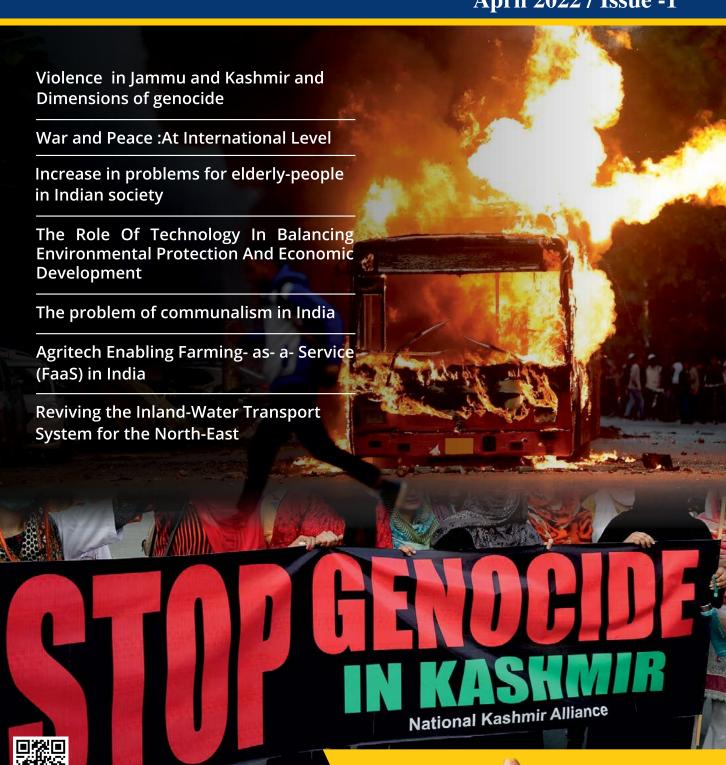
# PERFECT 7 FORTNIGHTLY CURRENT AFFAIRS

**April 2022 / Issue -1** 





IAS PRELIMS **FINISHER TEST SERIES 2022** 

(BILINGUAL)

Starts From

**10<sup>th</sup> April 2022** 

**TOTAL TESTS**: 11 (6 GS + 4 CSAT + 1 Full Current Affairs)



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+ CURRENT AFFAIRS (Jan. to Mar. 2021)

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17 APRIL, 2022

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**ALL SECTIONS OF GS** + CURRENT AFFAIRS (Apr. to Jun. 2021)

24 APRIL, 2022

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ALL SECTIONS OF GS + CURRENT AFFAIRS (Jul. to Sep. 2021)

TIMING: 2:30 PM - 4:30 PM

**CSAT** 

1 May, 2022

TIMING: 12 NOON -2 PM

**ALL SECTIONS OF GS** + CURRENT AFFAIRS (Oct. to Dec. 2021)

8 May, 2022

TIMING: 12 NOON -2 PM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Jan. to Mar. 2022)

TEST-8 TIMING: 2:30 PM - 4:30 PM

**CSAT** 

15 May, 2022

TIMING: 12 NOON -2 PM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Apr. to May. 2022)

TEST-10 TIMING : 2:30 PM - 4:30 PM

**CSAT** 

TEST-11

22 May, 2022 TIMING: 12 NOON -2 PM

**FULL CURRENT AFFAIRS** TEST (Jan. 2022- May 2022)

**OUR FACE TO FACE CENTRES** 





#### Director's Message





#### Mr. Vinay Kumar Singh

The guiding philosophy of the institute, throughout, has been creation of knowledge base. Dhyeya IAS inculcates human values and professional ethics in the students, which help them make decisions that are good not only for them, but also for the society, for the nation, and for the world as a whole. To fulfil its mission in new and powerful ways, each student is motivated to strive towards achieving excellence in every endeavor. It is done by making continuous improvements in curricula and pedagogical tools.

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Yours very truly,

Vinay Kumar Singh CEO and Founder

#### Mr. Q H Khan

Dhyeya IAS is an institution that aims at the complete development of the students. Our faculty are highly experienced and qualified to ensure that the students are given every possible support in all their academic endeavors. It is a multidisciplinary institution which ensures that the students have ready access to a wide range of academic material.

Our brand of education has broad horizons as we believe in exposure. Our students are encouraged to widen their knowledge base and study beyond the confinements of the syllabus. We aim to lend a gentle guiding hand to make our students recognize their inner potential and grow on their own accord into stalwarts of tomorrow's society.

Yours very truly,

O H Khan

Managing Director



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TEST-1

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ALL SECTIONS OF GS + CURRENT AFFAIRS (Jan. to Apr. 2021) TEST-2

17 APRIL, 2022

TIMING: 9:30 AM - 11:30 AM

ALL SECTIONS OF GS + CURRENT AFFAIRS (May. to Jul. 2021) TEST-3

24 APRIL, 2022

TIMING: 9:30 AM - 11:30 AM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Aug. to Oct. 2021) TEST-4

01 MAY, 2022

TIMING: 9:30 AM - 11:30 AM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Nov. 2021 to Jan. 2022)

TEST-5

08 MAY, 2022

TIMING: 9:30 AM - 11:30 AM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Feb. 2022 to Mar. 2022) TEST-6

15 MAY, 2022

TIMING: 9:30 AM - 11:30 AM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Apr. 2022 to May 2022) 22 MAY. 2022

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TIMING: 9:30 AM - 11:30 AM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Jul. 2021 to Dec. 2021) 29 MAY, 2022

TIMING : 9:30 AM - 11:30 AM

ALL SECTIONS OF GS + CURRENT AFFAIRS (Jan. to Mar. 2022)

TIMING: 12:00 NOON - 2:00 PM

CSAT

TEST-10 & 11 05 JUNE, 2022

TIMING: 9:30 AM - 11:30 AM

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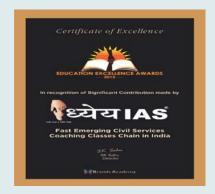
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# **PREFACE**







Current Affairs has an important role in the examinations conducted by Union Public Service Commission and State Public Service Commissions. It is necessary for the candidate to have knowledge of relevant information on issues of national and international importance. Perfect 7 Magazine is being presented fortnightly in front of the students to fulfill this requirement. Preparation of civil services exam is only completed when candidates have holistic knowledge and analysis of the dynamic nature of the current affairs. 'Perfect7' keeps this vision and approach and understands the multidimensional need of students at the content level, so this magazine has presented the current affairs with relevant issues of general studies. Keeping in mind the mains exam, current articles on 7 burning issues, Ethics Case Studies, Biographies of important personalities, coverage of most useful topics of various sections of General Studies and the most important current affairs issues are being covered for Preliminary Examination in which emphasis is being given on environmental, ecology, art and culture, science and technology, economy issues. A short section on Terminology will also be part of Perfect 7 Magazine.

Brain boosters with 7 themes based graphics are being presented in a concise form to enhance the conceptual understanding of the students. Apart from this, updated information on Global Initiatives, Global Institutions, Structure of Organizations, Functioning, Important Reports, and Indices will be included in this magazine, which is asked prominently in the Civil Services Examination. To give emphasis on facts and analysis, keeping in view the trends of new nature of questions in Preliminary and Main Examination of Civil Services, an inclusive magazine is being provided to the students so that they can give the right direction to their preparation by understanding the new requirements of Civil Services Examination. We hope that Perfect 7 in its new form will prove to be very useful. Your suggestions are always welcome.

Vinay Kumar Singh Editor DhyeyalAS



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# PERFECT 7 FORTNIGHTLY CURRENT AFFAIRS

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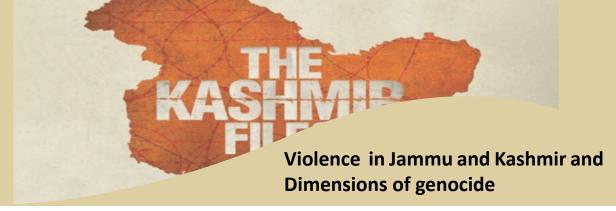
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DHYEYA TV
Current affairs Programmes hosted
by Mr. Qurban Ali
Ex. Editor RSTV) & by Dhyeya Team
Broadcasted on YouTube & Dhyeya TV





#### Context

Currently, the film "Kashmir Files" remains the subject of discussion. The film is mainly based on the violence that took place in Kashmir in 1990.

#### Introduction

Today, there is a discussion all over the country about a film "The Kashmir Files". This film is based on the violence in Kashmir in 1990. It should be noted that the tension which started with the assassination of Pandit Tika Lal Taplu was assassinated by a radical group Jammu & Kashmir Liberation Front (JKLF) on September 14. 1989, became the culmination of the exodus of Kashmiri Pandits on 19 January 1990. On 7 June 1994, organizations named Panun Kashmir Movement and All India Kashmiri Samaj gave a narrative before the National Human Rights Commission of India that between January 1990 and August 1990, Hindus were subjected to mass attacks and massacres. However, after listening to the arguments of the State of Jammu-Kashmir and Union of India and both these organizations, the Human Rights Commission of India did not classify this incident as genocide.

#### **Meaning of Genocide**

Generally, Genocide means the gravest moral crime committed by a governing authority against the citizens. This term was first used by Justice Raphael Lemkin (Poland's international legal expert ) in 1944. Genocide is derived from the terms "Genos" and "Cide". Genos is the term of Greek language and Cide

is of Latin language. Genos means race or group, tribe and Cide means killer or act of killing, thus Genocide means an act of ethnic genocide or committing ethnic genocide.

# Development of International Law on Genocide

- Genocide as an international crime is a modern concept, although there are instances from the 14th–15th centuries.
- According to an estimate, 174 million people have been massacred in the twentieth century by various totalitarianism governments of the world. Of these, about 110 million people were killed by communist governments. Most of these were also killed in the Soviet Union (U.S.S.R.) under the regime of Lenin and Stalin and in Communist China under the rule of Mao Zedong.
- During Hitler's rule, 21 million people died in Germany. In addition, cases of widespread genocide were also observed in Cambodia, Japan, North Korea, Mexico, Pakistan, Poland, Turkey, Vietnam, Ethiopia, and Yugoslavia.
- The United Nations General Assembly adopted the Convention on the Prevention of Genocide and Punishment 1948 in its context, considering the genocide as a crime under international law so that the situation like the mass genocide committed by Hitler during the Second World War should not be repeated. This convention came into force in 1951. As of 2017, 149 countries had become parties to this convention.

# Punishment against the offense of genocide:-

- The Preamble of the Convention provides that genocide is a crime under international law, contrary to the spirit and objectives of the United Nations. The Convention made genocide a punishable offense.
- According to Article 4 of the Convention, persons who commit genocide or any other act described in Article 3 should be punished, whether they are constitutionally responsible rulers or public officials, or private persons. This provision provides for individual responsibility for genocide. Therefore, the officers who committed the genocide cannot escape on the ground that they had committed such acts on the orders of their superior officers.
- If the person who has committed the crime of genocide flees to another state, then in such cases there is a provision for extradition of the offender under the law or treaty of the Contracting Party in force.
- Article 7 of the Convention specifically provides that genocide shall not be considered a "political offense" for extradition.
- So it is clear that there is a provision for clear punishment for genocide.
- Punishment for persons guilty of genocide has not been made under the Convention. The Convention provides under Article 4 that "effective punishment shall be awarded by the Contracting Parties. But this Conventionis silent on the quantum of punishment."

#### **Authority**

- This punishment will be given primarily by the national courts of the state concerned.
- The Convention makes it clear under Article 8 that the Contracting Parties may request the competent organs of the United Nations to take such action under the Charter of the United Nations. In this situation, action will be taken by the Security Council
- According to Article 9 of the Convention, at the request of any of the parties to the dispute, be referred to the International Court of Justice.

# Violence in the Kashmir genocide or not?

The Panun Kashmir Movement and All India Kashmiri Samaj presented this memorandum to the National Human Rights Commission in 1994 and it was noted that Hindus were massacred in Kashmir between January 1990 and August 1990.

# During this, the following situation arose -

- Nearly 800 people were killed
- 102 temples were destroyed.
- 16000 Hindu houses were burnt.
- 9000 people were tortured.
- There were countless cases of death, mutilation, rape, kidnapping.
- As a result of genocide and terrorism, the surviving Hindus in Kashmir, which were 15% in 1941, remained 5% in 1981 and 0.1% in 1991.

Since India is a party to the Genocide Convention, therefore the Union of India and the State of Jammu and Kashmir should have taken appropriate action in this regard, in which they failed.

Keeping in view the above matter, the Human Rights Commission sent a notice to the State of Jammu and Kashmir and the Union of India asking them to respond.



#### Reply by Jammu and Kashmir:-

- In the presented answer it was noted that Kashmiri Pandits were deliberately targeted. And as a result of this act 72076 Hindu families and 6000 Muslim families were displaced from the valley to Jammu and Delhi till 1991.
- The State of Jammu and Kashmir stated that terrorist groups were involved in this widespread violence, arson, rape. And they were targeting pro-India people.

#### Reply by Union of India:

- It was acknowledged in this reply that terrorist attacks against innocent civilians have been targeted by terrorists since the early years of terrorist violence in Jammu and Kashmir. As a result, groups of Kashmiri Pandits left the Valley and many Kashmiri Pandits and other minority communities were forced to leave their homes.
- The Union of India in its reply also said that no application can be entertained by the Commission based on the 1948 Geneva Convention because the Parliament of India has enacted the Protection of Human Rights Act, 1993. In Section 2 (1) (d) of this Act, human rights have been defined as such rights guaranteed by the Constitution or enshrined in international covenants and enforceable by the courts of India, which protect the life, liberty, equality, and dignity of the individual. be related

In addition, the International Covenants described in Section 2(1) (f) mean only the 'International Civil and Political Rights Covenant' and the 'Economic, Social and Cultural Rights Covenant'.

• The Union of India argued that the Genocide Convention is not mentioned in Section 2 (1) (d) or (f) of the Protection of Human Rights Act 1993, so no action can be taken.

## Decision of Human rights commission's:

- The Commission pointed out that although India had acceded to the Convention on 27 August 1959, India, following the Constitution, ratified this Convention (especially concerning genocide or other acts enumerated in Article III).
- But since the Convention aims to develop a model of customary international law, it is now universally recognized by the international community. Therefore, the rules regarding the prohibition of genocide must have attained the status of jus cogens. Therefore, the Prohibition of Genocide as expressed in the Geneva Conventions applies to all members of the international community.
- The killing of Kashmiri Pandits and caste harmony need to be seen in the context of the serious intention of ensuring the secession of the State of Jammu and Kashmir.
- The commission condemned the crimes committed against Kashmiri Pandits from any point of view, but they did not keep this incident within the definition of the Convention on Genocide. Therefore, the commission observed that the acts committed concerning Kashmiri Pandits amounted to genocide but they were not crimes of genocide.

# War and Peace :At International Level

#### Context

At present, international peace is being destroyed due to the conflict situations in different regions of the world.

#### Introduction

At present, the whole world is witnessing the war between Russia and Ukraine, which has resulted in a massive loss of peace and human rights. But for the last three years, the world has become a witness to many such conflicts. There have been many conflicts like America and Iran, Armenia and Azerbaijan, civil war in Ethiopia, skirmishes between India and China, etc. which are affecting global peace.

#### Conflicts in the present world

- Russia-Ukraine crisis
- Civil War in Ethiopia
- War in Armenia and Azerbaijan
- China- Taiwan
- China and India conflict
- Turmoil in the South China Sea
- Struggle for Kurdistan in Iran, Iraq, and Turkey
- Taliban conflict in Afghanistan
- Civil War in Sudan
- Israel-Palestine conflict
- Ethnic conflict in Sudan, Uganda
- Conflict in Pakistan and Afghanistan
- War of States against terrorist organizations in different parts of the world (eg ISIS)

#### The trend of Global conflicts

• State vs State: In this type of tension, due to various reasons, a situation of conflict arises between two nation-states with each other. For example, Armenia-Azerbaijan War, Russia-Ukraine, Indo-China, etc.

Civil War: In this situation, war starts between different stakeholder groups within a country over the ideology of separation. Such as the situation of conflict between the federal government of Ethiopia and the Tigra region there, the Baloch

• War on Terror: It is mainly action taken by a country against terrorist organizations. It was rendered by US President George Bush in 2001. Struggle against ISIS, India's surgical strike

conflict in Pakistan.

World War: When in a war between two or more states, all the major powers of the world fight on one side, then that tension turns into a world war. At present, many experts are amid the horrors of the Russo-Ukraine war. There were fears of turning into a world war.

#### **Need for peace**

- In the First World War and the Second World War, mankind saw that the result of wars resulting from political ambition is only destruction. The use of atomic bombs in Hiroshima and Nagasaki was a clear example of this.
- Peace is a necessity that leads mankind on the path of development. The economy of many regions, including Europe, was destroyed by World War II.
- At present, many countries including America, Russia, India, China, Pakistan, Britain are nuclear-rich.

The nuclear attack in only 2 cities had affected humanity widely, so the use of nuclear weapons on such a large scale would affect the entire humanity. In such a situation, peace is necessary for the protection of human civilization.

#### Measures to establish peace: **Ideological Position: Approaches to Establishing Peace**

- Realistic Approach for establishing peace:- In this policy, countries use diplomatic relations to establish peace. In this approach "diplomatic competence" is of utmost importance. As in the recent Indo-China conflict, there were diplomatic talks between the representatives of both
- Liberal approach for establishing peace:- In this ideology, special emphasis is given on the role of international law and international institutions in establishing peace. This policy reinforces the role of International Courts, International Organizations. Such as the step taken by the United Nations to send French forces to stop Al Qaeda in "Mali".
- Marxist approach for establishing peace:- In this ideology economic inequality is considered as the cause of conflict. In such a situation, economic equality is emphasized to establish peace. Therefore, various international organizations provide financial assistance to poor countries. Various international efforts for in-

# ternational peace

**United Nations Organization:** The United Nations Organization was



established by the international community after the threat of World War II. The United Nations is committed to the establishment of international peace and the protection of human rights as well as international development. The primary responsibility of the United Nations Security Council under the United Nations Charter is the establishment of international peace and security.

- Various Conventions for International Peace: Various conventions have been made to establish peace at the international level. These include the Hague Convention, the Geneva Convention, the International Convention for the Elimination of Terrorist Bombing (1997), etc.
- Various agreements for international peace: Many agreements have been made for the establishment of peace, in which Paris Agreement 1928, CTBT, NPT, etc. are important.

# Challenges in front of establishing peace

- Questions on the credibility of international organizations:- Many international organizations including the United Nations have been accused of being biased. Countries with "veto" power in the United Nations Security Council often make decisions based on their political importance. Sometimes international cooperation does not work even on issues like terrorism and money laundering.
- Ignoring reforms in international organizations: It is well known that

the influence of some countries is established in IMF, World Bank, and United Nations Security Council. From the creation of these institutions to the present day, the circumstances of the world have changed. Many other countries have become more powerful and influential than the countries dominant in these organizations today. As today India is ahead of Britain on population, area, army, economy, but Britain has veto power in the United Nations, not India. In this situation, all international organizations should be reorganized in today's context. But these reforms are constantly being neglected by the privileged countries which are giving rise to conflict.

- Disregard for International Laws by Powerful Countries:- Powerful countries like China, Russia, America constantly disobey the International Court of Justice, the rules of the United Nations, or the International Convention, that creates a sense of inequality in other countries. Such as withdrawing from the Paris Treaty by the US and imposing unilateral sanctions on Iran, UNCLOS by China, and violation of the rules of the International Court of Justice, etc.
- **Protectionism:** As a result of the concept of protectionism, a new type of conflict situation is being created due to the violation of international rules based order. As America has distanced itself from the Paris Treaty and it has been announced by France that France will not have economic relations with those who do not accept the Paris Treaty. This type of conflict of interest also causes conflict.
- **Political ambition:-** Russia's attack on Ukraine in a way reflects Russia's ambition to stop the expansion of NATO.
- Sense of Religious and Ethnic Superiority:- Many terrorist and separatist organizations promote conflict

by being motivated by the feeling of religious and ethnic superiority. Conflicts like Sudan, the Taliban, etc are taking place as a result of this concept.

#### India's role in international peacekeeping

- India has given the ideology of "Vasudhaiv Kutumbakam", "Ahimsa Paramo Dharma:", "Sarva Dharma Sambhav" and democracy to the whole world. Which contributes to the establishment of international peace by promoting peaceful coexistence.
- India's foreign policies such as adherence to international laws, the policy of non-alignment, principles of Panchsheel, commitment to the environment, etc. are the main policies of India to establish peace.
- At present, India has better relations with all the major countries of the world. India also has good relations with conflicting countries like America, Russia, Ukraine. In this situation, India's diplomacy can play the role of mediator in such conflicts.
- The power of India is also helpful in establishing peace. For example, India is seen as a provider of security by the countries of Southeast Asia in the Indian and Pacific Oceans. In the Russia-Ukraine war, if Ukraine had nuclear weapons, Russia would not have attacked it.

#### Conclusion

In the history of 100 years, the world has seen the horrors of two world wars. He has felt the difficulties, crises, and destructions caused by it. In such a situation, all must pay attention to peaceful coexistence. The refugee crisis, terrorism, nuclear proliferation, weaponization, etc. are by-products of war, so all responsible countries of the world should pay attention to peace by avoiding war.



#### Context

As a by-product of the growing impact of India's urbanization, the number of old age homes is increasing, along with the social status of the elderly in India is also declining.

#### Introduction

As India is rapidly moving towards urbanization and families are splitting up into smaller units, the number of old age homes, generally in urban and semi-urban areas, is also increasing. According to the 2011 census, the number of senior citizens in the country was about 100 million, which was about 8.5% of the total population. According to the UN World Population Aging Report, India's elderly population (60 years and above) people) is projected to increase from about 8% at present to about 20% by the year 2050. That's a large number that requires Social Security attention. Presently with the changing social norms and shift from joint to nuclear families, senior citizens are grappling with many issues. However, to address some of these issues, several steps have been taken by the government and a lot still needs to be done.

#### Key Issues associated with elderly people: Health problem

- More than 10% of senior citizens suffer from mental depression.
- 40 to 50% of the elderly require psychological counseling which they do not receive.
- 65% of the elderly depend on others for their health services.

Old people do not have health insurance.

#### Economic problem

- According to the report of the Administrative Reforms Commission in India, 32% of elderly men and 72% of elderly women depend on others for their livelihood.
- There is a large number of employees in the unorganized sector in India, due to which the dependence of the elderly increases in the absence of any pension after retirement.

#### Ignorance:

Increase in the number of nuclear families led to more neglect of the elderly. The elderly are excluded from the decision-making of nuclear families. Due to this, it takes different forms like physical and mental in the elderly.

#### **Domestic abuse**

 According to the report of NGO Help Age India, children are also abused. 25% of senior citizens are domestically abused and about 10% of the elderly suffer from depression. Along with the above problems, there are many problems like lack of data in the context of old age, lonely life, which makes the condition of old people uncomfortable in society.

#### Efforts to be made to improve the conditions of the elderly **Constitutional provision**

Preamble and Article 21 in the Indian Constitution are committed to human dignity.

Older people make a huge contribution not only to society but also to the building of the economy in their time. In such a situation, they have full right to get respect and economic cooperation in return for their contribution from society and the economy.

In Article 41, instructions have been given to the government for the welfare of old people.

#### **Legal efforts**

Maintenance and Welfare of Parents and Senior Citizens Act. 2007

- It provides for compulsory maintenance of parents by the children.
- It repeals the transfer of property rights to children in case of any negligence in parental maintenance.
- Along with this, penal punishment is also provided in this act.
- Construction of old age homes is also among the main objectives of this Act.
- It is only a model act and many states have not implemented it in the desired format. As a result, this Act has not been implemented more effectively.

# National Policy for Older Persons, 2011:-

This policy is driven by the following objectives-

- Bringing older people into the mainstream of development
- Establishment of more old-age homes.
- Regulating home care services.
- Increase in the rate of pension from time to time.
- Encouraging families to take care of the elderly.

#### **Other Schemes**

Along with the above efforts, schemes like Atal Pension Yojana, Old Age Pension Scheme, Integrated Scheme for Older Persons, Swadhar Greh, National Center for Aging, Vayoshree Yojana are being run which will help improve the standard of living of old people.

#### What can be done?

Even after making continuous efforts for the elderly, their condition is not improving, but their condition is continuously deteriorating. In such a situation, there is a need to take some other steps which can improve the condition of the elderly. Following efforts can be made in this regard-

#### **Basic health facilities:**

- Basic health facilities have to be provided in shelters like old age homes. Blood sugar and blood pressure, periodic vision and hearing tests, and early diagnosis will have to be made available at these locations.
- A holistic health package should be given keeping in mind the health status of older persons.
- Morning-walkers can also be provided in shelters such as old age homes. They also do not require much expenditure and they can play an important role in making the elderly long-lived by identifying and providing support to health-related

problems.

#### **Role of Health Institutions:**

- Along with providing basic services, the role of health institutions is also very important.
- It is imperative to address the identified health problems with basic health checks. In this context, hospitals run by public, private, and non-governmental organizations will have a major role to play.

#### **Policy Interventions:**

- It is important to have a sound public policy to support and support old-age homes.
- Simultaneously, the economy should be organized so that pensions can be facilitated.
- Along with the job, insurance will also have to be taken care of

#### Inclusion

- The condition of old age homes is very pathetic, there are complaints like low standard food and adequate accommodation. One of the effective ways of ensuring proper health facilities for all old persons in old-age homes would be to ensure that they are in limited and small numbers in these shelters.
- Older persons are like an asset to the society, not a burden and the best way to take advantage of this wealth would be to assimilate them into the mainstream population instead of being isolated in old age homes. Knowledge can be helpful in economic progress.

#### Role of civil society

• NGOs like HelpAge are doing very progressive work in this direction, along with these other bodies will also have to come forward and work.

#### Conclusion

The Indian people who are being influenced by western civilization will



have to return to their policy words. In Indian culture, it is said that-अभिवादनष्ठीलस्य नित्यं वृद्धोपसेविनः। चत्वारि तस्य वर्धन्ते आयुर्विद्या यष्ठो बलम्॥

Meaning: Persons who are polite and humble, are the ones who greet and respect the elders and are the ones who serve their elders. His age, knowledge, fame, and strength increase in all these four.

Older people make a huge contribution not only to society but also to the building of the economy in their time. In such a situation, they have full right to get respect and economic cooperation in return for their contribution from society and the economy.

NOTES



The Role Of Technology In Balancing Environmental Protection And Economic Development

#### Context

Recently, engineers at the University of Cincinnati developed an electro-chemical system to address climate change and convert emissions from chemical and power plants into useful products.

#### Introduction

Economic development is very necessary for the progress of a country. A country is considered developed only when it can provide enough employment to its citizens so that its residents can get rid of poverty and lead a good life. In the present era of the industrial revolution, there is a continuous loss of the environment in the use of energy and fuels required for economic growth. As a result, the problems of climate change and global warming are coming to the fore. But economic development is also necessary to improve the standard of living of most of the world's population. In this situation, it is imperative to strike a balance between economic development and environmental protection, in which technology can play an important role.

#### About the research:-

- The study was published in the journal Nature Catalysis in collaboration with the University of California Berkeley and the Lawrence Berkeley National Laboratory.
- UC College of Engineering and Applied Science engineers used a two-step cascade reaction to convert carbon dioxide to carbon monoxide

and then to ethylene. Applications of this technology can range from food packaging to tyres.

- Carbon dioxide is converted in this application. The research team reported that this process can increase ethylene selectivity and productivity at the same time (selectivity refers to the separation of the desired compounds and productivity refers to the amount of ethylene produced in the reactor).
- Potential benefits of research
- This technique can be applied to a variety of reactions because the electrode structure is general and simple."
- Carbon emissions can be reduced by this process, as well as this technology can be used in many industries from steel and cement plants to the oil and gas industry
- The research team suggested that this technology can be used to reduce carbon emissions and make a profit from it, which will reduce the cost of mitigation of carbon emissions.
- The ethylene produced as a result of this process is "one of the world's most important chemicals". It is used in a range of plastics from water bottles to textiles and rubber found in PVC pipes, tires, and insulation.
- The research team emphasized that this process could ideally remove greenhouse gases from the environment.
- It is important to note that power plants and ethylene plants emit a lot of carbon dioxide. Therefore, carbon dioxide is available in large quantities

development **Economic** is very necessary for the progress of a country. A country is considered developed only when it can provide enough employment to its citizens so that its residents can get rid of poverty and lead a good life. In the present era of the industrial revolution. there is a continuous loss of the environment in the use of energy and fuels required for economic growth.

to make ethylene.

- Promoting the productivity and selectivity of ethylene will bring commercial benefits
- However, the research team said that it will take some time for this technology to become affordable.

#### **Economic Growth**

• Industries are important for economic growth. There is a huge need for energy in these industries. At present, the energy used for industries is used both in conventional energy, which emits many greenhouse gases and carbon dioxide. At present, 25.6% of the total greenhouse gas emissions are in electric thermal houses, and 15.9% in industrial use.

are emitted.

- Agriculture plays an important role in economic development. At present, groundwater is exploited for irrigation in agriculture, which harms the environment. Agricultural products and animal husbandry are responsible for 11.6% of greenhouse gas emissions.
- With the increase in economic development, the use of housing, business, and means of transport increases. At present, 13.2% of greenhouse gases are emitted utilizing transport and 7.5% from housing and commercial places.
- At present, the whole world is moving from industry to service, in which Information and Communication Technology have an important role, e-waste is increasing due to the increase in the use of information and communication technology devices such as a mobile, computer.
- Widespread use of plastic in logistics, packaging, etc. is giving rise to a big problem. Large amounts of plastic pollution are harming biodiversity.
- In addition, due to the problem of migration caused by poverty, there is an increase in slums, etc. which makes urban areas environmentally unstable. This results in increased pressure on resources and degradation of environmental quality, reduced productivity, and increased poverty.

#### How will this research help strike a balance between environmental protection and economic development?

According to the Center for Climate Energy Solutions, carbon dioxide is responsible for 76% of greenhouse gas emissions. This research converts carbon dioxide into carbon monoxide and ethylene, which will reduce the concentration of greenhouse gases.



- In addition to reducing carbon emissions, it can also reduce the economic cost of cement oil and gas industries, so this technology will help in balancing the environmental imbalance and economic growth.
- The ethylene produced in this process is used in a range of plastics from water bottles to textiles and rubber found in PVC pipes, tires, and insulation.
- Electric heating houses account for 25.6% of greenhouse gas emissions. In this process, the carbon dioxide emitted from the electric thermal houses will be used economically.

#### Challenges before using this technology:

- This type of technology does not attempt to reduce carbon dioxide emissions. It only quenches carbon.
- After the patent rights of this technology, it will be available to other countries at an expensive price, which is a big problem.
- Researchers have said that it will take more than 10 years for this technology to be affordable and put into use, so we can say that it will not be able to stop the rapid effects of climate change.
- In one phase of this technology, carbon monoxide is being generated, which contributes to the depletion of the ozone layer and increasing global warming.

- The productivity of ethylene produced by this process is also in doubt. This technique will not be used by the general public.
- Energy supply from renewable energy sources like solar energy, wind energy is relatively more reasonable for the environment.

#### Conclusion

Although this technology does not discourage carbon emissions, it can reduce the current carbon emissions. This technology can play an important role in the mitigation and sustainable development of greenhouse gases, which are essential to current environmental problems. Along with this, by resolving issues like patent rights, carbon emissions can be reduced globally by giving importance to the transfer of this technology to other countries.

#### NOTES



#### Context

At present, elements of communalism are being seen in many parts of India. These are somehow affecting the process of nation-building of India.

#### Introduction

India is a country full of religious diversity where elements of communalism have been seen for some time. Controversy over Citizenship Amendment Act in 2019, hijab controversy, Kashmir files, etc. At present, the problem of communalism in the society of India is a complex problem that affects society, politics, and the life of common people on a large scale. Communalism can also be seen as a side effect of politics because of the importance of religion and caste in Indian politics, . In this way, this issue of communalism hinders the process of nation-building by affecting unity and fraternity in India's diversity.

#### What is communalism

Communalism is an ideology according to which a society is divided into different religious communities with different interests. When religion is used for political purposes, the feeling of communalism develops widely. If we look at the root of communalism, we find here that it is not a political problem, it was a religious and social problem. The most important point is that communalism is a modern problem and its elements were negligible in the ancient and medieval periods.

## Development of Communalism in

- India's communalism is mainly due to British rule. After the first war of independence of 1857, the British followed a very harsh and discriminatory policy towards the Muslims of India, blaming the Mughal emperor Bahadur Shah Zafar for this rebellion. And this rebellion held the Indian Muslims completely responsibly. During this, the British were advancing the Hindu society.
- After the establishment of the Congress in 1885, to influence the development of nationalism, the British changed the policy and while giving protection to Indian Muslims by the British, Hindus started being discriminated against.
- At the same time, there was a wave of communal nationalism in India in which attempts were made by Bal Gangadhar Tilak, Sir Syed Ahmed Khan, etc. to increase nationalism and development by using religious symbols, which increased communalism along with nationalism.
- After the establishment of the Muslim League in 1906, the Muslim League was supported and patronized by the British. The partition of Bengal in India in 1905 was a major attempt at Muslim appeasement.
- In the Morley Minto Reform in 1909, separate electorates were arranged for the Muslim community, which further increased communalism.
- The Lucknow Pact of 1916 can also be considered in the development of communalism as it recognized the Muslim League as a Muslim representation by Congress. As a result of

the Congress-Muslim League unity, Hindu-Muslim unity was seen in the Khilafat movement, non-cooperation movement, etc., but here it was temporary.

- The militant phase of communalism started after 1937. As a result of the election failure, the Muslim League adopted an aggressive policy with the slogan that "the interests of Hindus and Muslims are not only different from each other but also contradictory to each other".
- At the same time the concept of Pakistan was given by a person named Chaudhary Rahmat Ali and Muslim League started the demand for "two-nation theory".
- These events culminated in the partition of India based on religion in 1947. Partition also saw widespread communal riots.
- After 1947, even after 75 years have passed, communalism has not ended and continues to challenge Indian democracy and nation-building.

#### Some of the major incidents related to communalism in the country:

- Partition of India in the year 1947 and dispute in Noakhali.
- Anti-Sikh riots in the year 1984.
- Expulsion of Kashmiri Pandits from the Vallev in 1989.
- Babri Masjid controversy in the year 1992.
- Riots in Gujarat in the year 2002
- Riots in Muzaffarpur in the year 2013 etc.
- Communal protests in the Citizenship Amendment Act in the year 2019.



#### **Causes of communalism**

- Religion and caste play a special role in the politics of India. Through religious appeasement, particular religious sects are used as vote banks, as a result of which this appeasement further turns into communalism.
- Due to increasing poverty and unemployment as a result of increasing inequality, the feeling of dissatisfaction starts increasing in the mind of the people. People's trust in the government decreases in communal organizations, which increases communalism.
- Due to political pressure on the police and administration, there is an inability to stop these communal riots. Often there are allegations against various political parties for providing special administrative facilities to a particular class.
- The feeling of suspicion and oppression towards a particular religion increases the feeling of communalism among the people. An example of this was also seen during the Corona period.
- In the present time, due to the increasing transmission of fake news and paid news in the context of communalism through social media and TV media, the feeling of communalism is also developing rapidly.

#### **Effects of communalism**

• The concept of communalism is opposed to democracy, human dignity, the authority of the nation, and secularism.

- As a result of communalism, mutual harmony is less, due to which anarchy spreads in the society.
- Communal violence mainly affects the general public and they are subjected to displacement as seen in the Kashmir Valley in 1990. According to an RTI, more than 1600 people died in communal clashes between 2006 and 2017 happened.
- Due to communalism, people of one religion in the society start looking at the people of other religions with suspicion, which reduces mutual brotherhood.
- Communalism hinders the process of nation-building and also questions constitutional values.
- It presents a major challenge to the internal security of the country. It tarnishes the image of the country at the international level.

#### How to solve the problem of communalism

To stop communalism, mainly the following actions need to be done:

- First of all constitutional values like secularism, fraternity, national unity, etc. must be propagated in the form of moral values in the society. For this, the role of schools becomes very important.
- Special training should be given to the police force to solve the communal problem so that they understand the seriousness of the communal problems and present sensitive behavior.
- To improve the communal cases, especially the criminal justice system should be improved so that the communal cases can be resolved quickly and the victims can get compensation and the culprits can be punished.
- There is a need to implement the Communal Violence (Prevention, Control, and Rehabilitation of Victims) Bill 2005 comprehensively.
- Economic development should

be given importance because a person engaged in employment and economic progress is less likely to be attracted to communal things.

#### Conclusion

Communalism is a big problem that along with polluting society obstructs the process of nation-building. Therefore, both the religious leaders and the state must work together in preventing communalism, due to which the society will be completely free from the problem of communalism, and the process of nation-building will be completed.

#### NOTES



#### Why in News?

The agritech ecosystem has attracted a surge of startups in India offering technology-based solutions like offtake marketplaces, storage and transportation services, and agronomy advisory services while large traditional players seek to reduce operational costs and manage scale more efficiently.

#### What is Agritech?

It primarily refers to an ecosystem of companies and startup enterprises that are capitalizing on technological advancements to deliver products or services for increasing yield, efficiency – both in terms of time and cost, and profitability for farmers across the agriculture value chain.

#### The FaaS Ecosystem

- The ecosystem of farmers, equipment and service providers, technology and financing firms, and consumers can thrive from FaaS. Since the farmers only know their seasonally varying requirements better, they act as partners and coproduce the service with the agritech platforms and mobile apps.
- FaaS start-ups connect farmers and equipment owners to address the market opportunity for mutual benefits. They need to do well by doing good. FaaS utilises many business models, ranging from farm-to-warehouse, farm-to-mill, and farm-tofork, linking farmers to the marketplace. Seeing a huge potential, even tech giants like IBM are betting big on the trend.

The FaaS models bring all the parties, i.e., the farmers, the farm manufacturers, equipment cooperative, and the government, onto a single platform. While some agritech players provide equipment-oriented services at affordable prices, e.g., land preparation, crop harvesting, and management, Agribolo's innovative servitised models such as farm-to-fork link the farmers with marketplaces, including banks and financial institutions offering lower interest rates. Since the government has been promoting drones for crop insurance surveys, maintaining land records, and spraying pesticides, widespread adoption requires affordable prices for a win-win solution.

#### Overview of Agri-tech in India

- The overall agritech ecosystem witnessed a revenue growth of approximately 85 percent during FY 2019-20. An Ernst & Young 2020 study pegs the Indian agritech market potential at US\$24 billion by 2025, of which only one percent has been captured so far.
- Meanwhile, another Bain & Company report, jointly produced with the Confederation of Indian Industry (CII) in March 2022, indicates that private equity investors have focused on systemic issues in the agritech industry and its sustainable development. Private equity investments in agritech start-ups between 2017 and 2020 amounted to INR 66 billion, growing at the rate of over 50 percent. Supporting this has been the growth of the rural microfinance

- sector from INR 1.22 trillion in December 2019 to INR 1.46 trillion in March 2021. Agri credit grew from INR 8 trillion in FY 2014-15 to INR 14 trillion in FY 2019-20.
- The report notes that a surge of agritech start-ups have entered the ecosystem to offer technology-based solutions like off take marketplaces, storage and transportation services, and agronomy advisory services while large traditional players seek to reduce operational costs and manage scale via in-house solutions and new partnerships with emerging players. Global technology giants, like IBM and Microsoft, are looking at innovative solutions for crop health monitoring and yield estimates, for example.
- With ever increasing internet penetration in the country, and rural regions being the primary driver of this growth, India stands well equipped to adapt to changing methodologies in agriculture and transition from conventional business models to various innovative business models propelled by agritech.

#### How can the small landholders afford and access technology?

The answer lies in embracing innovation. Sustainable food production requires transitioning from resource-intensive, high-input farming methods to long-term, outcome-based services. Thanks to agritech, even small farmers can adopt Farming as a Service (FaaS) as the panacea in emerging economies.

- It attracts a new interest from stakeholders governments, non-government organizations (NGOs), the private sector, and the venture capitalists funding the startups. A toll-free number and a mobile app connects farmers to the platform to place their equipment and services orders. Shocks of equipment breakdown and consequent unexpected losses are avoidable as the farmers pay only for the equipment usage service.
- Digital agriculture aids farmers' profitability. It uses digital devices, artificial intelligence (AI), and data analytics allowing farmers to make informed decisions to increase productivity and drive efficiencies. It uses high-tech tools to determine machine performance and satellite images to manage crop health and harvesting. That also involves farm machinery automation, robotics, connected weather stations, satellite data and sensors to monitor the crops, and logistics services to streamline supply chains. With the precision application of water and chemicals, digital agriculture acts as a game-changer.

# How Agritech aids productivity and efficiency in India's agriculture sector?

The various segments within the agritech sector, which support the overall value chain are:

- Market linkage farm inputs: Digital marketplace and physical infrastructure to link farmers to inputs.
- Biotech: Research on plant and animal life sciences and genomics.
- Farming as a service: Farm equipment for rent on a pay-per-use basis.
- Precision agriculture and farm management: Use of geospatial or weather data, IoT, sensors, robotics etc. to improve productivity; farm management solutions for resource and field management, etc.

- Farm mechanization and automation: Industrial automation using machinery, tools and robots in seeding, material handling, harvesting, etc.
- Farm infrastructure: Farming technologies, such as greenhouse systems, indoor-outdoor farming, drip irrigation, and environmental control, such as heating and ventilation, etc.
- Quality management and traceability: Post-harvest produce handling, quality check and analysis, produce monitoring, and traceability in storage and transportation.
- Supply chain tech and output market linkage: Digital platform and physical infrastructure to handle post-harvest supply chain and connect farm output with the customers.
- Financial services: Credit facilities for input procurement, equipment, etc. as well as insurance or reinsurance of crop.
- Advisory/ Content: Information platforms online platform for agronomic, pricing, market information.

#### Way forward:

- FaaS attempts are still sporadic as the reach is limited to only a few states despite enormous potential and scope. Most startups face scalability issues. A few start-ups like Oxen Farm Solution and Gold Farm have already shut shop due to heavy funding requirements. Gold Farm's platform could connect only around 250 booking agents and 500 tractor owners with farmers. Only the large business houses, e.g., M&M, operate countrywide.
- Availability of cold chains for perishable farm produce transportation by road or rail is a bottleneck in India. Airlifting involves substantially high freight costs. There is a massive potential for tech-enabled firms offering cold chain solutions

- creating an enormous opportunity in infra-sharing. FaaS start-ups need different models in upstream and downstream services for scalability. An extended shelf-life will ensure fresher produce, reduced losses, and lower logistics cost.
- FaaS promises to supercharge sustainable food production to solve global food scarcity problems. Empowering farmers and not just looking at them as a market is the need of the hour. Servitisation with digital technologies can establish farming as a respectable profession.



NOTES



#### Why in the News?

- Recently, a vessel carrying 200 metric tonnes of food grains for the Food Corporation of India (FCI), docked at Guwahati's Pandu port on the southern bank of the Brahmaputra on March 6.
- The movement is believed to have taken inland water transport, on two of India's largest river systems-Ganga and Brahmaputra.

#### **Background:**

- The shipping of cargo from Gangetic belt to North-East in India via Bangladesh was FCI's pilot project.
- A pilot experiment was carried out in 2018 when two 1,000-tonne barges carrying 1,233 tonnes of bagged fly ash travelled 2,085 km from Bihar's Kahalgaon to Pandu for more than a month.
- 1. A private firm had procured the fly ash from the National Thermal Power Corporation's plant in Bihar for use in its cement factories in Assam and Meghalaya.
- 2. The FCI cargo is expected to lead to regular services between NW1 and NW2 "heralding a new age of inland water transport" for the northeast.
- According to the Inland Water ways Authority of India (IWAI), the development process has already started with a 252 MT cargo destined for eastern Assam's Numaligarh bio-refinery having reached central Assam's Silghat from Haldia in West Bengal.

#### **Benefits of Waterways:**

1. Comparative Advantage: Inland

PM Gati Shakti initiative envisaged to slowly convert the northeast into a connectivity hub and ramp up the swift movement cargo on the Brahmaputra, which meets the Ganga in Bangladesh.

Waterways are highly cost-effective and environment-friendly compared to other means of transport, specifically in long distances. For example, According to Rail India Technical and Economic Service, an arm of the Indian Railways, inland water transport is significantly cost-efficient compared to rail and road transport.

- **Enhance Decongestion:** Inland waterways transport will also help with decongestion of overcrowded rail and road networks in India.
- 3. Boost to Regional trade: Inland waterway mode has been agreed for inclusion in the trade treaty between India and Nepal. Recently, Stone exporters from Bhutan have identified inland waterways as an alternative mode of transportation.
- Efficient and Effective energy consumption: One horsepower can carry 4000 kg load in water whereas it can carry 150 kg & 500 kg load by

road & rail respectively.

5. Low maintenance cost: The cost of construction and maintenance of canals is much less, moreover, the cost of operation of inland water transport is very low.

#### Limitations of inland waterways in India:

- Phenomenon of Flood and 1. Drought: In Monsoon Rivers over flooded, while rest of the year, there is water scarcity.
- 2. Indian Dilemma: water for irrigation or water for transport
- River's of North East India flow through rocky areas. Hence they are not fit for plying boats because of waterfalls in many areas.
- 4. Poor last mile connectivity: As compared to boats, railways have better end to end connectivity.

#### Significance of Ganga-Brahmaputra inland waterways in for North East:

- Passage through important terminals:
- 1. It passed through Bhagalpur, Manihari, Sahibganj, Farakka, Tribeni, Kolkata, Haldia, Hemnagar in India, Khulna, Narayangani, Sirajgani and Chilmari in Bangladesh and again to India on National Waterway-2 (NW2, river Brahmaputra) through Dhubri and Jogighopa covering 2,350 km.
- 2. The successful docking of the vessel carrying 200 MT of food grains for the FCI has rekindled hope for the inland water transport system which the landlocked northeast depended on heavily before India's independence in 1947.

# • Connectivity is vital for holistic development:

- 1. Around Independence, Assam's per capita income was the highest in the country primarily because of access for its tea, timber, coal and oil industries to seaports on the Bay of Bengal via the Brahmaputra and the Barak River (southern Assam) systems.
- 2. Ferry services continued sporadically after 1947 but stopped after the 1965 war with Pakistan, as Bangladesh used to be East Pakistan then.
- 3. The scenario changed after the river routes were cut off and rail and road through the "Chicken's Neck", a narrow strip in West Bengal, became costlier alternatives.
- 4. The start of cargo movement through the Indo-Bangladesh Protocol (IBP) route is going to provide the business community a viable, economic and ecological alternative.
- 5. Seamless cargo transportation has been a necessity for the development of northeast.

#### • Government support for Hub-Spoke model based development for North East:

- 1. PM Gati Shakti initiative envisaged to slowly convert the northeast into a connectivity hub and ramp up the swift movement of cargo on the Brahmaputra, which meets the Ganga in Bangladesh.
- 2. These rivers are called Jamuna and Padma in that country. The multiple terminal development through these roads will provide positive spillover effects to other regions.

# Do you know the 'Protocol on Inland Water Transit and Trade' signed between India and Bangladesh?

• The resumption of cargo transport service through the waterways in Bangladesh has come at a cost since the Protocol on Inland Water Transit and Trade was signed between the two countries.

- India has invested 80% of ₹305.84 crore to improve the navigability of the two stretches of the IBP (Indo-Bangladesh Protocol) routes Sirajganj-Daikhowa and Ashuganj-Zakiganj in Bangladesh.
- The seven-year dredging project on these two stretches till 2026 is expected to yield seamless navigation to the north-eastern region.
- IWAI officials said the distance between NW1 and NW2 will reduce by almost 1,000 km once the IBP routes are cleared for navigation.
- The Government has also undertaken the Jal Marg Vikas project with an investment of ₹4,600-crore to augment the capacity of NW1 for sustainable movement of vessels weighing up to 2,000 tonnes.
- A few issues remain, though. Sailors who made the cargo trips possible have had difficulties steering clear of fishing nets and angry fishermen in Bangladesh. These hiccups will get sorted out with time, officials say.

#### **Conclusion:**

- The docking of the cargo vessel carrying 200 MT of food grains for the FCI has rekindled hope for the inland water transport system in the Northeast.
- The vessel passed through Bhagalpur, Manihari, Sahibganj, Farakka, Tribeni, Kolkata, Haldia, Hemnagar in India, Khulna, Narayanganj, Sirajganj and Chilmari in Bangladesh and again to India on the NW2, through Dhubri and Jogighopa covering 2,350 km.
- Transportation of cargo service through waterways in Bangladesh is possible because of the Protocol on Inland Water Transit and Trade signed between the two countries.



NOTES

# **SHORT ISSUES**

### **NATIONAL**

# 1

#### Missile Misfired at Pakistan

Recently, Pakistan said an unarmed Indian missile landed 124 km inside its territory. India acknowledged that a "technical malfunction led to the accidental firing of a missile".

Cabinet Committee on Security (CCS) was called by the Prime Minister Narendra Modi to look into the issue recently.

# What are the rules regarding Missile Launch?

- Under the flight testing of ballistic missiles agreement signed in 2005, each country must provide the other an advance notification on flight test it intends to take for any land or sea launched, surface-to-surface ballistic missile.
- Before the test, the country must issue Notice to Air Missions (NOTAM) or Navigational Warning (NAVAREA) to alert aviation pilots and seafarers, respectively.
- The testing country must ensure that the launch site is not within 40 km, and the planned impact area is not within 75 km of either the International Boundary (IB) or the Line of Control (LoC).
- The planned trajectory should not cross the IB or the LoC and must maintain a horizontal distance of at least 40 km from the border.
- The testing country must notify the other nation "no less than three days in advance of the commencement of a five day launch window within which it intends to under-

take flight tests of any land or sea launched, surface-to-surface ballistic missile".

• India is also member of Missile Control Technology Regime(MCTR) since 2016.

#### The Fault-

- The Director General, Inter-Services Public Relations of Pakistani Armed Forces, Maj General Babar Ifthikar said that there was "no contact" between the Directors General of Military Operation of Indian and Pakistani armies.
- It is extremely rare for a missile test to go so wrong that it crosses the border and changes track inadvertently.

#### What kind of a missile was it?

Neither country has spelt this out; Pakistan has only called it a "supersonic" missile.

Some experts have speculated that it was a test of one of India's top missiles BrahMos jointly developed with Russia.

BrahMos has a top speed of Mach 3, a range of around 290 km, and a cruising altitude of 15 km (around 50,000 feet). BrahMos can be fired from anywhere, is nuclear-capable, and can carry warheads of 200-300 kg.

#### **Indian Strategic Issues Concerned-**

- India's reputation as a responsible nuclear & military power has been hampered due to this incident.
- This incident has served as a Deterrence Threat to Pakistan in the

wake of Russia-Ukraine war crisis.

- Military Malfunction & Lack of Co-ordination: This misfiring has exposed the military's lack of co-ordination & loopholes in their regulatory systems of tactical military operations.
- Cyber Securty threat: The turning of missile during flight is a rare incident & could be due to cyber security hack in the system.
- Unprofessionalism & Technical inefficiency in military operations has been highlighted.

#### Way Forward-

- This incident cannot be taken lightly as there are several unanswered questions & many "what ifs".
- Fast-tracking the court of inquiry by handing out quick & firm punishments to those responsible is the way forward.







#### GI TAG GIVEN TO KASHMIR CARPETS

#### Why in News?

The Jammu & Kashmir government has recently started a Geographical Indication(GI) Registry for its famous Kashmiri hand knit carpet with Quick Response (QR) Code.

Recently, the first ever consignment of GI-tagged carpets was exported to Germany from New Delhi.

#### **About Kashmir Carpet-**

- The origin of hand-knotted carpets locally also known as "Kal baffi" dates back to the 15th century.
- Historians say Sultan Zain-ul-Abidin (famous king of Kashmir) brought carpet weavers from Persia and central Asia into Kashmir to train the local inhabitants.
- The loom used for Kashmir carpet weaving is composed of two horizontal wooden beams between which the wrap threads are stretched, one beam in front of the weaver and the second behind the first.
- The difference between a carpet and other hand-woven rugs lies in the fact that short lengths of the thread or yarn are tied to wrap chains to form the pile of the carpet.
- These are commonly called knots though it is a loop rather than an actual knot.

- There are different types of knots and in Kashmir the Farsi baff and the Persian system known as Sehna, or Sinneh, the knot is originally used.
- In the 1990s, carpet weavers shifted their focus from wool to silk carpets.
- Silk carpets are in the luxury bracket.
- However, the lack of silk processing units in Kashmir forced the weavers to buy silk from outside, which added to the cost of the carpet.
- The Kashmir carpet faces tough competition internationally from carpet-exporting countries like China, Turkey and Belgium, and internally from carpets manufactured in Jaipur, Agra, Bhadohi and Amritsar.
- GI tag to Kashmiri carpets was given in June 2016 but the registered carpets were certified this year itself.

#### What is GI Tagging?

A geographical indication (GI) is a name or sign used on products which corresponds to a specific geographical location or origin (e.g., a town, region, or country). The use of a geographical indication, as an indication of the product's source, acts as a certification that the product possesses certain qualities, is made according to traditional methods, or enjoys a good reputation due to its geographical origin.

Other recent GI tags given in India to Kashmiri Saffron & Manipuri Black Rice.

#### Benefits of GI tagging of Kashmiri Carpet-

- The QR code attached to the GI tag will help in reviving the sheen & glory of the Kashmiri carpet industry by certifying the genuiness of the hand-knotted carpets.
- Relevant information of the manufacturer, weaver, district, raw material will be revealed quickly after scanning the QR code.
- It will help in preserving the quality of this traditional carpet.
- It would help boost the exports of this carpet to other countries.
- It would bring it at par with the quality & price of Iranian & Turkish hand knotted carpets.
- It would transform & preserve the future of carpet industry.
- It would safeguard the weaver's
- It would help in providing legal protection.
- Giving speedy approvals.

#### **Innovative Way to Combat Malnutrition in MP**

#### Why in News?

- Recently, the government of MP (Madhya Pradesh) in partnership with the International Fund for Agricultural Development (IFAD) proposed two inexpensive and ingenious ideas to encourage women to cook balanced meals.
- o Forty-two percent of children un-

der five are malnourished in Madhya Pradesh. Having not received proper nutrition, they are either stunted or short for their age and deep in tribal areas the numbers only get worse.

#### Proposed scheme by IFAD and the MP government:

'7 days 7 plots' programme:

Where women from the village are taught how to grow different vegetables in their own gardens, seven to be exact, one for each day of the week. By the end of the week, the first plot is ready to be harvested again.

This way, families get to eat fresh, affordable vegetables that they can

consume for longer and in greater quantities, as against buying from the market, and so reduce sickness.

- o This scheme is an adjunct to the Tejaswini Rural Women Empowerment Programme implemented by the UN-affiliated IFAD in Balaghat, Dindori, and Mandla, three districts from the tribal-dominated southeast which is the poorest part of MP, and Panna, Chhatarpur and Tikamgarh of the northern parts where gender-inequality is high.
- "Tiranga Thali": To encourage a more balanced meal, the project introduced the concept of the "Tiranga Thali", where each plate contains ingredients of the three colours from the Indian flag.
- o Saffron all pulses like yellow split peas, pigeon peas, and split red lentils representing proteins;
- o White rice, milk and roti repre-

senting carbohydrates; and

- o Green leafy vegetables representing vitamins and minerals.
- The project has helped over 110,000 families in remote areas of Madhya Pradesh to cook and eat healthy meals for their children and themselves.

## Some Initiatives to tackle malnutrition:

- POSHAN Abhiyan: The Mission focusses on improving sanitation and hygiene conditions, anemia, antenatal care and optimal breastfeeding, amongst other issues, for over 130 million children.
- National Nutrition Strategy: The Strategy aims to reduce all forms of malnutrition by 2030, with a focus on the most vulnerable and critical age groups. It also aims to assist in achieving the targets identified as

part of the SDGs related to nutrition and health.

- Integrated Child Development Services (ICDS): It targets children up to the age of 6 years, pregnant and lactating mothers and women 16–44 years of age. The scheme is aimed to improve the health, nutrition and education (KAP) of the target community.
- Mid-day Meal Programme: The Midday Meal Scheme is a school meal programme in India designed to better the nutritional standing of school-age children nationwide.
- National Food Security Act: It marks a paradigm shift in the approach to food security from welfare to rights-based approach. It is legally entitled up to 75% of the rural population and 50% of the urban population to receive subsidized food grains under TPDS.

#### **INTERNATIONAL**

# 1

#### United Nations on the problem of Islamophobia

#### Context

Recently the United Nations General Assembly has approved a resolution to observe 15<sup>th</sup> March as International Day to Combat Islamophobia.

#### **Proposal of Islamophobia**

- In the 193-member United Nations General Assembly, Pakistan has proposed on behalf of the Organization of Islamic Conference (OIC) that March 15 as 'International Day to Combat Islamophobia' i.e. 'International Day to Fight for Fear of Islam'. To be celebrated
- This proposal received the support of 8 other countries including

China, Russia in addition to 57 member countries of the OIC. And this motion was passed.

- This proposal calls on all countries, private sector, and religion-based organizations, international and regional organizations, United Nations bodies, civil society, to organize various programs aimed at effectively raising awareness at all levels about "Preventing Islamophobia". invokes
- Proponents referred to Islamophobia as hate speeches, discrimination, and racial violence against the Muslim community.

Arguments in support of

#### Islamophobia:

Islamophobia refers to hate speech, racial violence against followers of Islam. It should be noted that in the case of terrorism at the international level, a different atmosphere has been created against the religion of Islam. This situation has increased to such an extent that France has also used the word "Islamic terrorism" in its document against terrorism. This situation was created because at present most of the terrorist organizations (eg ISIS, Al Qaeda) carry out their activities in the name of Islamic ideology. Due to these terrorist incidents, common Muslim citizens have





to face fear and hatred which is a big problem. To solve this problem and eliminate Islamophobia from the world, this proposal was presented and has been accepted by the United Nations General Assembly.

#### India's stand on the issue

- This proposal has been opposed by India. India has said that communal hatred is currently spreading not only against the Abrahamic religions (Islam, Judaism, and Christianity) but also against Hinduism, Buddhism, and Sikhism.
- India argued that the desecration of an ancient Gautam Buddha statue in Bamiyan, Afghanistan, the desecration of gurdwaras, the massacre

of Sikhs in gurdwaras, attacks on temples, and desecration of statues are evidence of communal hatred against non-Abrahamian religions.

- India argued that there are 1.2 billion people who follow Hinduism and there are 535 million people who follow Buddhism. At present, there are more than 30 million Sikhs in the whole world, on whom communal and racial violence also takes place. And it is time that we understand the atmosphere of fear spreading towards all religions instead of one religion.
- Along with this, India has also said that the United Nations must stay above such religious matters. The United Nations aims to keep the

whole world as one family. And by stopping hatred towards one religion and not paying attention to other religions, communalism can increase in place of peace and harmony.

- India also cited that there is no mention of the word 'pluralism' in the resolution. And the term 'Islamophobia' has no agreed definition in international law, which is contrary to freedom of religion or belief.
- It should be noted that before this International Day (August 22) is being celebrated in memory of the victims of acts of violence based on religion or belief, in this situation giving importance to any religion can give rise to an uncomfortable situation.



#### Impact on Central Asian countries due to sanctions on Russia

#### Context

After the crisis in Ukraine, Western countries are further increasing economic sanctions on Russia. This ban is affecting economic and political stability in Central Asia.

#### Introduction

After the Ukraine crisis, Western countries are continuously imposing sanctions on Russia. These sanctions are affecting Russia, but along with Russia, Central Asian countries are also being affected extensively by it. It should be noted that the Central-Asian countries are part of the erstwhile Soviet Union and are largely dependent on Russia economically. Central-Asian countries are already suffering from economic and social problems, in such a situation the sanctions on Russia are prolonging the time of stability in the countries of Central Asia.

#### Central Asia's concerns

The Central-Asian republics be-

came independent in 1991 (from the former Soviet Union) and their policies still depend on Russia.

- Due to being land-locked areas, the cost of trade activities of these countries is very high.
- Central Asia is surrounded by countries like Iran, Afghanistan, and Russia which have been subjected to economic sanctions. Which also affects Central Asia.
- Economic sanctions on Russia have affected Central Asia the most as countries such as Tajikistan, Kyrgyzstan and Uzbekistan depend mostly on Russia for foreign receipts. According to World Bank figures, remittances from abroad contribute 30 percent, 28 percent, and 12 percent of the GDP of Tajikistan, Kyrgyzstan, and Uzbekistan respectively. So this is a big problem.
- Kazakhstan is not dependent on remittances from Russia but is a major trading partner of Russia. Russia has invested about 40 billion US dollars in Kazakhstan over the past three

decades. Russia's investment has been put on hold due to the decision of Russia's central bank to increase the interest rate from 9.5 percent to 20 percent. Russian sanctions could affect these investments.

- Removal of Russian banks from the SWIFT system will also reduce the ability of Russia to pay for Kazakhstan's exports.
- The Taliban government in Afghanistan and global sanctions on the Taliban have exacerbated Central Asia's economic and security problems.
- Tajikistan, Turkmenistan, and Uzbekistan share a 2,387 km long border with Afghanistan. Afghanistan's Taliban problem raises security concerns in the Central Asian republics, as well as the stability and influence of Central Asia due to the activism of terrorist organizations such as the Islamic Movement of Uzbekistan (IMU), Islamic Jihad Union (IJU), and Jama'at Ansarullah.

#### Conclusion

At present Central Asia is surrounded by countries on which economic sanctions are imposed. In this situation, the Central-Asian nations will

have to make some decisions for their stability. Central-Asian countries can play an important role in pacifying the Russia-Ukraine issue by using their diplomacy, with these countries will have to strive for the stability of Central Asia by increasing their trade relations with India and China.

#### **ENVIRONMENT**



#### **BOMA TECHNIQUE AT KEOLADEO NATIONAL PARK**

#### Why in news?

Recently, the Boma technique of Africa was used in Keoladeo National Park of Bharatpur district of Rajasthan.

#### What is Boma Technique?

This technique involves luring of animals into an enclosure by chasing them through a funnel like fencing. The funnel tapers into an animal selection cumloading chute supported with grass mats & green nets to make it opaque to animals.

Basically, it's a technique of trapping an animal by creating a condition similar to its habitat by luring it.

#### Features of Boma Technique-

- It is popular in Africa.
- In recent years it has been adopted in Madhya Pradesh.
- It has been used for the first time in Rajasthan.
- Earlier this technique was used to capture wild elephants for training and service purposes.
- It is being used to shift the prey to tigers and leopards in the poached Mukundara Tiger Reserve.
- It takes six to eight months for a deer to give birth, which has emerged as one of the major challenges facing wildlife officials to advance the hunting base.
- Relocation to Kailadevi Wildlife

Sanctuary in Karauli and Nahargarh Wildlife Sanctuary near Jaipur is also being planned.

**Advantages of Boma Technique- Environment adaptation** – Used for an animal to settle and live in its new home.

Rehabilitation of sick/injured/orphan animals - In cases where human trauma or intervention has taken place, the animal can be brought back to its natural state.

A holding facility – If we have an animal that has been caught and needs to be transferred to another reserve, the Boma can be used as a holding facility until food and housing are available for the animal.

For the purpose of breeding in animals - Mainly for the purpose of increasing the number of animals with less population can use the Boma method. It was used to manage the population of African wild dogs.

#### **Keoladeo National Park**

Keoladeo National Park is formerly known as the Bharatpur Bird Sanctuary in Bharatpur, Rajasthan. It is a famous avifauna sanctuary of India that hosts thousands of birds, especially during the winter season. Over 350 species of birds are residents here. It is also a major tourist centre with scores of ornithologists arriving

here in the hibernation season. It was declared a protected sanctuary in 1971. It is also a World Heritage Site & a Ramsar site.

Keoladeo Ghana National Park is a man-made and man-managed wetland and one of the national parks of India. The reserve protects Bharatpur from frequent floods, provides grazing grounds for village cattle. Earlier, it was primarily used as a waterfowl hunting ground. The 29 km reserve is locally known as Ghana and is a mosaic of dry grasslands, woodlands, woodland swamps and wetlands. These diverse habitats are home to 366 bird species, 379 floral species, 50 species of fish, 13 species of snakes, 5 species of lizards, 7 amphibian species, 7 turtle species and a variety of other invertebrates.







#### **African Cheetahs being introduced in India**

#### Why in News?

The union government is planning to translocate 50 cheetahs from African Savannas to Kuno National Park in Madhya Pradesh (MP) india.

#### **History of Cheetahs in India**

- Records of Cheetah in India go back to the 1550's.
- It's main purpose in India was coursing black buck which is the major contributor for the depletion of its numbers through ages. (\*Coursing-A hunting chase game of speed using sight rather than scent ia used)
- Records of Cheetah have been mentioned in detail in Mughal Accounts from the 16th century onwards.
- The British declaring bounty for killing cheetah in 1871 further depleted their numbers.
- The consistent & widespread capture of the cheetahs from the wild over the centuries reduced the levels of male/female heterogeneity which resulted in reduced fecundity/fertility & high infant mortality rate.
- Inability to breed in captivity, sport hunting & bounty hunting were the main reasons for their extinction in India.
- It is reported that Akbar had 1000 cheetahs & Tipu Sultan had 16 cheetahs as a part of his menagerie.
- It is recorded that the last cheetah were shot in India in 1947 but few sightings were found till 1967.

#### Controversy & obsoleteness of the project

- It is said science is being used as a legitimising tool for pursuing a politically influenced conservation goal.
- According to eminent biologist T.N. Khoshoo-"It is more important

to conserve species that were still extant such as the lion & tiger, rather than trying to re-establish an extinct species".(this view is in sync with the 2013 SC order).

- The aim of establishing cheetah as the top predator for conservation purposes is not necessary as already there are top predators like asiatic lions & tigers prevalent in India.
- There are far more cost effective, efficient, speedier & more inclusive to conserve grasslands.
- The lack of extensive areas may not be able to sustain sufficient population density.

#### **Current Status of the Project-**

- About a month ago a team of Indian government officials visited Namibia to inspect the cheetahs being translocated to India.
- Namibia wants India's support

for lifting CITES ban on commercial trades of wildlife products like Ivory.

#### **About cheetah**

The cheetah is the world's fastest land animal and Africa's most endangered big cat. Uniquely adapted for speed, the cheetah is capable of reaching speeds greater than 110 kilometers per hour in just over three seconds. At top speed, their stride is seven meters long. The cheetah's unique body structure: flexible spine, semi-retractable claws, long legs and tail allow it to achieve the unbelievable top speed of 110 km/ hr (70 mph). The cheetah's body is narrow and lightweight with long slender limbs. Specialized muscles allow for a greater swing to the limbs increasing acceleration.



#### **SCIENCE AND TECH**

## Hypersonic missile

#### Context

Recently the Ministry of Defense of Russia has announced that hypersonic missile has been used by Russia in war with Ukraine.

#### What is Hypersonic Missile?

The hypersonic missile is a state-ofthe-art missile system with a speed of Mach 5 (5 times the speed of sound).

There are two types of hypersonic weapon systems.

- Hypersonic Glide Vehicle (HGV)
- Hypersonic cruise missile

HGVs are launched from a rocket before gliding to the intended target, while hypersonic cruise missiles are powered by high-speed engines or 'scramjets' to achieve their targets.

#### **Advantages of Hypersonic Missiles**

- They are useful in long-range and fast attacks.
- The desired target can be achieved by hypersonic missiles.
- These are a better weapon against

mobile missile systems.

 Conventional hypersonic weapons use only kinetic energy.

Classification of missiles based on speed

- Subsonic Missile: Less than Mach 0.8
- Sonic Missile: 0.8 to 1.2 Mach
- Supersonic Missile: Mach 1.2 to
- Hypersonic Missile: Mach 5 to Mach 25
- High Hypersonic Missile: more than Mach 25

(Note- 1 Mach- 332 meters per second speed of sound)

#### How does it differs from the ballistic missile system

• The maneuverability of a hypersonic missile differentiates it from a ballistic missile because a ballistic missile follows a defined ballistic trajectory whereas hypersonic missiles do not follow a ballistic trajectory and can be carried to the intended target.

#### Which countries have hypersonic missiles

• The US, Russia, and China are in the advanced stages of the hypersonic missile program, while India, France, Germany, Japan, and Australia are also developing hypersonic weapons.

#### Indian hypersonic missile program The report of CRS (US Agency) states that

- India is moving forward with Russia on the development of BrahMos II. This missile is a hypersonic cruise missile with a speed of Mach 7.
- India is also developing an indigenous, dual-capable (conventional as well as nuclear) hypersonic cruise missile as part of its Hypersonic Technology Demonstrator Vehicle program
- Successfully test-fired 6 scramjets between June 2019 and September 2020. At present India has hypersonic missiles with a speed of about 13 Mach.

#### **DISHANK APP**

#### Why in news?

The Karnataka Government has decided to digitize all land records since 1990 under it's "Bhoomi Project",these land records can now be accessed through a new app known as Dishank.

#### Features Of Dishank App-

• The Dishank app is built on digitized versions of maps for 70 to 80 lakh old parcels of land from a land survey dating back to 1965.

- The Application has been developed under the Karnataka Geographical Information System program of the Karnataka State Remote Sensing Applications Center (KSRSAC).
- The KSRSAC sources satellite data & provides it to various agencies for innovative use.
- 30,854 Village land maps in Kar-

nataka were digitized, scanned & geo-referenced using cartoSAT satellite.

• The Land ownership data provided by the app includes the name of the landowner, the extent of land as per records, ownership type, land type,restrictions/litigation on the land, category of land & any other active transaction being done on the land.





• It is only meant to provide clarity on the original status of piece of land & should not be used for legal purposes in land disputes.

#### **Land Acquisition Problems in India**

- Delays in granting approval to important infrastructure projects increases their costs making them unsustainable.
- Increasing NPAs in infrastructure sector can be attributed to some extent to the delays in land acquisition.
- Even after passing of Land Acquisition Act 2013 still land acquisition is estimated to take minimally four to five years.
- Inadequate compensation to

mostly poor farmers exclude them from agriculture as well as prevent them from a decent living standard.

- Using agricultural land for non-agricultural purposes, on one hand creates infrastructure whereas on the other hand serves as an impediment in the food security & losses to the farmer.
- Poor land acquisition policies in one region can transfer development to other regions with favourable policies.

#### Uses of the App

It will enable citizens to avail the information about the land & its ownership as recorded in the Bhoomi database.

- This app will help in bringing transparency as citizens will be able to identify the actual owner & location of the land freely available in the public domain.
- Citizens will be able to access their subdivision in the app in future.
- It will help in minimizing the grave problem of land disputes prevalent throughout the country if replicated & implemented in other states as well.
- Ease in providing approval & environmental clearances for new projects.

#### **ECONOMY**



#### **RBI Master Directions/ Regulatory Framework 2022 for Microfinance Loans**

#### Why in News?

New Microfinance guidelines have been issued by RBI to help increase reach of Microfinance & boost confidence.

#### The New Rules-

RBI recently revamped its norms for microfinance by making them uniform across lenders.

- Removing the ceiling on interest rates & hiking the cap on family income for MFI loans.
- According to RBI circular any collateral free loan given to a household with an annual income of upto Rs.3 Lakh is an MFI (Microfinance Institution) Loan.
- The Circular also allows the lender to put in place a board approved policy for the pricing of loans as long as

they are usurious i.e., charging illegal or exorbitant rates of interest.

- In the past the central bank had linked lending to costs.
- Board can provide for flexibility in repayment frequency & income assessment.
- Lender cannot provide loans where the loan repayment is at 50% of the monthly household income or more.
- If there are any existing loans where the outgo is above 50% the loans will be allowed to mature.
- RBI also does away with the limit on processing fees & interest removed.

#### Problems of Micro-financing in India

Lack of security and high operating costs: are some of the major limitations faced by the banks while providing loans to poor people.

- Inadequate Data: While overall loan accounts have been increasing the actual impact of these loans on the poverty-level of clients is sketchy as data on the relative poverty-level improvement of MFI clients is fragmented.
- Impact of COVID-19: It has impacted the MFI sector, with collections having taken an initial hit and disbursals yet to observe any meaningful thrust.
- Social Objective Overlooked: The objective of social inclusion has not been achieved.
- Loans for Consumption purposes: These microfinance loans are not being utilised for productive purposes but more on consumption.

# How the new rules can solve the problems-

The harmonized regulations: A common regulatory framework will apply to all regulated entities (RE) of the RBI.

Level playing field: The new rules will create a level playing field for all con-

cerned.

Indebtedness & Multiple Lending: The new rules can address these issues which are of paramount concern for the sector.

Increased Competition: The revision of the income cap to Rs.3 lakh will expand opportunities for new

players.

Risk Based Underwriting: The interest rate cap removal will promote risk based underwriting.

Deeper Penetration: The new rules will help cater to the beneficiaries at the bottom of the pyramid.

2

#### **Report of the Standing Committee on MNREGA**

#### Context

Recently, the Standing Committee (related to Rural Development and Panchayati Raj) headed by **Prataprao Jadhav** has presented its report on the "Critical Evaluation of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)".

#### **Key Findings of the Committee**

- The Committee observed that the notified wage rate in different States/UTs ranges from Rs.193 to Rs.318. Which presents an uneven rate of MGNREGA.
- The role of MGNREGA has been extremely important during the Corona pandemic.
- The committee pointed out that the beneficiaries of MGNREGA are mostly poor and deprived sections of society. And as a result of low wages under MGNREGA, beneficiaries are discouraged and they migrate to urban areas for more profitable work. The committee also found that 755 lakh families were provided employment in 2020-21 but only 72 lakh families completed 100 days of employment.
- The committee noted that there is a delay in the payment of wages to the beneficiaries. This delay is mainly due to inactive Aadhaar, block, or frozen bank accounts. The committee also pointed out that the provision of delay in payment under

MGNREGA is not complied with.

- The committee pointed out that the provision of social audit is not followed in MGNREGA. In 2020-21, only 29,611-gram panchayats were audited at least once. And those social audit reports are not publicly available.
- The Committee pointed out that there are also many problems in the appointment of Ombudsperson (to investigate complaints at the district level) as mentioned in the Act. Only 263 Ombudspersons have been appointed so far out of 715 possible appointments.

#### **Committee's recommendations**

- The scope of works permitted under the scheme needs to be amended regularly. For example, works like building dams to prevent soil erosion during floods and building boundaries to protect agricultural land from stray animals can be included in this.
- The committee has recommended a uniform wage rate across the country. And along with this, the committee has said that the wage rate of MNREGA should be adjusted with inflation.
- The committee has suggested that in case of delay in payment, the beneficiary should implement the compensation provision at the rate of 0.05% of wages every day.
- The Committee recommended

the Ministry to ensure that the audit of Gram Panchayats is not missed in any financial year. And the committee suggested that these reports be put in the public domain immediately after the completion of the audit.

- The Committee noted that the plan should be modified to meet the challenges due to COVID-19. He suggested a guarantee of 150 days of work under the scheme instead of 100 days.
- The Committee recommended that punitive measures should be taken in the states where ombudspersons have not been appointed and the funding of those states should be stopped.



#### NEWS OF NATIONAL AND INTER-NATIONAL IMPORTANCE

#### 1. "Operation Ganga" Launched to Bring Back Indian Nationals from Ukraine

The airspace in Ukraine was closed after the Russo-Ukraine War. Due to this India started Operation Ganga to rescue its citizens and students trapped in Ukraine. For this, land clearance options were identified through Ukraine's four neighbouring countries, Hungary, Poland, Romania and Slovakia. In this sequence, Air India's first evacuation flight from Romania landed in Mumbai on 26 February. Some of the other recently launched operations are as follows:-

Operation Sukun - Launched by the Indian Navy during the 2006 Lebanon War to evacuate Indians and other civilians

Operation safe homecoming- Launched in 2011 to repatriate Indian nationals from Libya

Operation Rahat - Launched in 2015 to evacuate Indian nationals and foreign nationals from Yemen

Operation Sankat Mochan - Launched in 2016 for the evacuation of Indian nationals from South Sudan

Vande Bharat Mission - The evacuation program started in May 2020 in the wake of the COVID-19 pandemic.

Operation Devi Shakti- Launched in 2021 for the evacuation of Indian citizens, embassy staff and eligible Afghans.



# 43/55 India

#### 2. India ranks 43rd in International Intellectual Property Index

India has been ranked 43rd in the International Intellectual Property Index released by the US Chamber of Commerce Global Innovation Policy Center (GIPC). A total of 55 countries have been included in this index. This index evaluates patent and copyright policies, commercialization of IP assets, and ratification of a country's international treaties.

According to the report, India's overall IP score has seen a marginal increase (up from 38.4 percent to 38.6 percent). Out of 55 countries in the index, only 45 countries have shown improvement in their scores. The United Arab Emirates (UAE), Nigeria and Peru have improved their scores the most in this order. This year Venezuela is ranked last (55th) in the Intellectual Property Index. Following are the top 5 countries in the index:

Place	Country
First	United States
Second	United kingdom
Third	Germany
Fourth	Sweden
Fifth	France

# 3. Professor Deepak Dhar becomes the first Indian to win the Boltzmann Medal

Professor and physicist Deepak Dhar, from the Indian Institute of Science Education and Research, Pune, will be awarded the Boltzmann Medal. He is the first Indian to receive this honour. He will be given this honour jointly with American scientist John J Hopfield of Princeton University. The Boltzmann Medal is presented once every three years by the Commission on Statistical Physics of the International Union of Pure and Applied Physics (IUPAP). This award is given for contribution to the field of statistical physics. IUPAP is the only global organization that is organized and operated by a physical community. The award is given in memory of Australian physicist Ludwick Eduard Boltzmann.





# 4. Saurabh Chaudhary won India's first gold medal in International Shooting World Cup

Saurabh Chaudhary defeated Germany's Michael Schwald in the gold medal match of the men's 10m air pistol event at the ISSF World Cup organized by the International Shooting Sport Federation in Cairo, Egypt. Russia's Artem Chernausov won the bronze medal. However, the Russian flag was not shown on the scoreboard. The ISSF World Cup was held from 26 February to 8 March. In the same event, India's Shreya Agarwal missed out on 0.1 points in the semi-finals. She scored 629.3 in women's air rifle. The International Shooting Sport Federation (ISSF) is the governing body of the Olympic shooting events in rifle, pistol and shotgun. Its headquarter is situated in Munich, Germany.

#### 5. India has the third-largest population of billionaires

Knight Frank's Wealth Report states that the number of Ultra-high net worth individuals (UHNWIs) in India has increased by 11 percent. They are very wealthy people. Mumbai has the highest number of UHNWIs at 1596, followed by Hyderabad with 467 UHNWIs. The equity market and digital adoption are key factors in the growth of UHNWIs in India. The report estimates that over the next five years, the global UHNWA population will increase by 28%. The UHNWA population in India is expected to grow by 39%. The report states that Bengaluru has the highest increase in the number of UHNWIs, followed by Delhi. The report claimed that at present, India has 145 billionaires which are the third-highest after the US (748) and China (554).

Billionaires	2021	2020-21	2016 21
US	748	15%	38%
Chinese mainland	554	32%	121%
India	145	24%	69%
Germany	136	14%	13%
Russia	121	20%	53%



# 6. New gin berry species discovered in Kanyakumari Wildlife Sanctuary

Scientists of the Botanical Survey of India have discovered a berry species named Glycosmis macrocarpa in the Kanyakumari Wildlife Sanctuary in the Southern Western Ghats. This species is found in Tirunelveli semi-evergreen forests. This species is endemic to the southern Western Ghats. This species belongs to the orange family. 'Glycosmis Pentaphylla' is a species of flowering plant in the Rutaceae family, commonly known as orangeberries and gin berries. The berry of the genus Glycosmis has the unique characteristic of 'gin aroma' and is a popular edible fruit. It is also used for medicinal values and food.





#### 7. India slips three places to 120th on Sustainable Development Goals

India has been ranked 120th in terms of 17 Sustainable Development Goals. India's SDG score is 66 out of 100. Last year India's rank was 117th. According to the Centre for Science and Environment's State of India Environment Report, 2022, India's ranking has dropped due to challenges in the 11 SDGs. India has not fared well in the SDGs on freedom from hunger, good health and wellness, gender equality and sustainable urban and community development. The report pointed out that India also did not perform well in quality education and life on land. The report claimed that Jharkhand and Bihar will not be able to achieve the SDGs by 2030. In the latest ranking, Kerala is in the first place while Tamil Nadu and Himachal Pradesh are in second place. The third place is shared by Goa, Karnataka, Andhra Pradesh and Uttarakhand. Among the Union Territories, Chandigarh ranks first, followed by Delhi, Lakshadweep and Puducherry. Finland is at the top with a score of 85.90 in the Sustainable Development Report 2021, while Sweden is at the second position with 85.61 points. Denmark and Germany are ranked fourth and fifth respectively.





#### 8. NASA launches next-generation weather satellite named GOES-T

The satellite named Geostationary Operational Environmental Satellite (GOES-T) has been launched for the National Oceanic and Atmospheric Administration (NOAA). This satellite is the third in the series of next-generation weather satellites. It was launched from Cape Canaveral Space Force Station on a United Launch Alliance Atlas V rocket. The satellite will help the National Oceanic and Atmospheric Administration (NOAA) predict "hazardous weather conditions" such as storms, thunderstorms, floods and fires in the Western Hemisphere. The Geostationary Operational Environmental Satellite (GOES-T) is placed in geostationary orbit 22,300 miles above Earth.

#### 9. Australian cricketer Shane Warne passes away

Legendary Australian cricketer and right arm leg spinner Shane Warne died of a heart attack on 4 March 2022 in Koh-Samui, Thailand. Shane Keith Warne played his first test match against India in 1992. He took 708 wickets in 145 test matches. He has taken the second-highest number of wickets in Test cricket. He took over 1,000 wickets in Tests and One Day Internationals. In 2000, he was selected as one of the five Wisden Cricketers of the Century.





#### 10. Biodegradable nanoparticle developed to protect crops from disease

Researchers from IIT Kanpur, led by Santosh K Mishra and Piyush Kumar, along with researchers from ICAR have developed a biodegradable nanoparticle (Bio-degradable-Carbonoid-Metabolite BioDCM) to protect crops from disease. A nanoparticle is a small particle between 1 and 100 nanometers in size. It can be used in place of chemical insecticides. The use of these biodegradable nanoparticles will help in protecting farmer crops from bacterial and fungal infections. It acts fast because it is applied in bioactive form and can withstand high tempera--tures. These biodegradable nanoparticles will also promote organic farming.

#### **Current Affairs at a Glance**

- Sadia Tariq of Jammu and Kashmir won the gold medal in the Wushu Stars Championship 2022 held in Moscow. Wushu or Kungfu is a martial art as well as a sport.
- Emma Terho was re-elected as the President of the International Olympic Committee (IOC) Athletes' Commission.
- India's first smart-managed EV charging station has been launched by BSES in Delhi.
- Mirabai Chanu won the gold medal in the Singapore International Weightlifting Tournament.
- Madhabi Puri Buch has been appointed as the new chairperson of SEBI. She is the first woman chairperson of the Securities and Exchange Board of India.
  - **Securities and Exchange Board of India (SEBI):** It was established in 1988 and was given statutory status in 1992.
  - It is the regulator of the securities market in India and aims to protect the interests of investors in securities. Its headquarter is located in Mumbai.
- The 31st Southeast Asian Games will be held in Vietnam.
- India's first mobile ambulance for street animals launched in Chennai.
- Shri Nivethe, Isha, Ruchita jointly won the gold medal in the women's 10m air pistol team event at the ISSF World Cup.
- The ninth edition of Exercise SLINEX took place in Visakhapatnam.
- Jharkhand High Court Chief Justice DN Patel has been appointed as the chairman of the Telecom Disputes Settlement and Appellate Tribunal (TDSAT).
- A two-day 'Study in India 2022' meeting was organized in Dhaka. A similar event will be held in Chittagong in future.
- Mithali Raj became the first woman cricketer to play six World Cups.
- Government of India launched the "SAMARTH" initiative to promote women's entrepreneurship.
- RBI has launched a 24x7 helpline for digital payment users named 'Digisathi'.
- T. Raja Kumar will be the next President of FATF.
- According to a Mercom India Research report, India has installed a record 10 gigawatts (GW) of solar capacity during 2021.

# **BRAIN BOOSTER**





#### 1. Why In news

The Union Cabinet on 9 March approved the setting up of National Land Monetisation Corporation (NLMC) as a wholly-owned government of India company to undertake monetisation of surplus land and building assets of Central Public Sector Enterprises (CPSEs) and other government agencies.

#### 2. About NLMC

- The National Land Monetisation Corporation will be a firm, fully owned by the government, to carry out the monetisation of government and public sector assets in the form of surplus, unused or underused land assets.
- It will fall under the administrative jurisdiction of the Ministry of Finance and will be set up with an initial authorised share capital of ₹5,000 crore and a paid-up capital of ₹150 crore.
- The Corporation will also facilitate the monetisation of assets belonging to PSUs that have ceased operations or are in line for a strategic disinvestment, with the aim of unlocking the value of these land holdings.
- The surplus land and building assets of such enterprises are expected to be transferred to the NLMC, which will then hold, manage and monetise them.
- NLMC will speed up the closure of loss-making CPSEs and smoothen the strategic disinvestment process.
- NLMC will act as an advisory body and support other government entities and CPSEs in identifying their surplus noncore assets and monetising them in an efficient and professional manner, maximising the scope of value realisation.

#### 3. About non-core assets

- The assets which are central to the business objectives of entities and are used for delivering infrastructure services to the public/users are considered as core assets.
- The core assets include asset classes such as transport (roads, rail, ports,

#### 4. Meaning of monetisation

- When the government monetises its assets, it essentially means that it is transferring the revenue rights of the asset to a private player for a specified period of time.
- In such a transaction, the government gets in return an upfront payment from the private entity, regular share of the revenue generated from the asset, a promise of steady investment into the asset, and the title rights to the monetised asset.



## **National Land Mone**tisation Corporation

- Another challenge would be to use the Public Private Partnerships (PPPs) as a monetisation model.
- The presence of just a few serious bidders would also give rise to the possibility of a monopoly or duopoly in operating surplus government land.
- airports), power generation, transmission networks, pipelines, warehouses etc.
- The other assets, which generally include land parcels and buildings, can be categorised as non-core assets.

#### 5. Functioning of NLMC

- The firm will hire professionals from the private sector with a merit based approach.
- · This is because asset monetisation of real estate requires expertise in valuation of property, market research, investment banking, land management, legal diligence and other related skill sets.
- The NLMC will undertake monetisation as an agency function and is expected to act as a directory of best practices in land monetisation.

#### 6. Land available for monetisation

- According to the Economic Survey 2021-2022, as of now, CPSEs have > put nearly 3,400 acres of land on the table for potential monetisation.
  - They have referred this land to the Department of Investment and Public Asset Management (DIPAM).
  - PSUs such as MTNL, BSNL, BPCL, B&R, BEML, HMT Ltd, Instrumentation Ltd etc are in the foray.
  - The Railways and Defence Ministries, meanwhile, have the largest amount of government land in the country.

#### 7. Challenges for NLMC

- The performance and productivity of the NLMC will also depend on the government's performance on its disinvestment targets.
- In FY 2021-22, the government has just been able to raise ₹12,423.67 crore against a target of ₹78,000 crore which was brought down from ₹1.75 lakh crore.
- The Life Insurance Corporation IPO, is in doldrums due to Russia-Ukraine
- Air India sell-off also took a lot of time.
- Identifying profitable revenue streams for the monetised land assets, ensuring adequate investment by the private player and setting up a dispute resolution mechanism are also important tasks.





#### 1. Why in News:

Commodity prices have gone into a tizzy after Russian forces invaded Ukraine. The Bloomberg Commodity Index recorded its biggest weekly rally since 1960 in February, 2022.

#### 2. Reason for commodity prices having an upward trajectory

- The military conflict between Russia and Ukraine has led to disruptions in the global commodity supply chain.
- The USA and EU have been taking measures to debilitate Russia's economy by cutting Russian banks off the SWIFT payment messaging system and freezing Russia's foreign reserves.
- Ukraine, supplies about 12% of global wheat exports and 13% of global corn exports.
- Suppliers in other parts of the world have failed to increase their production to make up for the loss of output in Russia and Ukraine.

#### 3. Commodity inflation & Russia-Ukraine war

- Commodity prices have risen significantly since at least 2021 when lockdowns were slowly lifted by governments and economies were allowed to open up.
- Owing to various frictions in the global economy, it took a while for supply chains disrupted by lockdowns to return to normalcy.
- The supply of goods was limited and this scarcity was reflected in the form of higher prices.
- A view is that, several countries are replacing fossil fuels with renewable energy as a possible reason behind the increase in commodity prices.
- The emphasis on renewable energy has discouraged investors from

#### 4. Russia's energy and commodity exports:

#### Crude oil

Russia is the world's third-biggest oil producer after the US and Saudi Arabia. It is responsible for about 12% of global oil production. Around 60% of Russia's oil exports go to OECD Europe, and 20% to China.

#### Natural gas

Russia produced about about 16% of the world's natural gas. Russia supplies almost half of the European Union's gas. In 2021, Russia, accounting for around 45% of EU gas imports and close to 40% of its total gas consumption.



## **Commodities &** Russia-Ukraine War

investing in the production of traditional fossil fuels.

- The pandemic witnessed major global central banks injected massive amounts of money into their economies, leading to a demand-supply
- Global commodity prices, as measured by the Bloomberg Commodity Index, have risen by over 60% since the start of 2021.

Russia is the world's third-largest producer of gold after Australia and China. It supplied about 350 tonnes of the precious metal last year.

Coal

Russia is the world's third-largest coal producer.

#### Wheat

Russia produced 75.5 tons of wheat last year, and it is the largest wheat-exporting country, with almost 17% of global export supply.

#### Nickel

Russia accounts for around 7% of global nickel output and is the third biggest producer. Nickel is a key component in the production of stainless steel and batteries for electric vehicles.

#### Palladium

Russia vves with South Africa for the position as the world's largest producer of palladium. The metal is used in the production of catalytic converters to reduce emissions in automobiles.

#### Copper

Russia supplies about 3.5% of global copper, which is used in wiring and power cables.

#### Aluminum

Russia is the world's biggest aluminum producer behind China. It accounts for around 6% of global supplies.

#### 5. Future ahead

- The course of the Russia-Ukraine war, which is unpredictable at the moment, will naturally affect the price of commodities going forward.
- It should be noted that cutting off Russia's economy from the rest of the world can affect not just Russia but also affect businesses and consumers that depend on the Russian economy.
- It is not just Russia that will suffer from the war and sanctions but also the rest of the world.
- As the global economy struggles to grow while prices rise fast, analysts have warned about the risk of stagflation, which is marked by high price inflation and low growth.





#### 1. Why in news?

Railway Minister Ashwini Vaishnaw reviewed the working of the indigenous train protection system of the national transporter- 'Kavach', between Lingampalli - Vikarabad section of South Central Railways' Secunderabad Division.

#### 2. About Kavach

- It is a set of electronic devices as well as Radio Frequency Identification devices installed in train locomotives, in the signalling system and rail tracks, that talk to each other utilizing ultra high radio frequencies in order to control the train brakes and also alert drivers, based on the logic programmed into the system.
- One of the main features of Kavach is that by continuously refreshing a train's movement information, it is able to send out triggers when a loco pilot jumps signal, known as Signal Passed at Danger, a grave offence that leads to accidents like collision.
- Also, the devices relay the signals continuously ahead to the loco, making it useful for locomotive pilots in low visibility, especially when there is dense fog.
- The Kavach system includes European Train Protection and Warning System, as well as the indigenous Anti Collison Device.
- Also in the future, it will carry features of the high-tech European Train Control System (ETCS) Level-2.
- The Kavach system's current form adheres to Safety Integrity Level 4 which is the highest level of safety and reliability standard.

#### 3. Modification in the train protection system

- The government wants to position Kavach as an exportable system, a cheaper alternative to the European systems.
- At present, Kavach uses Ultra High Frequency, however, work is on to make the system compatible with 4G Long Term Evolution technology and

#### 4. Kavach in Indian Railways

- Kavach, the indigenously-developed train collision avoidance system (TCAS), is set for countrywide implementation by taking up 4,000-5,000 km each year following the commissioning of up to 2,000 km this year in the South Central Railway (SCR) zone.
- Kavach has been deployed on over 1,098 km and 65 locomotives in ongoing projects of the South Central Railway.
- In future it will be implemented



**Anti-Collision System** 'Kavach'

on 3000 km of the Delhi-Mumbai and Delhi-Howrah corridors where the tracks and systems are being upgraded to host a top speed of 160 kmph.

- In addition to a trial section of 250 km, at present Kavach is under implementation on 1200 km of South Central Railway, on Bidar-Parli Vaiinath-Parbhani and Manmad-Parbhani-Nanded. Secunderabad-Gadwal-Dhone-Guntakal sections.
- Further, over 34,000 km on the High Density Network (HDN) and Highly Utilized Network (HUN) of on the Golden Quadrilateral have been included in its sanctioned plans.
- Four years ago, Prime Minister Narendra Modi had turned down an ambitious plan of the Railways to roll out ETCS-Level 2 system across its network and had asked the transporter to look for indigenous, cheaper solutions for such future upgrade.

#### 5. Way forward

- Announced in the 2022 union Budget as a part of the Atmanirbhar Bharat initiative, 2,000 km of rail network is planned to be brought under the indigenous world-class technology Kavach', for safety and capacity augmentation in 2022-23.
- Being cost-efficient, the system has the full potential to be a substitute of the European and Australian systems
- The Kavach system, in the next phase, will also be able to recalibrate as per temporary speed restrictions

make it for global markets.

- Also, work is going on to make Kavach such that it can be compatible with other installed systems across the globe.
- · In Lucknow, RDSO along with private vendors are developing the system.
- Once rolled out, Kavach may be the cheapest Automatic Train Protection System in the world with the rollout cost pegged at around Rs 30 lakh to 50 lakh per kilometer, a fourth of the cost of equivalent systems across . the globe.





#### 1. Why In news

A vessel carrying 200 metric tonnes (MT) of food grains for the Food Corporation of India (FCI), docked at Guwahati's Pandu port on the southern bank of the Brahmaputra on March

#### 2. The Project

- · The shipping of cargo from Gangetic belt to North-East (NE) in India via Bangladesh was FCI's pilot project.
- A pilot experiment was carried out in 2018 when two 1,000-tonne barges carrying 1,233 tonnes of bagged fly ash travelled 2,085 km from Bihar's Kahalgaon to Pandu for more than a month.
- The FCI cargo is expected to lead, to regular services between NW1 (Haldia to Prayagraj) and NW2 (Dhubri to Sadiya) "heralding a new age of inland water transport" for the NE.

#### 3. Advantages of Waterways

- Comparative Advantage: Inland Waterways are highly cost-effective and environment-friendly compared to other means of transport, specifically in long distances.
- Enhance Decongestion: Inland waterways transport will also help with decongestion of overcrowded rail and road networks in India.
- Boost to Regional trade: Inland waterway mode has been agreed for inclusion in the trade treaty between India and Nepal. Stone exporters from Bhutan have identified inland waterways as an alternative mode of transportation.
- · Efficient and Effective energy con**sumption:** One horsepower can carry 4000 kg load in water whereas it can carry 150 kg & 500 kg load by road & rail respectively.

#### 4. Limitations of inland waterways in India

- Flood and Drought: In Monsoon Rivers over flooded, while rest of the year, there is water scarcity.
- · Indian Dilemma: water for irrigation or water for transport
- River's of North East India flow through rocky areas. Hence they are not fit for plying boats because of waterfalls in many areas.
- Poor last mile connectivity: As compared to boats, railways have better end to end connectivity.



### **Inland-Water Transport** System for the North-East

#### 6. Conclusion

- The docking of the cargo vessel carrying 200 MT of food grains for the FCI has rekindled hope for the inland water transport system in the Northeast.
- · The vessel has passed through important cities of India & Bangladesh covering 2,350 km.

Low maintenance cost: The cost of construction and maintenance of canals is much less, moreover, the cost of operation of inland water transport is very low.

#### 5. Importance of NW1 & NW2

#### Connecting important terminals:

It passed through Bhagalpur, Manihari, Sahibganj, Farakka, Tribeni, Kolkata, Haldia, Hemnagar in India, Khulna, Narayanganj, Sirajganj and Chilmari in Bangladesh and again in India through Dhubri and Jogighopa covering 2,350 km.

#### · Connectivity & development:

- i. At the time of Independence, Assam's per capita income was the highest in the country primarily because of access to seaports on the Bay of Bengal via the Brahmaputra and the Barak River (southern Assam) systems.
- ii. Ferry services continued sporadically after 1947 but stopped after the 1965 war with Pakistan, as Bangladesh used to be East Pakistan then.
- iii. NE Came to a position of disadvantage as the river routes were cut off and rail and road through the "Chicken's Neck", became costlier alternative.
- iv. The start of cargo movement through the Indo-Bangladesh Protocol (IBP) route is going to provide the business community a viable, economic and ecological alternative.
- Seamless cargo transportation has been a necessity for the development of northeast.

#### · Government support for development of NE:

- PM Gati Shakti initiative envisaged to slowly convert the northeast into a connectivity hub and ramp up the swift movement of cargo on the Brahmaputra, which meets the Ganga in Bangladesh.
- These rivers are called Jamuna and Padma in Bangladesh. The multiple terminal development through these will provide positive spillover effects to other regions.





#### 1. The story so far

Microsoft has partnered with Fortum, a Finnish energy company to heat homes, services and businesses in Finland with sustainable waste heat from a new datacentre region that Microsoft has planned to build in the Helsinki metropolitan area in Finland.

#### 2. About datacentre

- · A datacentre is a physical facility that organisations use to store their critical applications and data, process data and disseminate them to users.
- It is designed based on a network of computing and storage resources that enables delivery of shared applications and data.
- The key components of a datacentre are routers, switches, firewalls, storage systems, servers, and application delivery controllers.
- Many large datacentres are located in dedicated buildings.
- Smaller datacentres may be situated in specially designed rooms within buildings constructed to serve multiple functions.

#### 3. Heat generated by datacentres

- The temperatures recorded in the hot aisles of a datacentre hover between 80 and 115 degrees Fahrenheit, according to Lifeline datacentres.
- Global cyber security firm Kaspersky estimates over 75% of a datacentre's electricity becomes waste heat.
- It noted that in winter, a datacentre can provide heating up to 85°F, similar to a gas boiler, with better energy efficiency than a heat pump in a new house.

#### 4. Carbon footprints of Datacentres

- On a global level, datacentres consume around 200 terawatthours (TWh) of electricity, which is more than 1% of the world's total electricity.
- They contribute to 0.3% of all

#### 5. Microsoft's plan to cut carbon emission

- According to Microsoft, the recycled waste heat, along with other carbon reduction measures, can help the city of Espoo and its neighbouring communities to reach their CO2 emission reduction targets.
- · It can also help decommission Fortum's last coalfired heat unit in the city.
- · The heat recycling system can provide clean heat to homes, businesses and public buildings in Helsinki, and can reduce up to 4,00,000 tons of CO2 emissions annually, according to estimates by Fortum.



### **Datacentres & Heat**

- Apple is building a datacentre in Denmark and plans to run it with renewable energy and use waste heat to warm up nearby office buildings.
- · An IBM datacentre in Switzerland is heating a nearby community pool.
- In Canada, communications company Quebecor donates its heat to the editorial office of a local newspaper.

global CO2 emissions, according to the International Energy Agency.

Ireland's energy regulator says datacentres could use almost 30% of the country's electricity by 2027, endangering climate goals.

 The company highlighted that once the new data centre region's waste heat capture is in operation, a total of about 60% of the area's heating will be generated by climate friendly waste heat.

#### 6. The working

- Fortum will capture the excess heat generated by the new datacentre region and transfer the clean heat from the server cooling process to homes, services and business premises that are connected to the district heating system.
- District heating is a system of generating heat in a centralised location by capturing heat and then distributing it to buildings for residential and commercial heating needs.
- The heat is transferred to customers as hot water which is pumped through insulated underground pipes.
- The new generation of district heating is based on replacing fossil fuels with flexible solutions like renewable electricity, heat pumps and waste heat utilisation.
- · Artificial intelligence will help optimise operations of the entire system.

#### 7. Countries recycling heat from datacentres

- District heating is popular in the Nordic and Baltic countries, as well as in Russia and China, which have high heat demands during winters.
- Datacentres thrive in cold climates.
- Their location in cold climates helps to cut down on the need to cool server rooms.
- Cold weather is also an asset as technology companies shift to selling their heat which doesn't have a lot of demand in hot weather.

#### 8. Initiatives by other companies

Facebook is putting its waste heat to use by heating nearby 6,900 homes in Odense, Denmark.





#### 1. Why in news?

A Made in India Petascale Supercomputer "PARAM Ganga" has been installed at IIT Roorkee on 7th March, 2022 by Indian Institute of Technology (IIT) Roorkee. The establishment of 1.66 PFLOPS (Peta Floating-Point Operations Per Second) supercomputing at IIT Roorkee by the Centre for Development of Advanced Computing (CDAC) has been built under the approach of the National Supercomputing Mission (NSM).

#### 2. About Supercomputer

- · A supercomputer is a computer with a high level of performance compared to a general-purpose computer.
- Performance of a supercomputer is measured in floating-point operations per second (FLOPS) instead of million instructions per second (MIPS).
- Supercomputers contain tens of thousands of processors and can perform billions and trillions of calculations or computations per second.
- Supercomputers are used for da-V ta-intensive and computation-heavy scientific and engineering purposes such as quantum mechanics, weather forecasting, oil and gas exploration, molecular modelling, physical simulations, aerodynamics, nuclear fusion research and cryptanalysis.

#### 3. About NSM

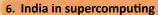
- The National Supercomputing Mission (NSM) has been steered jointly by Ministry of Electronics & Information Technology (MeiTY) and the Department of Science and Technology (DST) and implemented by Centre for Development of Advanced Computing (C-DAC) and Indian Institute of Science (IISc), Bangalore.
- The four major pillars of the NSM
- Infrastructure
- 2 Applications
- R&D
- 2 HRD
- C-DAC has been entrusted the responsibility to design, development,

#### 4. Role of C-DAC

- Under the build approach, C-DAC is building an indigenous supercomputing ecosystem in a phased manner, which is leading to indigenously designed and manufactured supercomputers.
- It has designed and developed a compute server "Rudra" and high-speed interconnect "Trinetra" which are the major sub-assemblies required for supercomputers.

#### 5. Applications developed by NSM

- NSM Platform for Genomics and Drug Discovery.
- Urban Modelling: Science Based Decision Support Framework to Address Urban Environment Issues (Meteorology, Hydrology, Air Quality).
- Flood Early Warning and Prediction System for River Basins of India.
- HPC Software Suite for Seismic Imaging to aid Oil and Gas Exploration.
- MPPLAB: Telecom Network Optimization.



- India is fast emerging as a leader in high power computing with the National Supercomputing Mission (NSM) boosting it to meet the increasing computational demands of academia, researchers. MSMEs, and start-ups in areas like oil exploration, flood prediction as well as genomics and drug discovery.
- The supercomputer infrastructure installed at various Institutes across the country has helped the R&D community to achieve major milestones, objectives and products for scientific and societal applications.



## Param Ganga at IIT Roorkee

deployment and commissioning of the supercomputing systems under the build approach of Mission.

- The Mission plans to build and deploy 24 facilities with cumulative compute power of more than 64 Petaflops.
- Till now C-DAC has deployed 11 systems at IISc, IITs, IISER Pune, JNCASR, NABI-Mohali and C-DAC under NSM Phase-1 and Phase-2 with a cumulative compute power of more than 20 Petaflops.
- Total 36,00,000 computational jobs have been successfully completed by around 3600 researchers across the nation on the NSM systems to date.

#### 7. Conclusion

Supercomputing enables problem solving and data analysis that would be simply impossible, too time-consuming or costly with standard computers, e.g., fluid dynamics calculations. Today, big data presents a compelling use case. A supercomputer can discover insights in vast troves of otherwise impenetrable information.

• The supercomputer infrastructure installed at various Institutes across the country have helped the R&D community to achieve major milestones, objectives and products for scientific and societal applications.





#### 1. Why In news

Sri Lanka's dire economic conditions, sparked by the covid-19 pandemic, are pushing its citizens off the cliff, forcing them to flee to Indian shores clandestinely to escape food shortages. On March 22, up to 16 Sri Lankan nationals, including eight children, reached the southern Indian state of Tamil Nadu. The authorities were forced to cancel school examinations for millions of students, due to a shortage of paper.

#### 2. State of the Sri Lankan economy

- In 2020, the pandemic skewered tourism, one of Sri Lanka's main foreign exchange-earners. This led to a dollar crisis in the Emerald Island.
- The government's abrupt switch to organic farming, further aggravated the problem.
- Sri Lanka is heavily dependent on imports of essential items such as petroleum, food, paper, sugar, lentils, medicines, and transportation equipment
- With the Central Bank of Sri Lanka's foreign exchange reserves dwindling to around \$2.3 billion creating a great mismatch to pay for imports and external debt servicing.
- Sri Lanka's dollar-denominated debt repayments due this year amount to more than \$6 billion, including a sovereign bond of \$1 billion maturing in July.
- The government has had to cancel school examinations due to an acute shortage of printing paper.
- Its only fuel refinery ran out of crude oil in November 2021.
- Consumer prices have risen by 15% in February, the fastest among 13 Asian economies.

#### 3. Tough balancing act

- Sri Lanka's public debt is projected to have risen from 94% in 2019 to 119% of GDP in 2021.
- Analysts said the country needs to either restructure the debt or go to

#### 4. Averting a deeper crisis

- · In February, the central bank said about honoring all forthcoming debt obligations & denied reports of country being on the brink of a sovereign default.
- The country may prioritize stabilizing domestic conditions in the very near term and avert a deeper economic crisis.
- For Sri Lankans, the country's ongoing debt crisis has become a cause of growing anxiety and frustration. People are worried and there is a lot of anger directed at the government.

# 5. The resistance

- Both citizens and different segments of the political opposition are taking to the streets, demanding that President Rajapaksa go home.
- Many media houses are criticising the government, while social media pages are rife with memes and sharp commentary on the Rajapaksas.

## 6. Steps by Sri Lanka

- Sri Lanka is turning to China and India for help.
- China is reportedly considering a \$2.5 billion loan request from Sri Lanka.
- · Within this, the loan will constitute \$1 billion and a credit line will constitute \$1.5 billion.
- This is in addition to the \$2.8-billion assistance that China has extended to Sri Lanka since the outbreak of the pandemic.
- India has also stepped in to aid its neighbour.
- The State Bank of India and the Government of Sri Lanka came to an agreement during Finance Minister Basil Rajapaksa's visite to New Delhi.
- India agreed to extend a \$1 billion credit facility to the government of Sri Lanka, which will ensure that it can procure food, medicines and other essential commodities for the people.
- Sri Lanka is finally seeking aid from the IMF. Basil Rajapaksa will visit Washington next month to discuss bringing about a resolution to the crisis.
- President Gotabaya Rajapaksa stated that he had given a green light for an IMF programme to aid Colombo.



## Sri Lankan **Economic Crisis**

the International Monetary Fund for a relief package.

- The government's messages about pursuing the IMF option had been mixed. Finance Minister said that all options were being explored, including an IMF relief.
- · But central bank Governor said that Sri Lanka did not need IMF help as it had an alternative strategy.

## MCQs Based on Environment and Ecology

- Q1. Atmospheric ozone layer which protect us from UV-B & C is getting depleted most by addition of-
  - (a) Chlorofluorocarbon
  - (b) Carbon monoxide
  - (c) Carbon dioxide
  - (d) Sulpur dioxide
- Q2. In which of the following biome the maximum plant diversity is found?
  - (a) Tropical evergreen forests
  - (b) Tropical moist deciduous forests
  - (c) Tropical dry deciduous forests
  - (d) Temperate moist forests
- Q3. Which among the following is a water borne disease?
  - (a) Smallpox
  - (b) Meningitis
  - (c) Malaria
  - (d) Cholera
- Q4. The term 'dead' with respect to a water body refers
  - (a) The inability of a water body to sustain aquatic
  - (b) The ability of a water body to sustain a quatic life
  - The inability of a water body to flow
  - (d) The heating or cooling of a water body
- Q5. Which one of the following is not normally a pollut--ant?
  - (a) Carbon monoxide
  - (b) Carbon dioxide
  - (c) Hydrocarbons
  - (d) Sulphur dioxide
- Q6. Ultraviolet radiation from sunlight causes the reac--tion that produces
  - (a) Fluorides
  - (b) Ozone
  - (c) Carbon monoxide
  - (d) Sulphur dioxide
- O7. DDT is a
  - (a) Green house gas
  - (b) Persistent Organic Pollutant
  - Degradable pollutant
  - (d) None of these

- Q8. Decomposition of domestic wastes under natural processes is called
  - (a) Industrial pollution
  - (b) Thermal pollution
  - (c) Biodegradable pollution
  - (d) Nonbiodegradable pollution
- Q9. Eutrophication is often seen in
  - (a) Mountains
  - (b) Deserts
  - (c) Fresh water lakes
  - (d) Ocean
- Q10. Fish die in water polluted by sewage due to
  - (a) Pathogens
  - (b) Reduction in O2
  - (c) Clogging of gills by silt
  - (d) Foul smell
- Q11. Fluoride pollution mainly affects
  - (a) Brain
  - (b) Teeth
  - (c) Heart
  - (d) Kidney
- Q12. Gas leaked during Bhopal tragedy was
  - (a) Ethyl isothiocyanate
  - (b) Sodium isothiocyanate
  - (c) Potassium isothiocyanate
  - (d) Methyl isocyanate
- Q13. The best way to dispose plant waste is-
  - (a) Burning
  - (b) Composting
  - (c) Dumping in a water body
  - (d) Incineration
- Q14. Which of the following is a major pollutant causing acid rain?
  - (a) Carbon dioxide
  - (b) Sulphur dioxide
  - (c) Hydrogen peroxide
  - (d) Carbon monoxide
- Q15. Increase in the concentration of pollutants in high--er trophic levels is known as
  - (a) Biomagnification
  - Biodegradation (b)

- Eutrophication (c)
- (d) Recycling
- Q16. The best household method to obtain potable water is-
  - (a) Filtration
  - Boiling (b)
  - Chemical treatment (c)
  - (d) Decantation
- Q17. Consider the following statements regarding Wild Life (Protection) Act 1972?
  - 1. The Government of India enacted Wild Life (Protection) Act 1972 with the objective of effectively protecting the wild life of this country and to control poaching, smuggling and illegal trade in wildlife and its derivatives.
  - 2. The Act was amended in January 2003 and pun--ishment and penalty for offences under the Act have been made more stringent.
  - 3. The Ministry OF Environment and Forest has proposed further amendments (The Wild Life (Pro--tection) Amendment Bill, 2010) in the law by intro--ducing more rigid measures to strengthen the Act.
  - 4. The objective of 'The Wild Life (Protection) Amendment Bill, 2010' is to provide protection to the listed endangered flora and fauna and ecologi--cally important protected areas.

Which of the statements given above is / are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 3 and 4 only
- 1, 2, 3 and 4 (d)
- Q18. An endemic species is
  - a species found uniquely in one place. (a)
  - (b) a species carrying an epidemic disease.
  - a species at an early phase of its evolution. (c)
  - a taxonomist's mistake.
- Q19. Contamination of water with sewage is indicated by cysts of
  - (a) Escherichia
  - Escherichia coli (b)
  - Pseudomonas (c)
  - Leishmania
- Q20. Consider the following statements regarding National Environment Tribunal

- 1. In 1999 the Central Government established the National Environment Tribunal [through the National Environment Tribunal Act 1999].
- 2. National Environment Tribunal was established to provide for strict liability for damage arising out of accidents caused from the handling of hazardous substances.

Which of the statements given above is / are correct?

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

#### **Answers**

- 1. (a)
- 2. (a)
- 3. (d)
- 4. (a)
- 5. (b)
- 6. (b)
- 7. (b)
- 8.
- (c)
- 9. (c) 10.
- (b) 11.
- (b)
- 12. (d)
- 13. (b)
- 14. (b)
- 15. (b)
- 16. (b) 17.
- (d)
- 18. (a)
- 19. (b)
- 20. (b)

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## **MCQs Based on Current Affairs**

Q1. With reference to National Waterways (NW), consider the following pairs:

#### **National Waterways**

#### **River System**

1. NW - 1: Ganga-Bhagirathi-Hooghly

2. NW - 2: Brahmaputra

3. NW - 3: Krishna and Godavari

4. NW-4: West Coast Canal, Champakara Canal, and Udyogamandal Canal

Which of the pairs given above is/are correctly matched?

a) 1 and 2 only

b) 1,2 and 4 only

c) 1, 2, 3 and 4

d) 1, 3 and 4

#### Answer- a

- Q2. Which operation was launched to bring back Indian nationals from Ukraine?
  - a) Operation safe homecoming
  - b) Operation Ganga
  - c) Operation Sankat Mochan
  - d) Operation Rahat

#### Answer- b

- Q3. What is the rank of India in the International Intellectual Property Index?
  - a) 42th
  - b) 40th
  - c) 43rd
  - d) 44th

#### Answer - c

- Q4. Who won India's first gold medal in the recently held International Shooting World Cup?
  - a) Saurabh Chaudhary
  - b) Jitu Rai
  - c) Gagan Narang
  - d) Vijay Kumar

#### Answer - a

- Q.5 With reference to the International Fund for Agricultural Development, IFAD, consider the following statements:
  - 1. IFAD is an international financial institution and is not affiliated with the United Nations.
  - 2. It was created in 1977, which is the result of the

1974 World Food Conference.

3. Due to its dispute with the WTO, India has relinguished its membership in the IFAD.

Select the false statements:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) All are correct.

#### Answer- c

- Q6. With reference to Hungary for Cargo initiative, consider the following statements:
  - 1. It is a joint initiative of the World Bank and Indian Railways under which the World Bank will provide funds to Indian Railways with 50:50
  - 2. It aims to identify new cargo opportunities in existing and new sectors, by bringing in new

Select the correct answer using the codes given below.

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) neither 1 nor 2

#### Answer- b

- Q7. Acharya J.B Consider the following statements about Kripalani:
  - 1. During the year 1934-46, Acharya Kripalani was the General Secretary of Congress.
  - 2. His autobiography was published under the title 'My Times'.

Select the correct answer using the codes given below.

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) neither 1 nor 2

#### Answer- c

- Q8. Which state has recently launched the Dishank application with the aim of digitizing land records?
  - a) Karnataka
  - b) Assam
  - c) Tamil Nadu

d) Uttar Pradesh

#### Answer- a

- Q9. The recent development of touchless touch sensor technology by Indian scientists can be effective in preventing which disease?
  - a) Alzheimer's
  - b) Monkey fever
  - c) Coronavirus
  - d) None of these

#### Answer- c

- Q10. Consider the following statements about Farming-as-a-Service:
  - 1. FaaS promises to increase sustainable food production to solve the problems of global food shortage.
  - 2. The FaaS model brings together all the parties, i.e., farmers, farm equipment manufacturers, co-operatives and the government.

Which of the above statement(s) is/are correct?

- a) Only 1
- b) 2 only
- c) Both 1 and 2
- d) None of these

#### Answer- c

- Q11. Who launched the next-generation weather satellite named GOES-T?
  - a) NASA
  - b) ISRO
  - c) Space-X
  - d) Roscosmos

#### Answer- a

- Q12. Where has the Satish Dhawan Center for Space Sciences been inaugurated recently?
  - a) Telangana
  - b) Bhubaneswar
  - c) Jammu and Kashmir
  - d) None of these

#### Answer- c

- Q13. The "National Initiative for Developing and Harnessing Innovation (Nidhi)" initiative aims at:
  - a) Promoting self-reliance in defence technology as a part of the 'Atmanirbhar Bharat Initiative'.
  - b) To nurture ideas and innovations (knowledge-based and technology-driven) in successful

startups.

- c) To encourage foreign cooperation for the devel--opment of new space technologies in joint ventures.
- d) To empower higher educational institutions to promote science and technology in the curriculum.

#### Answer - b

- Q14. The 'Malegam Committee' sometimes mentioned in the news recently is related to
  - a) Digital Lending
  - b) Micro Finance
  - c) Cyber security
  - d) Fiscal deficit

#### Answer- b

- Q15. Which one of the following publishes the 'Global Economic Prospects' report periodically?
  - a) The Asian Development Bank
  - b) The Food and Agriculture Organization
  - c) The World Economic Forum
  - d) The World Bank

#### Answer- c

- Q16. Where was India's first mobile ambulance for street animals launched?
  - a) Chennai
  - b) Lucknow
  - c) Delhi
  - d) Hyderabad

#### Answer- a

- Q17. National Land Monetization Corporation (NLMC) comes under which Ministry?
  - a) Ministry of Finance
  - b) Ministry of Labour
  - c) Ministry of Commerce & Industry
  - d) Ministry of Corporate Affairs

#### Answer-a

- Q18. Which country is the highest producer of crude oil?
  - a) Saudi Arabia
  - b) Russia
  - c) China
  - d) USA

#### Answer-d





## Case Study

You are district magistrate of Agra. You have received several complaints against different petrol pumps in last few weeks. During enquiry you found that petrol pump owners installed an integrated chip in the measuring machine. This chip ensure that 5% less oil is filled each time, while the meter show full amount.

You immediately formed a team honest of officers to conduct surprise raids, arrest guilty persons and cease such machines. Public also appreciated such move, but ones they faced long queues they lost there enthusiasm.

Very soon pertrol pumps formed a joint front to resist there raids. They issued threat to conduct complete strike. It created panic among public. Politicians are also exerting pressure on you, in favour of petrol-pump owners. Some of the options to handle this situation could be as follows.

- (a) Stop conducting raids on petrol pumps.
- (b) Seek cooperations from oil companies.
- (c) Brief your higher-ups, seak directions from them and act accordingly.
- Evaluate all of these options and suggest best course of action, giving your reasons for it.

involved in this racket. It can leak strategic informations.

(c) Merits: Briefing higher ups is a good step. In case of need, they can provide necessary help. Other persons will not be able to confuse them.

Demerits: I know my work, so there is no need of seeking directions. If higher officer will issue some directions on their own. I will act on its merits.

#### Course of action:

I will immediately impose Essential Services Mainternance Act and warn petrol pump owners against any strike. Next I will call a meeting with pertol-pump owners, apprise them about laws and ask them to cooperate during raids. After that I will call management of oil companies and convince them to immediately replace ceased machines so that public not face any problem. After that I will meet higher-officers and apprise them about situation.

After that I will personally monitor these raids and motivate public to cooperate. I will ensure 24 hour working of public pertol pumps. With in one week we will complete inspection of all pertol pumps, lodge case against guilty employees / owners of pertolpamps, and restore normalcy.

#### Solution

In the given case study, I am District Magistrate of Agra, where I have to check malpractices committed by pertrol pump owners. Values like honesty, integrity, responsibility, dedication for public service and justice are involved in the case.

#### Options:

(a) Merits: It will solve the immediate tension. Public will get relief from long queues. Petrol pump owners can oblige me.

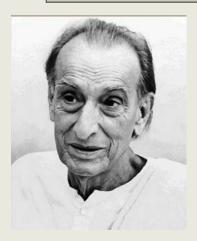
Demerits: It will incourage petrol pump owners to indulge in more frauds. Media will criticise me. Judiciary can also summen me.

**(b) Merits :**It can help me. Oil companies can provide technical assistance. It will put pressure on pertrol pumps to cooperate.

**Demerits :**Some employees of oil companies can be

#### NOTES

## **Eminent Personality - Acharya J. B. kripalani**



Many great freedom fighters made an important contribution to the freedom struggle of India. Some of them adopted the path of non-violence of Gandhiji and some followed the path of revolutionaries like Bhagat Singh and Chandrashekhar Azad. Among the freedom fighters who adopted Gandhiji's non-violent path, Acharya J.B. Kripalani's name is prominent. However, on some issues, he also had a different opinion from Gandhiji.

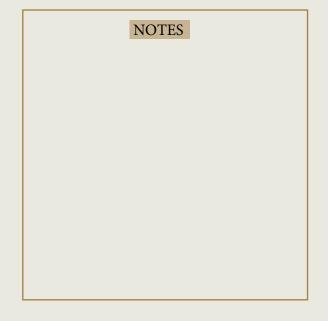
Acharya J.B. Kripalani was a freedom fighter, Indian politician and educationist. His full name was Jeevatram Bhagwandas Kripalani. He was born on 11<sup>th</sup> November 1888 in Hyderabad (present-day Pakistan) of Sindh. After completing his studies he was appointed as Professor in Muzaffarpur. From 1912 to 1927, he taught in many educational institutions before joining the freedom movement. During this time he also taught at Banaras Hindu University and Gujarat Vidyapeeth.

During his teaching work, he met Mahatma Gandhi and being a teacher, he received the title 'Acharya'. Influenced by Gandhiji, gradually he started leaning towards the freedom struggle. He had been a part of the Non-Cooperation Movement, the Civil Disobedience Movement and the Quit India Movement. He worked as an associate of Gandhiji in the Champaran Satyagraha. Acharya J.B. Kriplani met Sucheta Kripalani and in 1936 they got married. Sucheta later became the first woman Chief Minister of India.

During the year 1934-46, Acharya Kripalani was the General Secretary of the Congress. In 1946-47, he became the 57th President of the Congress but resigned in November 1947 due to differences in policy views. In the year 1950, he once again contested the election of Congress President but lost. In 1950 itself, Acharya J.B. started editing the magazine 'Vigil'. He also contributed to the Interim Government of India (1946–1947) and the Constituent Assembly of India.

After independence, he left the Congress and founded a Kisan Mazdoor Praja Party, but after joining the Samajwadi Party, he formed a new party named 'Praja Samajwadi Party'. He was a member of the Lok Sabha four times from this party and after the Indo-China war, he moved a no-confidence motion against the government in 1963 for the first time. When he lost in the 1971 Lok Sabha elections, he left politics and worked towards spirituality and environmental protection. Kripalani was involved in environmental protection and rescue activities in the 1970s along with Vinoba Bhave.

He strongly criticized the emergency declared by Indira Gandhi, due to which he was arrested. Acharya Kripalani passed away on 19 March 1982 at Sabarmati Ashram. After his death in 2004, his autobiography 'My Times' was published.



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## **Key Terminology of Medieval History**

Ansar: - It literally means helper

Akhur Bek: The caretaker of horses

Altamaga-i-Sultani :- The royal title or insignia

Alp Khan: A book or title which means first or senior Khan

Amir: The third-largest state office of the Delhi Sultanate

Amir-e-Dad:- Officer in charge of the Department of Justice and Public Prosecutor.

Amir-e-Akhur:- Commander of the cavalry and the officer in charge of the royal stables

Amir-i-Hajib: The officer in charge of the royal court, also known as barbek among the Turks

Amir-e-Kohi :- Officer in charge of Agriculture Department

Amir-e-Tarab :- The royal official of the royal entertainment system

Amir-e-Muminin/Momin :- Commander or Caliph of the Muslims

Asalib :- One who implements the law

Ariz :- The officer in charge of the attendance of soldiers, their military equipment and horse equipment.

Amil :- Revenue Officer

Ariz-e-Mamalik :- In charge of the whole country's army or military ministry

Itisab :- Account of calculation, computation and accounting

Ilm-e-Muhasib Wa Hindu :- Knowledge of Accounts and Numbers

Iqta-e-Istigl: - Appointed to the post of governor for a short period or appointed to the post of governor at the will of the head of state. This address was generally used for provincial-sized iqta holders.

Iqta-e-Tamlik :- Hereditary Iqta

iradas:- a type of small ballist or stone-pelter

Ishraf :- Elite Society

Ulema:- Knower of Islamic Law

Ulul Amr: - The person who conducts

Umrah: Plural of Amir

Ummal:- Revenue or Finance Officer

Usr :- One-tenth of the produce which was collected

as rent.

Usar :- barren land

Sometimes God :- Village head

Kaham :- Kahar, the picker of the palanguin or the

people of his descendants

Kadarin: - The employee or officer in charge of a par-

ticular work

Karkhana:- Karkhana, royal factories which were divided into two categories-ratbi i.e. factories taking care of cattle and non-ratbi i.e. factories producing

various items of state need.

Karkun: - Worker or officer.

Kar-i-Daulat- Affairs of the Sultanate

Karoh:- Measurement of land of two miles distance

Kotla:- Residential Fort.

Kotwal:- The officer in charge of a city or a fort.

Kotwali:- Kotwal office





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	English	✓	*
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Brain boosters for important issues	Hindi	$\checkmark$	×
	English	✓	×
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DhyeyalAS, one and half decade old institution, was founded by Mr.Vinay Singh and Mr. Q. H. Khan. Ever since its emergence it has unparallel track record of success. Today, it stands tall among the reputed institutes providing coaching for Civil Services Examination (CSE). The institute has been very successful in making potential aspirants realize their dreams which is evident from the success stories of the previous years.

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Quite a large number of students desirous of building a career for themselves are absolutely less equipped for the fairly tough competitive tests they have to appear in. Several others, who have a brilliant academic career, do not know that competitive exams are vastly different from academic examination and call for a systematic and scientifically planned guidance by a team of experts. Here one single move may invariably put one ahead of many others who lag behind. Dhyeya IAS is manned with qualified & experienced faculties besides especially designed study material that helps the students in achieving the desired goal.

Civil Services Exam requires knowledge base of specified subjects. These subjects though taught in schools and colleges are not necessarily oriented towards the exam approach. Classes at Dhyeya IAS are different from classes conducted in schools and colleges with respect to their orientation. Classes are targeted towards the particular exam. Classroom guidance at Dhyeya IAS is about improving the individuals' capacity to focus, learn and innovate as we are comfortably aware of the fact that you can't teach a person anything, you can only help him find it within himself.

We feel that despite brilliance and diligence, most of the students are lacking proper guidance and aptitude needed to clear Civil Services Examination. This is why, we at Dhyeya IAS amalgamated the traditional as well as modern approach of teaching by incorporating best educators of the industry ably supported by Academic Associates, Class Notes and printed Study Material, routine as well as surprise Tests. Due to its arduous efforts, Dhyeya IAS is able to carve a niche among all the civil services coaching institutes in India. Access to an institution is as important as the quality of Institution. Our faith in this philosophy made us grow. With 12 Face to Face Centers located in different parts in India, Distance Learning Program, Live Streaming Centers and Residential Academy, we have made truly pan India presence. Ever since the foundation the institute has produced a heavy pool of bureaucrats both at central and state level. Dhyeya IAS not only aims at imparting the content of civil services in best way but also nurturing the aspirants as leaders of tomorrow who have a responsibility of fulfilling the dreams of around 1.4 billion Indians. Dhyeya IAS has guided over 50,000 aspirants with more than 4000 selections in civil services. Our journey is a small contribution for the development of the society and nation by nurturing the potential civil services aspirants.

Considering the toughness of Civil Services Exam, where success rate is a meager 0.1 percent, Dhyeya IAS has continuously produced phenomenal results over the years. Year after Year Dhyeya IAS is being recognized for imparting guidance to civil services aspirants using benchmarked quality practices. On the basis of scalability, innovation, achievements, impact potential our efforts and contribution have been acknowledged and rewarded with Education Excellence Awards by ET NOW, Brands Academy, Times of India, etc. This has enhanced motivation, pride and self-esteem of entire Dhyeya family.

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