of the Nizam of Hyderabad**. Later, Arcot **emerged from Hyderabad. Hence, statement 1 is correct.**
- The Yadu dynasty came to power in Mysore in 1399 AD. A feudatory of the Vijayanagara Empire, the Yadu dynasty contributed significantly to the development of Mysore. After the decline of the Vijayanagara Empire, Mysore became an independent state under the Hindu Wodeyar Dynasty in 1565 AD. In 1761, Hyder Ali overthrew the regaining dynasty in Mysore and established his own control over that state that was succeeded by Tipu Sultan in 1782. **Hence, statement 2 is correct.**
- The **Kingdom of Rohilkhand** was a powerful Indian State, nominally under Mughal Suzerainty, that arose under the declining Mughal Empire in 1721 and continued to exist until 1774 when annexation by the British transformed its significantly reduced borders into the Princely State of Rampur. Nawab Ali Mohammed Khan, a scion of the ancient Barha Dynasty became the first Nawab of Rohilkhand. Most of Rohilkhand's borders were established by Ali Mohammed Khan and largely came into existence as a check to the power of Oudh State. **Hence, statement 3 is not correct.**
- **Therefore, option (a) is the correct answer.**

Source: TH