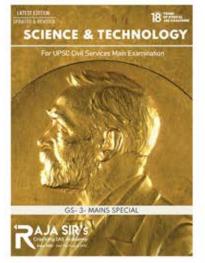
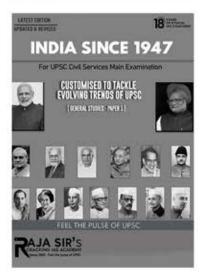
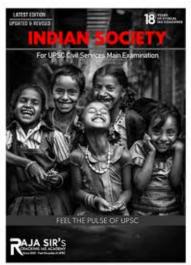
### SEPTEMBER 2023 September 2023 Since 2005 - Feel The Pulse of UPSC SINCE 2005 - Feel The Pulse of UPSC SEPTEMBER 2023 SEPTEMBER 2023









Though the Human Rights Commissions have contributed immensely to the protection of human rights in India, yet they have failed to assert themselves against the mighty and powerful...... The National Human Rights Commission (NHRC) of India was established on 12th October, 1993 under the Protection of

### Analyse the distinguishing features of the notion of Right to Equality in the Constitutions of the USA and India.

Human Rights Act (PHRA), 1993.....

Both the United States and India are the largest democratic countries in the world, based on federalism, in their political structure. Democracy can only thrive and flourish where the individuals in society .......

Explain the constitutional provisions under which Legislative Councils are established. Review the working and current status of Legislative Councils with suitable ......

India follows a bicameral system at both the Centre and State level. Under this system, the State's legislature is divided into two parts - Legislative Assembly......

CrackingIAS.com CrackingIASbooks.com







#### CONTENTS

- 1. <u>Can the vicious cycle of gender inequality, poverty and malnutrition be broken through</u> <u>microfinancing of women SHGs? Explain with examples.</u>
- 2. <u>"If the last few decades were of Asia's growth story, the next few are expected to be of Africa's."</u> In the light of this statement, examine India's influence in Africa in recent years.
- 3. <u>"The USA is facing an existential threat in the form of China, that is much more challenging than the erstwhile Soviet Union." Explain.</u>
- 4. <u>The jurisdiction of the Central Bureau of Investigation (CBI) regarding lodging an FIR and</u> <u>conducting probe within a particular State is being questioned by various States. However, the</u> <u>power of the States to withhold consent to the CBI is not absolute. Explain with special reference</u> <u>to the federal character of India.</u>
- Though the Human Rights Commissions have contributed immensely to the protection of human rights in India, yet they have failed to assert themselves against the mighty and powerful. Analysing their structural and practical limitations, suggest remedial measures. UPSC IAS Mains 2021 General Studies (Paper – 2)
- 6. <u>Analyse the distinguishing features of the notion of Right to Equality in the Constitutions of the</u> <u>USA and India. UPSC IAS Mains 2021 General Studies (Paper – 2)</u>
- Explain the constitutional provisions under which Legislative Councils are established. Review the working and current status of Legislative Councils with suitable illustrations. UPSC IAS Mains 2021 General Studies (Paper – 2)
- Do Department-related Parliamentary Standing Committees keep the administration on its toes and inspire reverence for parliamentary control? Evaluate the working of such committees with suitable examples.UPSC IAS Mains 2021 General Studies (Paper – 2)
- Has digital illiteracy, particularly in rural areas, coupled with lack of Information and Communication Technology (ICT) accessibility hindered socio-economic development? Examine with justification. UPSC IAS Mains 2021 General Studies (Paper – 2)
- 10. <u>"Though women in post-Independent India have excelled in various fields, the social attitude towards women and feminist movement has been patriarchal." Apart from women education and women empowerment schemes, what interventions can help change this milieu?. UPSC IAS Mains 2021 General Studies (Paper 2)</u>
- <u>Can Civil Society and Non-Governmental Organisations present an alternative model of public</u> service delivery to benefit the common citizen? Discuss the challenges of this alternative model. <u>UPSC IAS Mains 2021 General Studies (Paper – 2)</u>
- 12. <u>Critically examine the aims and objectives of SCO. What importance does it hold for India?</u>. <u>UPSC IAS Mains 2021 General Studies (Paper – 2)</u>
- <u>The new tri-nation partnership AUKUS is aimed at countering China's ambitions in the Indo-Pacific region. Is it going to supersede the existing partnerships in the region? Discuss the strength and impact of AUKUS in the present scenario. UPSC IAS Mains 2021 General Studies (Paper 2)</u>
- 14. Explain the difference between computing methodology of India's Gross Domestic Product (GDP) before the year 2015 and after the year 2015. UPSC IAS Mains 2021 General Studies (Paper – 3)
- 15. <u>Distinguish between Capital Budget and Revenue Budget. Explain the components of both these</u> <u>Budgets. UPSC IAS Mains 2021 General Studies (Paper – 3)</u>





- 16. <u>How and to what extent would micro-irrigation help in solving India's water crisis?</u>. UPSC IAS Mains 2021 General Studies (Paper 3)
- 17. <u>How did land reforms in some parts of the country help to improve the socio-economic conditions</u> of marginal and small farmers?. UPSC IAS Mains 2021 General Studies (Paper – 3)
- 18. <u>How is S-400 air defence system technically superior to any other system presently available in</u> the world?. UPSC IAS Mains 2021 General Studies (Paper – 3)
- Explain the purpose of the Green Grid Initiative launched at World Leaders Summit of the COP26 UN Climate Change Conference in Glasgow in November, 2021. When was this idea first floated in the International Solar Alliance (ISA)?. UPSC IAS Mains 2021 General Studies (Paper – 3)
- Discuss about the vulnerability of India to earthquake related hazards. Give examples including the salient features of major disasters caused by earthquakes in different parts of India during the last three decades. UPSC IAS Mains 2021 General Studies (Paper – 3)
- 21. <u>Discuss how emerging technologies and globalisation contribute to money laundering. Elaborate</u> <u>measures to tackle the problem of money laundering both at national and international</u> <u>levels.UPSC IAS Mains 2021 General Studies (Paper – 3)</u>
- 22. <u>Keeping in view of India's internal security, analyse the impact of cross-border cyber-attacks.</u> <u>Also, discuss defensive measures against these sophisticated attacks. UPSC IAS Mains 2021</u> <u>General Studies (Paper – 3)</u>
- 23. <u>Do you agree that the Indian economy has recently experienced V-shaped recovery? Give</u> reasons in support of your answer. UPSC IAS Mains 2021 General Studies (Paper – 3)
- 24. <u>"Investment in infrastructure is essential for more rapid and inclusive economic growth." Discuss</u> in the light of India's experience. UPSC IAS Mains 2021 General Studies (Paper – 3)
- 25. What are the salient features of the National Food Security Act, 2013? How has the Food Security Bill helped in eliminating hunger and malnutrition in India?. UPSC IAS Mains 2021 General Studies (Paper – 3)
- 26. <u>What are the present challenges before crop diversification? How do emerging technologies</u> provide an opportunity for crop diversification?. UPSC IAS Mains 2021 General Studies (Paper – <u>3)</u>
- 27. What are the research and developmental achievements in applied biotechnology? How will these achievements help to uplift the poorer sections of the society?. UPSC IAS Mains 2021 General Studies (Paper 3)
- 28. Surge in Bail Appeals in Indian High Courts
- <u>The Nobel Prize in Physics of 2014 was jointly awarded to Akasaki, Amano and Nakamura for the invention of Blue LEDs in 1990s. How has this invention impacted the everyday life of human beings?</u>. UPSC IAS Mains 2021 General Studies (Paper 3)
- 30. Describe the major outcomes of the 26th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC). What are the commitments made by India in this conference?. UPSC IAS Mains 2021 General Studies (Paper <u>-3)</u>
- Describe the various causes and the effects of landslides. Mention the important components of the National Landslide Risk Management Strategy. UPSC IAS Mains 2021 General Studies (Paper – 3)
- Analyse the multidimensional challenges posed by external state and non-state actors, to the internal security of India. Also discuss measures required to be taken to combat these threats., UPSC IAS Mains 2021 General Studies (Paper – 3)

2





- 33. <u>Analyse the complexity and intensity of terrorism, its causes, linkages and obnoxious nexus. Also suggest measures required to be taken to eradicate the menace of terrorism. UPSC IAS Mains 2021 General Studies (Paper 3)</u>
- 34. <u>Identify five ethical traits on which one can plot the performance of a civil servant. Justify their</u> inclusion in the matrix. UPSC IAS Mains 2021 General Studies (Paper -4)
- 35. <u>Impact of digital technology as a reliable source of input for rational decision making is a debatable issue. Critically evaluate with suitable example. UPSC IAS Mains 2021 General Studies (Paper 4)</u>
- 36. What does each of the following quotations mean to you? (a): "Every work has got to pass through hundreds of difficulties before succeeding. Those that persevere will see the light, sooner or later."- Swami Vivekanand. UPSC IAS Mains 2021 General Studies (Paper – 4)
- 37. <u>Attitude is an important component that goes as input in the development of human being. How to build a suitable attitude needed for a public servant?</u>. UPSC IAS Mains 2021 General Studies (Paper 4)
- 38. <u>"Refugees should not be turned back to the country where they would face persecution or human right violation"</u>. Examine the statement with reference to ethical dimension being violated by the nation claiming to be democratic with open society. UPSC IAS Mains 2021 General Studies (Paper 4)
- An independent and empowered social audit mechanism is an absolute must in every sphere of public service, including judiciary, to ensure performance, accountability and ethical conduct. Elaborate. UPSC IAS Mains 2021 General Studies (Paper – 4)
- 40. <u>Sunil is a young civil servant and has a reputation for his competence, integrity, dedication and relentless pursuit of difficult and onerous jobs. Considering his profile, he was picked .....</u>
- 41. You are Vice Principal of a degree college in one of the middle-class towns. Principal has recently retired and management..
- 42. <u>An elevated corridor is being constructed to reduce traffic congestion in the capital of a particular</u> <u>State..</u>
- 43. <u>The coronavirus disease (COVID-19) pandemic has quickly spread to various countries. As on</u> <u>May 8th, 2020, in India 56342 positive cases of corona had been reported.</u>
- 44. <u>A reputed food product company based in India developed a food product for the international</u> market and started exporting the same after getting necessary approvals.
- 45. <u>Pawan is working as an officer in the State Government for the last ten years. As a part of routine transfer, he was posted to another department.</u>
- 46. <u>The rock-cut architecture represents one of the most important sources of our knowledge of early</u> Indian art and history. Discuss. (UPSC IAS Mains 2020 General Studies Paper – 1)
- 47. Pala period is the most significant phase in the history of Buddhism in India. Enumerate. (UPSC IAS Mains 2020 General Studies Paper 1)
- 48. Evaluate the policies of Lord Curzon and their long term implications on the national movement. (UPSC IAS Mains 2020 General Studies Paper – 1)
- <u>Discuss the geophysical characteristics of Circum-Pacific Zone. (UPSC IAS Mains 2020 General Studies Paper 1)</u>

<u> 3</u>





Can the vicious cycle of gender inequality, poverty and malnutrition be broken through microfinancing of women SHGs? Explain with examples. UPSC IAS Mains 2021 General Studies (Paper – 2)

Gender inequality is the outcome of unequal opportunity, education, health economic participation and empowerment, which results in pushing women into a vicious cycle of poverty and malnutrition.

Self-Help Groups (SHGs) are informal associations of people who choose to come together to find ways to improve their living conditions. Microfinance is a type of banking service provided to unemployed or low-income individuals or groups who otherwise would have no other access to financial services.

<u>Microfinancing of women SHGs can help uplift even the most vulnerable and marginalised</u> <u>section of women in the following ways:</u>

- By mobilising poor rural women and building community institutions of the poor, SHGs are aimed at reducing poverty. To this, microfinancing acts as a catalyst because it can help channel the savings and funding of the SGH members.
- Credit flow will make women work and interact with the outside world. This will help in reducing the gender inequality and promote community involvement.
- Microfinancing of women SHGs improves the decision-making ability of its members. With greater say in the matters of resource utilization, family planning etc., it results in better nutritional values among their families.
- Though microfinancing of women SHGs can help overcome challenges like malnutrition, poverty and gender equality, it is not alone enough to change the grim situation. Additionally, there needs to be a change of patriarchal mindset, spread of awareness about SHGs and penetration of rural banking facilities.

"If the last few decades were of Asia's growth story, the next few are expected to be of Africa's." In the light of this statement, examine India's influence in Africa in recent years.UPSC IAS Mains 2021 General Studies (Paper -2)

The last few decades saw extraordinary growth of Asian countries mainly driven by China, South Korea, Japan, India and others. Now the paradigm is tilting towards Africa. Since 2000, at least half of the world's fastest-growing economies have been in Africa. And by 2030, Africa will be home to 1.7 billion people, whose combined consumer and business spending will total \$6.7 trillion. A surplus of workers is something which is turning the heads of everyone towards Africa.

#### India's influence in Africa in recent years:





- Political Engagement: In the last few years, Africa has been the focus of India's development assistance and also diplomatic outreach, as evident in plans to open 18 new embassies.
- Economic Engagement: India's duty-free tariff preferential scheme for Least Developed Nation (LDCs) launched in 2008 has benefited 33 African states. India was the fourth largest importing partner and the fifth largest export destination for South Africa in 2017-18.
- Grants in Aid: After South Asia, Africa is the second-largest recipient of Indian overseas assistance with Lines of Credit (LoC) worth billions of dollars.
- <u>Capacity Building</u>: India is investing in capacity building providing more than \$1 billion in technical assistance and training to personnel under the Indian Technical and Economic Cooperation (ITEC) program.
- Security Cooperation: Approximately 6,000 Indian soldiers are deployed in UN peacekeeping missions in conflict zones in Africa.
- Cooperation on Multiple Fronts: This includes solar energy development (International Solar Alliance), information technology, cybersecurity, maritime security, disaster relief, counter-terrorism and military training.
- Medical Diplomacy: Under the e-ITEC initiative, India has shared COVID-19 management strategies, training webinars exclusively aimed at training health-care professionals from Africa by Indian health experts.

India and Africa offer a lot of opportunities for each other in coming times like addressing the food security problem, becoming the voice of the developing world, preventing global rivalries, and maintaining diplomatic ties. India-Africa (Gandhi-Mandela) friendship in a longer will benefit both mutually.

#### "The USA is facing an existential threat in the form of China, that is much more challenging than the erstwhile Soviet Union." Explain. UPSC IAS Mains 2021 General Studies (Paper – 2)

The last few decades have seen an exponential rise of China as a competitor of the US on the global stage. In the present scenario, the experts are debating on the cold war conditions prevailing between the two biggest economies of the world (US-China).

After the Second World War, the US faced a challenge from the erstwhile USSR. While today the US is facing the same threat from China, it is not same as the erstwhile USSR:

 In the last few decades China has become the manufacturing hub of the world. Its economy has grown at a rapid pace and forms a special knot in the global supply chain.

\_\_\_\_\_

5





This is opposed to the USSR, which had a crippled economy and could not compete with the US over the period.

- The Soviet Union and the United States were hardly interdependent either economically or politically. Although there are divergences and disputes, China and the United States are the two largest economies in the world and share a wide range of interests, especially in the economic sphere. To illustrate, the US and China have a trade of over 500 billion with each other.
- Today's global economy is more integrated as compared to the cold war era. Even after two countries are not on good terms with each other, they are still dependent on each other.
- In the face of internal and external problems, the Soviet Union often repelled, but China has constantly reformed. China outpaced the USSR in governance models and is now challenging the US as a global power.

Given the high degree of interdependence and the prevalence of globalisation, the so called cold war situation between the US and China may not result in a full-fledged war. Nevertheless, both the countries, in particular, and the global community, in general, must strive to keep the conflicts at minimum and avoid any situation that may precipitate into violent clashes.

The jurisdiction of the Central Bureau of Investigation (CBI) regarding lodging an FIR and conducting probe within a particular State is being questioned by various States. However, the power of the States to withhold consent to the CBI is not absolute. Explain with special reference to the federal character of India. UPSC IAS Mains 2021 General Studies (Paper – 2)

Federalism is a system of government in which the power is divided between a central authority and various constituent units of the country. The Constitution clearly provided a threefold distribution of powers between the Union Government and the State Governments.

Known as India's premier investigation agency, Central Bureau of Investigation (CBI) deals with matters of corruption and major criminal matter. It investigates cases connected to infringement of economic and fiscal laws. The CBI derives its power from the Delhi Special Police Establishment (DSPE) Act, 1946.

According to Section 6 of the DSPE Act, the State's consent is required to extend CBI investigation beyond Union Territories. There are two types of consent for a probe by the CBI:

\_\_\_\_\_

6





- **General Consent**: When a State gives a general consent to the CBI, the agency is not required to seek fresh permission every time it enters that State in connection with investigation.
- **Specific Consent**: When a general consent is withdrawn, CBI needs to seek case-wise consent for investigation from the concerned State government. If specific consent is not granted, the CBI officials will not have the power of police personnel when they enter that State.

However, the power of the States to withhold consent to the CBI is not absolute. The CBI can be ordered by the Supreme Court and the high court to investigate a crime without the consent of the State. Moreover, the withdrawal of general consent does not affect pending investigation (Kazi Lendhup Dorji case, 1994) or the cases registered in another State in relation to which investigation leads into the territory of the State which has withdrawn general consent.

In context of federal structure, Police is exclusively a State subject. However, the establishment of CBI under the DSPE Act is an exception as it encroaches upon the State jurisdiction. Federal issues are caused recurrently with the jurisdiction of CBI often coming into direct confrontation with the State police. The existence of different political parties at the State and Central level often leads to a more prominent conflict between the State and Centre over CBI.

Though the Human Rights Commissions have contributed immensely to the protection of human rights in India, yet they have failed to assert themselves against the mighty and powerful. Analysing their structural and practical limitations, suggest remedial measures. UPSC IAS Mains 2021 General Studies (Paper – 2)

The National Human Rights Commission (NHRC) of India was established on 12th October, 1993 under the Protection of Human Rights Act (PHRA), 1993. The NHRC is an embodiment of India's concern for the promotion and protection of human rights.

#### Functions of NHRC:

- Complaints and redressal mechanism.
- Awareness raising, human rights education, training and research.
- Cooperation with civil society, NGOs and human rights defenders.
- Coordination with all State Human Rights Commissions.
- Engagement at international and regional bodies and mechanisms.

#### **Contributions of NHRC:**

• The Commission took cognizance of many individual cases of displacement on account of mega projects, disasters and conflicts.

\_\_\_\_7





- In the aftermath of Godhra riots in Gujarat, the Commission filed a writ petition in the Supreme Court and ensured that guilty persons were brought to book.
- With respect to the high suicide rates by debt-ridden farmers, the Commission took suo motu cognizance of the reports about suicide by farmers.

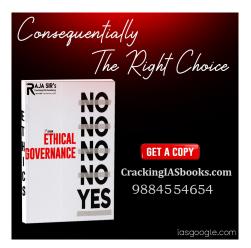
#### Limitations:

- NHRC can only make recommendations without the power to enforce decisions. It does not have any mechanism of investigation. In majority cases, it asks the concerned Central and State governments to investigate the cases of the violation of human rights.
- It has been termed as 'India's teasing illusion' by Soli Sorabjee (former Attorney-General of India) due to its incapacity to render any practical relief to the aggrieved party.
- A large number of grievances go unaddressed because NHRC cannot investigate the complaint registered after one year of incident.
- State Human Rights Commissions cannot call for information from the Central government which means that they are implicitly denied the power to investigate armed forces under the control of the Union government.

#### **Possible Remedial Measures:**

- NHRC efficacy can be enhanced by government if the decisions of the Commission are made enforceable.
- There is need to change in composition of the Commission by including members from civil society and activists.
- NHRC should have its autonomous investigating staff recruited by itself instead of the present practice of deputation.
- To improve and strengthen the human rights situation in India, state and non-state actors need to work in tandem.

Manifold challenges are presented by the situation of persistent human rights violations across the country. There is an urgent requirement to improve and strengthen the human rights situation. It is necessary to empower NHRC to make it work more efficiently and independently.







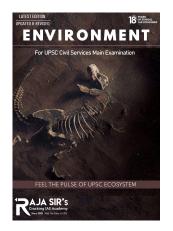
Analyse the distinguishing features of the notion of Right to Equality in the Constitutions of the USA and India. UPSC IAS Mains 2021 General Studies (Paper – 2)

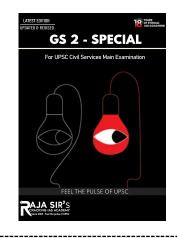
Both the United States and India are the largest democratic countries in the world, based on federalism, in their political structure. Democracy can only thrive and flourish where the individuals in society are treated equally and without discrimination. Thus, it was necessary to incorporate provisions in the Constitution to remove the hurdle of existing social and economic inequalities and enable the diverse communities to enjoy the rights and liberties guaranteed under the Constitution.

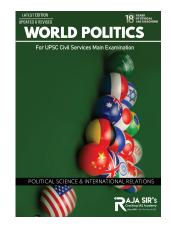
The right to equality means the absence of legal discrimination on grounds of caste, race, religion, sex, and place of birth and ensures equal rights to all citizens.

- Right to Equality in India: In India, Chapter III named as "Fundamental Rights" was added in the Constitution by the Constituent Assembly. The Constitution follows both the British model of 'Equality before Law' and American model of 'equal protection of law' (Article 14). It also provides for both civil-legal as well as socio-economic equality. It also highlights substantive equality. The Constitution also provides for affirmative action to ensure equality (Article 16). It focuses on ensuring equality of outcomes along with equality of opportunity. The right also prevents discrimination and abolishes untouchability (Article 17).
- Right to Equality in the US: The original Constitution did not prevent discrimination. The US derived Right to Equality from Declaration of Rights and the Bill of Rights. It was inserted in the Bill of Rights through fourteenth Amendment in year 1868. The US follows the concept of 'equal protection of law' which highlights the equal treatment under equal circumstances. The right majorly emphasises on civil and legal equality.

The Right to Equality is considered a basic feature of both the Constitutions and plays a key role in achieving social and economic justice in our society where upliftment of certain classes is considered necessary for our country to flourish. The emphasis is on the fundamental unity of individuals by providing equal opportunities and treatment to all.









CrackingIASbooks.com

CrackingIAS.com





Explain the constitutional provisions under which Legislative Councils are established. Review the working and current status of Legislative Councils with suitable illustrations. UPSC IAS Mains 2021 General Studies (Paper – 2)

India follows a bicameral system at both the Centre and State level. Under this system, the State's legislature is divided into two parts - Legislative Assembly or Vidhan Sabha and Legislative Council or Vidhan Parishad.

The Legislative Council is the upper house of the State. Its institution is outlined in Article 169 of the Constitution. Presently, only Andhra Pradesh, Karnataka, Telangana, Maharashtra, Bihar, and Uttar Pradesh have Legislative Councils.

Formation:

- As per Article 169, the Parliament can abolish a Legislative Council (where it already exists) or create it (where it does not exist) by a simple majority, if the Legislative Assembly of the concerned State, by a special majority, passes a resolution to that effect.
- As per Article 171 of the Indian Constitution, the total number of members in the Legislative Council of a State shall not exceed one-third of the total number of members in the Legislative Assembly.
- The members of the Council are either nominated by the Governor of the state or are indirectly elected. Of the total number of members of the Legislative Council:
- 1/3 of members are elected by electorates consisting of the members of local authorities,
- 1/12 are elected by electorates consisting of graduates residing in the state,
- 1/12 are elected by electorates consisting of persons engaged in teaching,
- 1/3 are elected by the members of Legislative Assembly and
- the remaining are nominated by the Governor.
- 1/3 of the members of Legislative Council retire every 2 years.

Functions:

- Legislative: Non-money bills can be introduced in the Legislative Council. When a nonmoney bill, passed by the Legislative Assembly, comes to the Legislative Council, the latter can pass it or can send it back with amendments to the Legislative Assembly for its reconsideration.
- Financial: The Legislative Council has only limited powers in financial matters. A money bill cannot be introduced in the Legislative Council. It can be introduced only in the Legislative Assembly.
- Control over Executive: The Legislative Council does not have much control over the executive. The Council of Ministers is responsible to the Legislative Assembly. Even if the government is defeated in the Legislative Council, it is not bound to resign.

<u>10</u>





• Miscellaneous: The Legislative Council elects its own Chairman and Deputy Chairman. The Council discusses technical matters as there are experts as its members.

The legislative power of the Councils is limited. They lack a constitutional mandate to shape non-financial legislation. Besides, the Assemblies can override suggestions/amendments made to legislation by the Council. Critics of Legislative Councils state that the Councils act as a burden on the State budget and are used to park leaders who have not been able to win an election.

Nevertheless, the Legislative Councils serve some useful purposes. They act as a check against hasty legislation passed by the Assemblies. They also accommodate election shy talent. That is, the elderly, experienced and sober individuals, who cannot-bear the ordeal of electioneering get onboarded to the Council. For example, Bihar Chief Minister is a member of the Legislative Council.

Do Department-related Parliamentary Standing Committees keep the administration on its toes and inspire reverence for parliamentary control? Evaluate the working of such committees with suitable examples.UPSC IAS Mains 2021 General Studies (Paper – 2)

Department-Related Parliamentary Standing Committees comprise 31 members (21 from Lok Sabha and 10 from Rajya Sabha) to be nominated by the Speaker, Lok Sabha and the Chairman, Rajya Sabha respectively. The term of office of these Committees is not more than one year.

The Committees have often been found keeping the administration on its toes thereby setting a benchmark of parliamentary control. This can be ascertained from the functions of such Committees, viz.:

- They examine the demands for grants of the related ministries/departments and report thereon.
- They verify bills, belonging to the related ministries/departments, referred by the Chairman or the Speaker.
- Laying importance on the long-term plans and policies guiding the working of the executive, these committees give necessary direction, guidance and inputs for broad policy formulations.





• They facilitate input from experts and those who may be directly affected by a policy or legislation.

Nevertheless, the functioning of the Committees is marred with several issues, such as:

- The meetings happen behind closed doors leading to the issue of transparency.
- The Committees' suggestions are not enforceable in nature.
- It is not necessary to route all the bills to the Committees. Thus, proper scrutiny of all the bills is not guaranteed.
- The Committees can hardly be considered a specialised body as their tenure is just of one year.

Thus, though it is comparatively less difficult to examine an issue in depth by a committee of 30 than by an assembly of 700, the issues faced by these Committees limits their scope.

# Has digital illiteracy, particularly in rural areas, coupled with lack of Information and Communication Technology (ICT) accessibility hindered socio-economic development? Examine with justification. UPSC IAS Mains 2021 General Studies (Paper – 2)

Digital literacy is the ability to navigate the digital world. It focuses on using technology – like a smartphone, PC, e-reader, etc. – to find, evaluate, and communicate information. Digital literacy can play a powerful role in helping people connect, learn, engage with their community, and create more promising futures.

It has been reported that Information and Communication Technology (ICT) in rural areas have slow uptake due to the low to no income, lack of ICT infrastructures, cultural differences, and many other reasons.

Digital illiteracy in the present time of the pandemic has hindered socio-economic development to a great extent in rural areas. It can be concluded so by:

• Children are not able to access quality education or attend virtual classrooms due to issues with internet connectivity coupled with frequent internet/electricity outages.

\_\_\_\_\_





- Lack of digital knowledge among rural youth kept them away from capitalising on myriad of employment and income generation opportunities. For example, e-commerce, IT services, etc.
- Emphasis on digitisation and computerisation, while ignoring digital literacy, led to inaccessibility of government benefits and schemes to the vulnerable sections.
- Digital illiteracy among women and girl-child in rural areas has increased the gender imbalance. Social, cultural, and institutional barriers influence digital inclusion.

The digital divide is more than just an access issue and cannot be alleviated merely by providing the necessary equipment. The Standing Committee on Information Technology in January, 2019 concluded that the digital literacy efforts of the government are far from satisfactory.

The government needs to focus on information accessibility, information utilisation and information receptiveness. Various initiatives such as Digital India, Internet Saathi Program, DIKSHA, etc. are commendable steps that are leading to positive socio-economic development in rural areas.

"Though women in post-Independent India have excelled in various fields, the social attitude towards women and feminist movement has been patriarchal." Apart from women education and women empowerment schemes, what interventions can help change this milieu?. UPSC IAS Mains 2021 General Studies (Paper – 2)

Patriarchy is a social system in which men hold primary power, moral authority, special privilege, and control over property. Despite the prevalence of patriarchy in India, the status of women in post-Independent India has continuously changed with changing socio-economic and political realities. This change has been a result of external agents and catalysts like government initiatives and women-led movements.

Women have been empowered by spread of education, communication, media, political parties, and general awakening. Women like Kalpana Chawla, Kiran Mazumdar-Shaw and Late Sushma Swaraj represent diverse fields of social work and professional life. But issues like the Sabarimala controversy, Triple Talaq, Madhya Pradesh HC judgement in POCSO Act, etc. highlight that patriarchal barriers to women empowerment remain deeply entrenched in society.

\_\_\_\_\_

<u>13</u>





Apart from special focus on women education and women empowerment schemes, collective interventions are the need of the hour to change the conception that India is a patriarchal society. This can be done through:

- Imbibing gender equality ideas needs to start within homes, in attitudes of parents, spouse and siblings.
- Women must have the freedom to take important decisions of life such as which career to pursue, when to marry, etc.
- Setting up of specially designed courts (Fast Track Courts) for trying cases of violence against women. These courts could be mandated to finalise the case within a stipulated period.
- The cause of gender equality at work will be helped by balancing maternity leaves with paternity leaves.
- Administrative reforms need to factor in gender inclusion, especially in police. It can help de-emphasise the culture of violence in public life.
- Concepts like 24×7 cities can combine urbanisation, needs of public safety, and promote greater participation of women in economy and public life.

Thus, education and empowerment schemes are necessary to support the feminist movement, but issues hindering gender equality in India require more fundamental and practical approach.

## Can Civil Society and Non-Governmental Organisations present an alternative model of public service delivery to benefit the common citizen? Discuss the challenges of this alternative model. UPSC IAS Mains 2021 General Studies (Paper – 2)

Civil society refers to the communities and groups that function outside of government to provide support and advocacy for certain people and/or issues in society. A Non-Governmental Organisation (NGO) is a non-profit group organised on community, national and international levels to serve a social or political goal such as humanitarian causes or the environment.

Role of Civil societies and NGOs as an alternative model of public service delivery:

- Civil society and NGOs can provide a ready pool of volunteers and resources that the government can tap into.
- Issues of inclusion-exclusion errors can be addressed through grass-root verification by the volunteers.

<u>14</u>



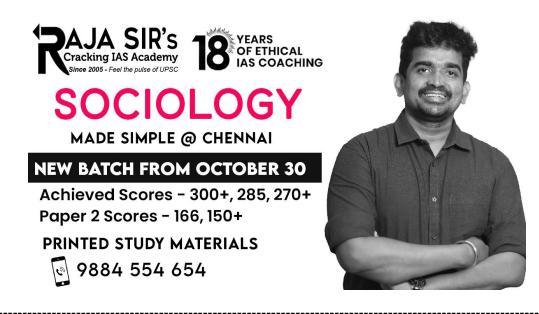


- Skill enhancement and livelihood support schemes like National Rural Livelihood Mission can be made more effective through involvement of civil society and NGOs.
- The last-mile delivery of public services can be addressed. For example, during the COVID-19 lockdown, several voluntary groups distributed food, ration, and vegetables for the homeless and the migrants.
- Civil society and NGOs can play the role of effectively communicating the needs of people to the government. For example, the PM Garib Kalyan Rojgar Abhiyan was launched in response to Mazdoor Kisan Shakti Sangathan's petitioning to distribute food grains to everyone.

Civil societies and NGOs can have a positive influence on the state and the market. But there are various challenges such as:

- Ad-hocism and lack of continuity in the delivery process.
- The issue of misappropriation of funds is highlighted every now and then. There are issues where the civil society or an NGO is accused of using foreign funds for provoking protests and stall governmental projects.
- There have also been reports of NGOs lobbying parliamentarians and using the media to manipulate issues in their favour.
- The 'big brother attitude' of the government officials and their mindset of construing NGOs simply as contractors fulfilling staffing requirements.

Civil society and NGOs can be made an integral part of the development process but, given the prevalent situation, they cannot completely substitute the administrative channels for the delivery of public service delivery. Nevertheless, the civil society/NGOs and the administrative channels need to coordinate to carry out the public service delivery efficiently and effectively.







Critically examine the aims and objectives of SCO. What importance does it hold for India?. UPSC IAS Mains 2021 General Studies (Paper – 2)

Created in 2001, the Shanghai Cooperation Organisation (SCO) is a Eurasian political, economic, and military organisation aiming to maintain peace, security, and stability in the region. India became a permanent member of the SCO in 2017.

SCO aims to strengthen relations among member states. But India-Pakistan-Russia-China relations create a complex matrix of diverging and conflicting interests. To illustrate, China has shown little respect to an international rule-based order. 'Chequebook' and 'wolf warrior' diplomacy, human rights violations, etc. raise fundamental questions on Chinese commitments to aims and objectives of SCO. Moreover, under the guise of economic co-operation, China has pushed its Belt and Road Initiative (BRI) projects through SCO.

Likewise, SCO seeks to safeguard regional peace, security, and stability. But, China (in Taiwan, Hong Kong, Ladakh), Russia (in Ukraine) and Pakistan (in Jammu & Kashmir) are accused of destabilising the regional peace, security, and stability.

Significance of SCO for India:

- SCO is part of India's stated policy of pursuing "multi-alignments" and "strategic autonomy".
- The challenges of terrorism, radicalism, and instability pose a grave threat to Indian sovereignty and integrity. SCO's counter-terrorism body, the Regional Anti-Terror Structure (RATS), may prove useful for India in this context.
- SCO allows India to deepen its strategic reach in Central Asia. India already has substantial soft power potential in Central Asia. India's membership of SCO can boost energy security by providing access to mineral and energy resources of the Central Asian countries.
- India's presence in the SCO will help in India's aim to link itself to the larger Eurasian region, and to Europe via INSTC.
- SCO membership will also help India, which is currently boxed in the South Asian region, to become a major pan-Asian player.
- SCO can play a vital role in deepening people-to-people engagement through cooperation in the field of education, medicine, tourism, etc.

\_\_\_\_\_

India's relations with countries in the region have enormous potential for enhancing ties in areas such as economy, security, policy, investment, trade, connectivity, energy, and capacity building. However, India's benefits from the SCO will be limited due to the role of China and Pakistan in the organisation. Positive outcomes will depend on how Indian diplomacy deals with its rivals.

\_\_\_\_\_

<u>16</u>





The new tri-nation partnership AUKUS is aimed at countering China's ambitions in the Indo-Pacific region. Is it going to supersede the existing partnerships in the region? Discuss the strength and impact of AUKUS in the present scenario. UPSC IAS Mains 2021 General Studies (Paper – 2)

- AUKUS is a trilateral security partnership between the United States of America, Australia and the United Kingdom in the Indo-Pacific region. Under the AUKUS alliance, the UK, the US and Australia seek to increase the development of joint capabilities and technology sharing.
- Creation of the AUKUS is an attempt to send a stronger message to China as it will give its members a credible deterrence powers towards China by deepening military capabilities. It will also enhance the patrolling and surveillance power of the members in Indo-Pacific, thus restoring the sanctity of norms and rules-based order in the region. By providing nuclear submarines to Australia, it will enhance its capabilities to project power in the Indo-Pacific.
- However, critics allege that AUKUS is also likely to supersede the existing partnership in the region. For example, the Quadrilateral Dialogue (QUAD) comprising India, Japan, Australia and the US may get lesser importance as the US might be obliged to share its strength and competence to AUKUS and QUAD both. AUKUS may also weaken the Five Eyes alliance group and the ASEAN centrality in the region.
- On the stronger side, the focus of AUKUS will be on integrating all defence and securityrelated science, supply chains, industrial bases, and technology. The partnership would also involve a new architecture of meetings and engagements between the three countries and cooperation across emerging technologies like AI, quantum technologies, and undersea capabilities.
- With respect to India, AUKUS may instigate a nuclear/conventional arms race in the Indo-Pacific region. It may lead to China and Russia supplying sensitive defence technologies to other states. With its exclusionary vision, AUKUS may also run contrary to India's vision of an inclusive Indo-Pacific. AUKUS was formulated ignoring France, which may increase trust deficit between the like-minded democratic countries on other matters of global importance.
- Thus, though AUKUS offers the advantage of balance of power, strategic autonomy, and a check on Chinese aggression, it also has significant challenges as it has been termed as Indo-Pacific NATO. India's diverse relationships with the West must be deployed in full measure to prevent a split in the Indo-Pacific coalition.





Explain the difference between computing methodology of India's Gross Domestic Product (GDP) before the year 2015 and after the year 2015. UPSC IAS Mains 2021 General Studies (Paper – 3)

GDP is a measure primarily used as a yardstick to gauge the growth of an economy. In 2015, a new series was announced to calculate India's GDP by upgrading the methodology with new data sources to meet UN standards.

Difference between old and new methodology:

Change in Base Year

- Pre-2015: 2004-05
- Post 2015: 2011-12
- Change of base year to calculate GDP is done in line with the global exercise to capture economic information accurately.

Change in data used to measure manufacturing sector growth

- Pre-2015: The performance of the manufacturing sector was previously evaluated using data from the IIP and the Annual Survey of Industries (ASI), which comprises over two lakh factories.
- Post-2015: Now, firms' annual accounts filed with the Ministry of Corporate Affairs (MCA 21) are used, which includes around five lakh companies.

GDP at factor cost replaced by GDP at market price

- Pre-2015: GDP at factor cost was calculated.
- Post-2015: Adopted the international practice of GDP at market price and for sector-wise estimate, Gross Value added (GVA) at basic price.
- The new measures include not only the cost of production but also product subsidies and taxes.

Calculation of labour income

- Pre-2015: All labour used to be equal.
- Post-2015: The new series has used a concept called "effective labor input". Different weights are assigned on whether one was an owner, a hired professional or a helper.

Change in the way value addition in agriculture was captured

- Pre-2015: It was confined to value addition in farm produce.
- Post-2015: Value addition in agriculture is now taken beyond farm produce.
- Livestock data is now critical to the new method.

Capturing income generated by Financial Sector

- Pre-2015: Financial corporations in the private sector, other than banking and insurance, was limited to a few mutual funds (primarily UTI) and estimates for the Non-Government Non-Banking Finance Companies as compiled by RBI.
- Post-2015: The coverage of financial sector has been expanded by including stock brokers, stock exchanges, asset management companies, mutual funds and pension funds, as well as the regulatory bodies, SEBI, PFRDA and IRDA.

<u>18</u>





The new method is statistically more robust since it estimates more indicators such as consumption, employment, and the performance of enterprises, and incorporates factors that are more responsive to current changes.

## Distinguish between Capital Budget and Revenue Budget. Explain the components of both these Budgets. UPSC IAS Mains 2021 General Studies (Paper – 3)

According to Article 112 of the Indian Constitution, the Union Budget of a year is referred to as the Annual Financial Statement (AFS). It is a statement of the estimated receipts and expenditure of the Government in a financial year (which begins on 01 April of the current year and ends on 31 March of the following year).

Objectives of Budget:

- Reallocation of resources
- Reducing inequalities in income and wealth
- Contributing to economic growth
- Bringing economic stability
- Managing public enterprises

| Capital Budget   | Revenue Budget   |
|--|--|
| It includes the Capital Receipts and Capital Expenditure.  | <ul> <li>It consists of the Revenue Expenditure and Revenue Receipts.</li> </ul>   |
| Capital Receipts indicate the receipts which lead to a decrease in<br>assets or an increase in liabilities of the government.<br>It consists of:<br>• the money earned by selling assets (or disinvestment) such as<br>shares of public enterprises, and<br>the money received in the form of borrowings or repayment of loans<br>by states. | Revenue Receipts are receipts which do not have a direct impact on the assets and liabilities of the government.<br>It consists of the money earned by the government through tax (such as excise duty, income tax) and non-tax sources (such as dividend income, profits, interest receipts). |
| Capital Expenditure is used to create assets or to reduce liabilities. It consists of: <ul> <li>the long-term investments by the government on creating assets such as roads and hospitals, and</li> </ul> the money given by the government in the form of loans to states or repayment of its borrowings.                                  | Revenue Expenditure is the expenditure by the government which does<br>not impact its assets or liabilities.<br>For example, this includes laries, interest payments, pension, and<br>administrative expenses.   |
| It is non-recurring in nature. It is usually a one-time expenditure for a long period of time.   | It is recurring in nature (on a yearly basis).   |

\_\_\_\_\_





How and to what extent would micro-irrigation help in solving India's water crisis?. UPSC IAS Mains 2021 General Studies (Paper – 3)

Water is a scarce natural resource but the major requirement in the agricultural sector. The efficient use of available water for irrigation is a major challenge. A nation with annual water availability of below 1,700 kilolitres per head is considered water deficient. India's per capita water availability is estimated at 1,428 kilolitres per year.

Micro-irrigation is a modern method of irrigation by which water is irrigated through drippers, sprinklers, foggers and by other emitters on the surface or subsurface of the land. Sprinkler irrigation and drip irrigation are the commonly used micro-irrigation methods.

Significance of micro-irrigation:

- Micro-irrigation ensures water use efficiency. It applies water directly to the root zone, the practice reduces loss of water through conveyance, run-off, deep percolation and evaporation.
- Water savings in comparison with flood irrigation are to the tune of 30-50%.
- Electricity consumption falls significantly, as being water efficient it requires less water to be pumped.
- The localised water application in micro-irrigation prevents fertilizers from washing away, and so reduces nutrient loss or leaching. The micro-irrigation system can also be effectively used to apply fertilizers (fertigation) in a targeted way so as to prevent weed growth.
- Micro-irrigation, by virtue of localised water application, avoids soil erosion. It does not require land leveling and can irrigate fields that are irregularly shaped, making it much less labor-intensive and less costly.

Nevertheless, micro-irrigation also has certain limitations:

- Expense especially initial cost is high mainly for marginal and small farmers.
- Maintenance cost for the tubes, sprinklers may go out of pocket for small farmers.
- The lifetime of the tubes used in drip irrigation can be shortened by the sun causing wastage.
- It needs more awareness and higher rate of adoption in water stressed areas.

The future revolution in agriculture will come from precision farming. Micro-irrigation can, indeed, be the stepping stone for achieving the goal of making farming sustainable, profitable and productive.

------

\_\_\_\_\_

20







How did land reforms in some parts of the country help to improve the socio-economic conditions of marginal and small farmers?. UPSC IAS Mains 2021 General Studies (Paper -3)

Land reform is a form of agrarian reform involving the changing of laws, regulations, or customs regarding land ownership. Under the British Raj, the farmers did not have the ownership of the lands they cultivated. In post-independent India, many initiatives were taken for bringing land reforms and improving the deplorable conditions of farmers.

- Abolition of the zamindari system: This removed the layer of intermediaries who stood between the cultivators and the state. It kept in check the debt trap and increased the share of marginal and small farmers in the production cost.
- Tenancy reforms: The rent paid by the tenants during the pre-independence period was exorbitant. Tenancy reforms introduced to regulate rent, provide security of tenure and confer ownership to tenants.
- Ceilings on landholdings: It was to deter the concentration of land in the hands of a few. It ensured redistribution of land from big landlords to landless labourers ensuring land ownership, access to credit, and food security.
- Consolidation of landholdings: It prevented the subdivision and fragmentation of land holdings. It brought down the cost of cultivation and reduced litigation among farmers and generated higher incomes.
- Cooperative farming: Under the mechanism, each member farmer remains the owner of his land but farming is done jointly. Profit is distributed among the member farmers in the ratio of land owned.

Challenges with the land reforms:

- Land reforms were lengthy and cumbersome process.
- Benami transactions became a point of concern under land ceiling act.
- Digitisation of land records with efficiency and correct information will take time.

The pace of implementation of land reform measures has been slow but the objective of social justice has been achieved to a considerable degree. New and innovative land reform measures should be adopted with new vigour to eradicate rural poverty and improve the socio-economic conditions of marginal and small farmers.







How is S-400 air defence system technically superior to any other system presently available in the world?. UPSC IAS Mains 2021 General Studies (Paper – 3)

The S-400 Triumf is a mobile, surface-to-air missile system (SAM) designed by Russia. It is the most dangerous operationally deployed modern long-range SAM (MLR SAM) in the world, considered much ahead of the US-developed Terminal High Altitude Area Defence system (THAAD). India is engaged with Russia for the purchase of five S-400 Missile Systems.

How S 400 is different from others?

- S-400 Triumf is considered one of the world's most advanced air defence systems that can simultaneously track and neutralize a range of incoming objects spanning aircraft, missiles and Unmanned Aerial Vehicles (UAV).
- Each system has four different types of missiles for up to 40 km, 120 km, 250 km and maximum range of 400 km and up to 30 km altitude. The different ranges and varying altitudes create a layered air defence net.
- Unlike S-400, the American THAAD is a one-dimensional missile system as it can fire only one type of missile upto a range of 150-200 km and Patriot has a range of 180 km.
- THAAD cannot intercept a fighter jet while S-400 can.
- The deployment time for S-400 and Patriot is 5 minutes and 25 minutes respectively.
- The maximum target speed of S-400 is 4.8km/sec as compared to 1.38km/sec of Patriot.

Even though buying S-400 from Russia attracted criticism from the US under the CAATSA agreement, the purchase of the much-awaited S-400 for India was inevitable keeping its volatile neighbors in mind.





Explain the purpose of the Green Grid Initiative launched at World Leaders Summit of the COP26 UN Climate Change Conference in Glasgow in November, 2021. When was this idea first floated in the International Solar Alliance (ISA)?. UPSC IAS Mains 2021 General Studies (Paper – 3)

The Green Grid or the One Sun One World One Grid (OSOWOG) initiative was announced at COP-26, Glasgow by India and the UK. The initiative is aimed at accelerating the development and deployment of interconnected electricity grids across continents, countries, and communities, and improving energy access of the poorest through mini-grids and off-grid solutions. The idea for the single global solar grid was first outlined at the International Solar Alliance in 2018, by the Prime Minister of India.

The Green Grid Initiative aims:

- To speed up the process of decarbonising energy production.
- To create an international network of global interconnected solar power grid to ensure 24x7 supply of green power.
- To help in increasing investment in R&D centers by pooling skill, technology and financial resources.

As good as it sounds, the implementation of the Green Grid has to counter the following challenges:

- The creation of global transmission infrastructure involves huge financing.
- For connecting with the Green Grid, a global cooperation between the countries is needed.
- As the grid will pass through several geographical locations, it will be sensitive to the security risks emanating from terror organisations.

The Green Grid initiative is a transformational new programme, with the goal of making universal access to renewable energy a reality. It will ensure that clean power is the most affordable and reliable option for all countries to meet their energy needs efficiently by 2030.







Discuss about the vulnerability of India to earthquake related hazards. Give examples including the salient features of major disasters caused by earthquakes in different parts of India during the last three decades. UPSC IAS Mains 2021 General Studies (Paper – 3)

An earthquake is the shaking of the earth caused due to the release of energy which generates waves that travel in all directions. Earthquake hazards can range across ground shaking, surface rupture, landslide, liquefaction, tectonic deformation, tsunami etc.

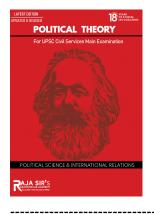
India is prone to earthquakes because:

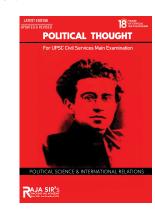
- The landmass is penetrating into the Eurasian plate, which makes the country prone to earthquakes of moderate to very high intensity.
- Densely populated areas, extensive unscientific constructions and unplanned urbanisation have increased risks.
- Regions in Himalayan foothills are vulnerable to liquefaction and landslides due to earthquakes.

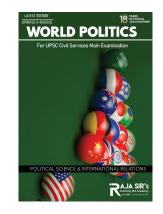
Major disasters caused by earthquakes over last three decades:

- 1993, Latur: Relatively shallow depth caused large surface damage; causes remain debatable due to lack of plate boundaries in the region.
- 1999, Chamoli: Caused by the thrust fault; resulted in landslides, changes in surface water flow, surface rupture and disconnected valleys.
- 2001, Bhuj: Associated with a reactivated fault, which was previously unknown; impeccable loss of life and property.
- 2004, Indian Ocean Tsunami: Created by under-water seismic activity, created massive waves which flooded coastal areas and islands, causing long-term changes.
- 2005, Kashmir: Caused by severe upthrust of Indian plate against Eurasian plate, it created multiple after-shocks. Infrastructure and communication were disrupted.

India has come a long way on the road to earthquake safety. And yet, much remains to be done before this journey is completed. Creating a system and culture for building safe houses in 21st century India is something not only possible but an absolute necessity.







IASgoogle.com

CrackingIASbooks.com

CrackingIAS.com





Discuss how emerging technologies and globalisation contribute to money laundering. Elaborate measures to tackle the problem of money laundering both at national and international levels.UPSC IAS Mains 2021 General Studies (Paper - 3)

Money laundering is disguising the identity of illegally obtained money so that it would appear to have originated from legitimate sources. Money laundering is generally used by criminals to disguise their illicit funds, terrorists to dodge tracking or tax evaders.

Emerging technologies contribute to money laundering in following ways:

- 1. Use of cryptocurrencies and alternate finance that are unregulated by governments
- 2. Encrypted conversations facilitate exchange of information about money laundering
- 3. Large volume of digital transactions at online market places is used to disguises the structured chunks of layered money.
- 4. Identity theft through hacking of credit card information etc. Is used to layer illegitimate money under untraceable identities.

Globalization contributes to money laundering in following ways:

- 1. Placement of money in global financial system creates problems of coordination between multiple jurisdictions.
- 2. Tax haven countries like Cayman Island, Panama etc. have structured their economies around assistance in tax evasion.
- 3. Distribution of assets across countries prevents punitive action by authorities.

Some of the national and international measures enacted to tackle money laundering:

- 1. Prevention of Money Laundering Act (PMLA), 2002 established the legal framework to prevent money laundering. It criminalizes money laundering as a cognizable, nonbailable offence.
- 2. The Smugglers and Foreign Exchange Manipulators (Forfeiture of Property) Act, 1976 and Narcotic Drugs and Psychotropic Substances Act, 1985 provides for the penalty of property derived from smuggling or illegal traffic in narcotic drugs.
- 3. Financial Intelligence Unit India (FIU-IND) coordinates efforts of national and international intelligence, investigation and enforcement agencies against money laundering
- 4. RBI regulations and KYC norms issued from time to time try to keep up with evolving threats and methods of money laundering.

\_\_\_\_\_

5. The Vienna Convention makes it obligatory for signatory states to criminalize the laundering of money from drug trafficking.





- 6. The financial action task force (FATF) sets standards and promotes effective implementation of legal, regulatory and operational measures against money laundering; terror financing.
- 7. The OECD forum has adopted convention against money laundering. It supports appropriate safeguards, access to tax administration in suspicious transaction based on information received from FIUs.

Money Laundering is a global menace which require global effort to curb it. Mutual cooperation among Nations, financial institutions along with use of technological counter-measures such as big data and artificial intelligence is required to curb the menace of money laundering.

Keeping in view of India's internal security, analyse the impact of cross-border cyberattacks. Also, discuss defensive measures against these sophisticated attacks. UPSC IAS Mains 2021 General Studies (Paper – 3)

Cyber threats are anonymous and borderless. Thus, it makes the tracking of criminals difficult and cybersecurity a national security issue.

Impact of cross border cyber attack

- It will have debilitating impact on Critical Information Infrastructure (Power Plans, nuclear Plants, telecommunications etc.)
- Cross border cyber-attacks can be used to threaten national security by indulging in contemporary forms of cross-border terrorism
- It can be used to disrupt social harmony through radicalization. Terrorists may use social media to plan and execute terror attacks and for "virulent propaganda" to incite hatred and violence, recruit youth and raise funds.
- It can be used as spyware to get sensitive information.(e.g India banning Chinese mobile applications)

Defensive Measures

Institutional Measures

- 1. National Cyber Security Coordinator (NCSC) to coordinate with different agencies at the national level for cyber security matters.
- Indian Computer Emergency Response Team (CERT-In) to issue alerts and advisories regarding latest cyber threats and countermeasures on regular basis to various concerned agencies.

\_\_\_\_\_

<u>26</u>





- 3. National Critical Information Infrastructure Protection Centre (NCIIPC) has been establishedThe post of Chief Information Security Officer (CISO) has been created in various organisations to deal with cyber security issues.
- 4. Cyber Swachhta Kendra (Botnet Cleaning and Malware Analysis Centre) has been launched for detection of malicious programs and provide free tools to remove the same.
- 5. National Cyber Coordination Centre (NCCC) has been set up for timely sharing of information with individual entities to enable them to undertake preventive and protective actions against existing and potential cyber security threats.

#### Legislative Measures

1. Information Technology Act, 2000 to provide legal recognition for electronic communication, electronic commerce and cyber-crimes. IT Act has deterrent provisions to deal with cyber threats and cyber-attacks.

## Do you agree that the Indian economy has recently experienced V-shaped recovery? Give reasons in support of your answer. UPSC IAS Mains 2021 General Studies (Paper – 3)

V-shaped recovery is characterised by a quick and sustained recovery in measures of economic performance after a sharp economic decline. It is very apt to state that the Indian economy has recently experienced V-shaped recovery.

- Quarterly GDP Growth: The COVID-19 pandemic has been a human and economic catastrophe for India. Almost one-fourth of the country's economic activity was wiped out due to fall in domestic demand in wake of the strict nationwide lockdowns. India's GDP dipped a historic 23.9% in the first quarter (Q1) of 2020. The contraction narrowed down to 7.5% in the second quarter (Q2).
- Rise in Government Expenditure: Total expenditure of the government rose 48.3% on year-on-year basis in the month of November. On the other hand, capital expenditure shrugged off a three-month contraction and expanded 248.5%. This was mainly due to the introduction of the Atmanirbhar Bharat package.
- Revival of Imports/Exports: After dipping for 9 consecutive months, merchandise imports finally experienced a growth of 7.6% (y-o-y) in December 2020. The revival was led by gold, electronic goods and vegetable oils. India's merchandise exports have reached pre-COVID-19 levels and exhibited a growth of 0.1% in December 2020.

\_\_\_\_\_

\_\_\_\_\_







- Financial Markets Surge: The COVID-19 pandemic kept the Sensex to a record low in late March 2020. However, it staged a strong recovery from the lows. Both the BSE and NSE indices finally wrapped up 2020 on a bullish note.
- IPO Market: During December 2020, the listings of two Initial Public Offerings (IPOs), aggregating Rs. 1,351 crore, took the total resource mobilisation through main board IPOs to Rs. 15,971 crore during 2020-21 (up to December 2020), marking a sharp rebound from Rs. 10,487 crore in the corresponding period of the previous year.
- Industrial Activity: Although industrial output remains volatile, contracting by 1.9% in November 2020 after a record expansion in October by 4.2%, industrial activity is finally turning around. The headline Purchasing Managers' Index (PMI) manufacturing expanded in December 2020 to 56.4, a tick higher than November's reading of 56.3.
- Record GST Collections: The gross Goods and Services Tax collections touched a record high of over Rs. 1.15 lakh crore in December the highest since the implementation of the regime. The collection indicates that the economy continues to show signs of recovery after a stringent lockdown.

### "Investment in infrastructure is essential for more rapid and inclusive economic growth." Discuss in the light of India's experience. UPSC IAS Mains 2021 General Studies (Paper – 3)

Infrastructure investments are a form of "real assets" which contain physical assets one sees in everyday life like bridges, roads, highways, sewage systems or energy. Such a type of asset is quite vital in a country's development. Often, investors invest in infrastructure as it is non-cyclical and it offers stable and predictable free cash flows.

Benefits of investment in infrastructure:

- Stable and Steady Cash Flows: The potential for steady cash flows is one of the main attractive features of investment in infrastructure. It creates steady and predictable cash flows, given that the asset often comes with a regulated and contracted revenue model.
- Non-Cyclical: While the small Italian restaurant at the corner of the street may go bankrupt during a long economic recession, that same risk does not apply to infrastructure assets. Infrastructure assets are crucial to a country's development which also means that they will still be used regardless of what stage the economy is in.
- Low Variable Costs: Infrastructure comes with extremely small marginal costs per use which are completely negligible.





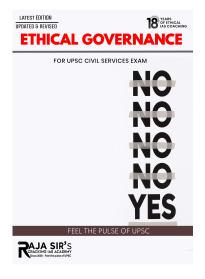
• High Leverage: Leverage is the amount that is taken on. Given that infrastructure provides stable and predictable cash flows, it can take on high levels of leverage which leads to high-interest costs.

Role of infrastructure in rapid and inclusive economic growth:

- Creation of Jobs: Infrastructure development such as road construction, real estate, railway construction, etc. is labour-intensive resulting in increase in employment opportunities in formal and informal sectors and, thus, propelling domestic demand.
- Farmer Income: Investment in infrastructure would play a crucial role in ensuring doubling of farmers' income through emphasis on increased irrigation infrastructure and storage, processing and marketing infrastructure.
- Health and Well-Being: Infrastructure enhancement of superior healthcare facilities, electronic health records and better equipped health infrastructure at primary levels (Telemedicine).
- Logistic Cost: Establishing world class roads, railways, ports and inland waterways will cut down logistic costs and improve competitiveness and promote exports. This would bring more revenues to the government and may promote socio-economic development.

India has been quite attentive with respect to infrastructure programmes. Setting up of a Development Finance Institution (DFI) with an initial capital of Rs. 20,000 crores, is expected to serve as a catalyst for facilitating infrastructure investment. Likewise, the National Infrastructure Pipeline seeks to boost the country's spending on infrastructure.

However, the success of the infrastructure expansion plan would depend on other stakeholders of the pipeline playing their due role. These include State governments and their public sector enterprises and the private sector. Besides, there shall be proper implementation of holistic reforms in the banking sector.







What are the salient features of the National Food Security Act, 2013? How has the Food Security Bill helped in eliminating hunger and malnutrition in India?. UPSC IAS Mains 2021 General Studies (Paper – 3)

The National Food Security Act, 2013 aims to provide subsidized food grains to approximately two-third of the country's population. The enactment of this landmark legislation, brought a paradigm shift in approach to food security, from welfare to rights-based approach. The salient features of the act are as:

- 1. Coverage and entitlement: Up to 75% of rural and 50% of the urban population will be covered under TPDS, with uniform entitlement of 5kg/person/month ration.
- 2. Identification of households: The work of identification of eligible households is to be done by States/UTS.
- 3. Maternity benefit: Pregnant Women and Lactating Mothers (PWLM) are entitled to receive maternity benefits of not less than 6000 rupees.
- 4. Nutritional support: PWLM and children in the age group of 6 months to 14 years will be entitled to meals as per prescribed nutritional norms under ICDS, MDM (PM-Poshan).
- 5. Women empowerment: Eldest women of the household of age 18 years or above to be deemed as head of the household for the purpose of issuing ration cards.
- 6. Grievance Redressal: Act calls for dedicated mechanism for grievance redressal at district and state level.
- 7. Transparency/Accountability: Provisions regarding social audits, setting up of vigilance committees, disclosure of PDS records etc.
- 8. Food security allowance: It is entitled to the beneficiaries in case of non-supply of entitled food grains or meals.

Role of NFSA in eliminating hunger and malnutrition:

- 1. According to a UN report number of undernourished people in India has declined by 60 million between 2006 to 2019.
- 2. Improved access to food grains have improved the hunger outcomes amongst the poor and underprivileged.
- 3. Wide coverage of the 2/3rd population have increased resilience in the poor against income shocks.
- 4. Stunting in children under 5 years of age, according to the UN report have decreased from 47.8% in 2012 to 34.7% in 2019.
- 5. Monetary compensation has compensated against wage loss during pregnancy. PWLM can now access to healthier food options like fruits, vegetables etc.
- 6. The awareness generated by the Asha workers have increased the number of infants who were exclusively breastfed from 11.2 million in 2012 to 13.9 million in 2019.

However, there is still a long way for India to reach nutritional sufficiency as:





- 1. Number of women in reproductive age suffering from anaemia grew from 165.6million in 2012 to 175.6 million in 2019.
- 2. The CNNS have highlighted prevalence of hunger/malnutrition in India children.
- 3. The number of obese adults in India grew from 25.2 million in 2012 to 34.3 million in 2016.
- 4. Institutional infrastructure for delivering the provisions of the food bill is poor.
- 5. Widespread corruption has siphoned off the benefits to ghost beneficiaries and middlemen.

The food bill has revolutionized the access to food grains; however, the need is to move towards nutritional security and not just food security. Further the structural bottlenecks in the implementation food bill should be corrected by leverage of technology.

# What are the present challenges before crop diversification? How do emerging technologies provide an opportunity for crop diversification?. UPSC IAS Mains 2021 General Studies (Paper – 3)

Crop diversification refers to the addition of new crops or cropping systems to agricultural production on a particular farm taking into account the different returns from value-added crops with complementary marketing opportunities. The aim of crop diversification is to increase crop portfolio so that farmers are not dependent on a single crop to generate their income.

Benefits:

- At present, 70-80% farmers have land below 2 hectares. To overcome this, existing cropping patterns must be diversified with high value crops such as maize, pulses, etc.
- Crop diversification can better tolerate the ups and downs in price of various farm products and it may ensure economic stability of farming products.
- It refers to sudden adverse weather conditions like erratic rainfall, drought, hail, incidence of insect and pest disease. Under this situation, crop diversification through mixed cropping may be useful.
- Most of the Indian population suffers from malnutrition. Crops like pulses, oilseed, horticulture and vegetables can improve socio-economic status by adding quality to the food basket and also improve soil health with the aim of food safety and nutritional security.

\_\_\_\_\_





• Adoption of crop diversification helps in conservation of natural resources like introduction of legume in rice-wheat cropping system which has the ability to fix atmospheric nitrogen to help sustain soil fertility.

Challenges:

- Majority of cropped area in the country is completely dependent on rainfall.
- Sub-optimal and over-use of resources like land and water cause a negative impact on the environment and sustainability of agriculture.
- Inadequate supply of seeds and plants of improved cultivars.
- Fragmentation of land holding less favouring modernisation and mechanisation of agriculture.
- Poor basic infrastructure like rural roads, power, transport, communications, etc.
- Inadequate post-harvest technologies and inadequate infrastructure for post-harvest handling of perishable horticultural produce.
- Very weak agro-based industry.
- Weak research extension farmer linkages.
- Inadequately trained human resources together with persistent and large-scale illiteracy among farmers.
- Host of diseases and pests affecting most crop plants.
- Poor database for horticultural crops.
- Decreased investments in the agricultural sector over the years.

Role of emerging technologies in crop diversification:

- With the help of IT revolution, farmers are directly connected with grocery-customers (farm to fork model) leading to cultivation of high value perishable products (e.g., Big Basket, BlinkIt startup platforms).
- Aquaponics and urban farming are a technique of controlled environment cultivation which help in crop diversification in order to meet the heavy urban demand for perishable items.
- Through financial inclusion and digitisation, small farmers and women self-help groups have been able to ensure crop diversification by credit supply.
- In arid areas, technologies like Urea Deep Placement (UDP), Poly-bag Nursery farming, etc. have been introduced by Indo-Israel Agriculture Project.
- Soil health management assisted in facilitating right fertiliser usage, developing organic farming and providing GIS based thematic mapping for soil.

\_\_\_\_\_





What are the research and developmental achievements in applied biotechnology? How will these achievements help to uplift the poorer sections of the society?. UPSC IAS Mains 2021 General Studies (Paper – 3)

Biotechnology is technology based on biology. Biotechnology generates cellular and biomolecular processes to develop technologies and products that help improve our lives and the health of our planet. Biotechnology is helping to heal the world by harnessing nature's own toolbox and using our own genetic makeup.

Research and developmental achievements:

- Stem Cell Research: Stem cells have the ability to keep on dividing infinitely and have the capacity to distinguish into different types of body cells during the early development of an organism. Researchers can program these stem cells to differentiate into specific types of cells.
- Human Genome Project: It was an international scientific research project coordinated by the National Institutes of Health and the U.S. Department of Energy. Officially launched in 1990, it had the goal of determining the sequence of nucleotide base pairs that make up human DNA. It has supported researchers in identifying genes that cause diseases.
- Targeted Cancer Therapies: The established standard chemotherapies are toxic for healthy cells at present. Targeted cancer therapies are drugs that operate either by interfering with the function of specific molecules or by only targeting known cancerous cells in order to reduce damage to healthy cells.
- CRISPR: Clustered Regularly Interspersed Short Palindromic Repeats (CRISPR) is a relatively new gene-editing system that has been hailed as a groundbreaking tool in medical research. HIV research is one of its many uses.

Role in uplifting poorer sections of society:

- Biotechnology is assisting to expand the income of marginal farmers by increasing crop yield and making it climate and pest resilient.
- It has revolutionised the medical science leading to controlled death rate and world class treatment possible in India itself.
- By genome sequencing, biotechnology helps in accessing health of the people from the corners of India which ultimately proves conducive for the government in framing targeted policy initiatives.
- It also proves beneficial in expanding the shelf life of food products, which in turn, keeps their price in check for the poor.
- Pollution attacks poor the most. Biotechnology helps in reducing pollution and, thus, alleviates their suffering. For example, landfills are cleaned through bioremediation techniques.

\_\_\_\_\_

<u>33</u>





#### Surge in Bail Appeals in Indian High Courts

The number of Bail Appeals filed in India's High Courts surged post 2020, according to the 'High Court dashboard' by DAKSH, a think-tank focussed on law and justice system reforms. DAKSH analyzed 9,27,896 bail cases filed between 2010 and 2021 across 15 High Courts. These courts followed distinct naming patterns for bail cases. The data revealed 81 case types associated with bail across the analysed High Courts.

Statistics Related to Bail Appeals

Bail Appeals are on Rise:

- Bail appeals have risen from approximately 3.2 lakh to 3.5 lakh annually before 2020, to 4 lakh to 4.3 lakh thereafter from July 2021 to June 2022.
- Consequently, the number of pending bailappeals in High Courts has surged from around 50,000 to 65,000 to between 1.25 lakh to 1.3 lakh.

High Courts and Caseload Distribution:

• The distribution of caseloads varied across different High Courts. In some states, such as Patna, Jharkhand, Odisha, Madhya Pradesh, and Chhattisgarh, bail appeals formed more than 30% of the total caseload between July 2021 and June 2022.

Disposal Time and Outcome Uncertainty:

- The median time taken for disposal of regularbail applications varied among High Courts. Some High Courts had significantly higher disposal times, raising concerns about delays in the resolution process.
- Delays in deciding onbail cases are seen as equivalent to denying bail, as the accused remains incarcerated during this period.

Incomplete Outcome Data:

• The data also highlighted the lack of clarity regarding the outcomesof bail appeals in High Courts. In nearly 80% of disposed bail cases in all High Courts, the outcome of the appeal, whether it was granted or rejected, was unclear or missing.

Article 21 of the Indian Constitution gives everyone the right to life and personal liberty. It provides the fundamental right to live with human dignity and personal freedom, which entitles us to seek bail when detained by any law enforcement entity.

Reasons for Surge in Bail Appeals

Covid Violations and Disruption in Court Functioning:

- There has been an increased number of cases related to violations of Covid-19 lockdown norms during the pandemic.
- Additionally, the disruption of court functioning during this periodcould have contributed to the accumulation of pending bail cases.
- However, the exact cause cannot be definitively determined from court data.

<u>34</u>





Epidemic Diseases Act as a Factor:

- TheEpidemic Diseases Act, 1897 may have played a role in the increase in bail appeals. While 77% of regular bail cases did not mention the specific Act under which the appellant was imprisoned, analysis of the remaining 23% showed the Epidemic Diseases Act ranked fourth.
- This hints at apotential surge in cases under this Act contributing to the increase in bail appeals.

Bail and its Types

- Bail is the conditional/provisional releaseof a person held under legal custody (in matters which are yet to be pronounced by the Court), by undertaking a promise to appear in the Court as and when required.
- It signifies a security/collateral deposited before the Courtfor release.
- In and Remembrancer of Legal Affairs v. Amiya Kumar Roy Choudhry (1973) case, the Calcutta High Court explained theprinciple behind giving Bail.

Types of Bail in India

- Regular Bail: It is a direction given by the Court (any Court within the country) to release a person who is already under arrest and kept in police custody. For such Bail, a person can file an application under Section 437 and 439 of the Code Of Criminal Procedure (CrPC), 1973.
- Interim Bail:Bail granted for a temporary and short period by the Court till the application seeking Anticipatory Bail or Regular Bail is pending before a Court.
- Anticipatory Bail or Pre-arrest Bail: It is a legal provision that allows an accused person to apply for bail before being arrested. In India, pre-arrest bail is granted under section 438 of the CrPc, 1973. It is issued only by the Sessions Court and High Court.
- The provision of pre-arrest bail is discretionary, and the court may grant bail after considering the nature and gravity of the offence, the antecedents of the accused, and other relevant factors.
- The court may also impose certain conditions while granting bail, such as surrendering the passport, refraining from leaving the country, or reporting to the police station regularly.
- Statutory Bail: The remedy of statutory bail, also known as default bail, is distinct from bail obtained in the ordinary procedure under CrPC Sections 437, 438, and 439. As the name implies, statutory bail is given when the police or investigating agency fails to file its report/complaint within a certain time frame.

\_\_\_\_\_





The Nobel Prize in Physics of 2014 was jointly awarded to Akasaki, Amano and Nakamura for the invention of Blue LEDs in 1990s. How has this invention impacted the everyday life of human beings?. UPSC IAS Mains 2021 General Studies (Paper – 3)

LEDs are basically semiconductors that have been built so they emit light when they are activated. White light, which we generally use, is made by a combination of red, green and blue light. Scientists say that while it was easier to make red and green LEDs, making Blue LED was the ultimate challenge. The Nobel Prize in Physics 2014 was awarded jointly to Isamu Akasaki, Hiroshi Amano and Shuji Nakamura for the invention of efficient blue light-emitting diodes which has enabled bright and energy-saving white light sources.

Impact of this invention on our everyday life:

- Electricity Conservation: A modern white LED light bulb converts more than 50% of the electricity it uses into light. This is opposed to the 4% conversion rate for incandescent bulbs.
- Increasing Access to Electricity: White LEDs' efficiency makes them appealing for getting lighting to folks living in regions without electricity supply. A solar installation can charge an LED lamp to last a long time.
- Smart Energy Efficient Homes: In addition to generating light, LEDs can incorporate sensors that detect when people are in a room, and switch off the lights when no one is there a requirement for any smart home.
- Enables other Technological Advancements: In the electronics industry, LEDs provide backlighting for the liquid crystal displays (LCDs) in many smartphones, laptops and televisions. The LEDs are more energy-efficient than the fluorescent lights that are sometimes used for backlighting, and allow for very thin displays.
- Increased Ability to Store Data: Blu-ray players, the successor to DVD players, use blue LED lasers to read data off a digital optical disc. When these systems switched from using an infrared laser (like that used in DVD players) to a blue LED laser, it became possible to store five to 10 times as much data.

Researchers are exploring other applications of LEDs as well like in transmitting data from the Internet and water purification. These advancements show that LEDs will continue to impact everyday life of humans for years to come.





Describe the major outcomes of the 26th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC). What are the commitments made by India in this conference?. UPSC IAS Mains 2021 General Studies (Paper – 3)

The COP26 summit held at Glasgow brought parties together to accelerate action towards the goals of the Paris Agreement and the UNFCCC.

Major outcomes of the 26th CoP are as follows:

- Methane Pledge: The European Union and the US have launched a landmark pledge to slash emissions of greenhouse gas methane, a commitment that could prevent 0.2 degrees Celsius of global warming. The alliance's members will seek to lower global emissions of methane (the second-largest contributor to climate change after carbon dioxide) by 30% below 2020 levels by 2030. India did not sign it.
- Deforestation Pledge: More than 100 national leaders pledged to halt and reverse deforestation and land degradation by the end of 2030. The agreement vastly expands a commitment made by 40 countries as part of the 2014 New York Declaration of Forests and promises more resources.
- Call for Climate Finance: India noted that climate finance cannot continue at the levels decided in 2009 (100 billion USD) and emphasized that it should be at least USD 1 trillion to meet the goals of addressing climate change. India underlined the unity and strength of Like-Minded Developing Countries (LMDC) as fundamental in the UNFCCC negotiations.
- Infrastructure for Resilient Island States (IRIS): India launched it for developing the infrastructure of small island developing nations (SIDN). SIDN faces the biggest threat from climate change, India's space agency ISRO will build a special data window to provide them timely information about cyclones, coral-reef monitoring, coastline monitoring etc.
- One Sun One World One Grid Group (OSOWOG): It is an initiative by India and the United Kingdom to tap solar energy and have it travel seamlessly across borders. It includes a group of governments called the Green Grids Initiative (GGI) One Sun One World One Grid group.

India made the 'Panchamrit' commitments (five promises) at the CoP 26:

- India will achieve net-zero emissions by 2070.
- India will bring its non-fossil energy capacity to 500 GW by 2030.
- India will bring its economy's carbon intensity down to 45% by 2030.
- India will fulfil 50% of its energy requirement through renewable energy by 2030.
- India will reduce 1 billion tonnes of carbon emissions from the total projected emissions by 2030.





COP26 of Glasgow is a promising start on emissions reduction, however, on the part of global largest emitters, much more is expected to be done. In India's context, it needs to work out a detailed plan of action with reference to phasing-down coal-based power generation and encouraging electric vehicles.

Describe the various causes and the effects of landslides. Mention the important components of the National Landslide Risk Management Strategy. UPSC IAS Mains 2021 General Studies (Paper – 3)

A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. They are a type of mass wasting, which denotes any downward movement of soil and rock under the direct influence of gravity.

Slope movement occurs when forces acting downward (mainly due to gravity) exceed the strength of the earth materials that compose the slope. Landslides are caused due to three major factors: geology, morphology, and human activity.

- Geology refers to characteristics of the material. The earth or rock might be weak or fractured, or different layers may have different strengths and stiffness.
- Morphology refers to the structure of the land. For example, slopes that lose their vegetation to fire or drought are more vulnerable to landslides.
- Human activity refers to agriculture and construction which increases the risk of a landslide.
- Landslides can be initiated in slopes already on the verge of movement by rainfall, snowmelt, changes in water level, stream erosion, changes in groundwater, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors. Earthquake shaking and other factors can also induce landslides underwater.

Different effects of landslides are as follows:

- Landslides have been verified to result in destruction of property. If the landslide is significant, it could drain the economy of the region or country. After a landslide, the area affected normally undergoes rehabilitation.
- Infrastructure such as roads, railways, leisure destinations, buildings and communication systems can be decimated by a single landslide.

<u>38</u>





- Communities living at the foot of hills and mountains are at a greater risk of death by landslides. A substantial landslide carries along huge rocks, heavy debris and heavy soil with it.
- The soil, debris, and rock sliding downhill can find way into rivers and block their natural flow. Many river habitats like fish can die due to interference of natural flow of water.

Important components of National Landslide Risk Management Strategy are as follows:

- Generation of User-Friendly Landslide Hazard Maps
- Development of Landslide Monitoring and Early Warning System
- Awareness Programmes
- Capacity Building and Training of Stakeholders
- Preparation of Mountain Zone Regulations & Policies
- Stabilisation and Mitigation of Landslides and Creation of Special Purpose Vehicle (SPV) for Landslide Management.

# Analyse the multidimensional challenges posed by external state and non-state actors, to the internal security of India. Also discuss measures required to be taken to combat these threats., UPSC IAS Mains 2021 General Studies (Paper – 3)

Internal security has assumed core importance for India. As India now aspires and rises to taking the high seat in the comity of nations, the security challenges become more compounded and complex. India faces multifold threats from external states and non-state actors on the internal security front. State actors include the foreign government representative and their agencies. Non-state actors may include NGOs, multinational companies, terrorist and religious groups, hackers, etc.

Challenge posed by external state actors:

- A few of India's bordering countries support the insurgent groups through funding, training, or coordination. For example, China is alleged to support insurgents in the North-East.
- There have been instances where state actors have been responsible for carrying out cyber warfare through hacking and other espionage.
- State actors also fund their proxies in and out of India to spread instability within the country and tarnish its stature at the global platforms.

\_\_\_\_\_





Challenges posed by non-state actors:

- Multi-national Companies (MNCs) have the potential to threaten national security, especially in the data security and cyberspace domains, and by influencing the policies of their respective governments. It is the reason several Chinese apps were blocked in India recently.
- Non-state organisations with anarchic and fundamentalist ideologies repugnant to the secularist credentials of India are potential threats to the peaceful internal security environment of the nation.
- Propagandas are run and funded by enemy countries and other non-state actors (NGOs and civil society organisations) to destabilise India by damaging the socio-religious fabric and ensure riots.

Following measures shall be undertaken to combat the internal security challenges:

- There must be effective communication and coordination between intelligence agencies and law enforcement agencies.
- Sound cyber security measures must be in place to prevent any attempt of cyber attacks.
- Collaboration should be there between the government, media and the public to ensure quick and efficient sharing of information about suspicious activities to the law enforcement agencies.

We need to understand national security in a comprehensive sense and not in narrow military terms only. While it is imperative to guard our borders and strengthen our diplomacy, we also need to check the various non-state actors who come in hidden forms. There is a need for a national internal security doctrine to deal with various challenges.







Analyse the complexity and intensity of terrorism, its causes, linkages and obnoxious nexus. Also suggest measures required to be taken to eradicate the menace of terrorism. UPSC IAS Mains 2021 General Studies (Paper – 3)

Terrorism can be defined as the calculated use of violence or the threat of violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological.

Causes of terrorism:

- Lack of political legitimacy and continuity, as well as a lack of integration for the political fringes, encourages ideological terrorism.
- Perceptions of deprivation and inequality, especially amongst culturally defined groups. This can lead to civil violence, of which terrorism may be a part.
- Terrorist tactics are used not out of a random desire to fire rockets at civilians but to leverage violence to gain specific concessions.
- Socio-economic explanations of terrorism suggest that various forms of deprivation drive people to terrorism, or that they are more susceptible to recruitment by organisations using terrorist tactics. Poverty, lack of education or lack of political freedom are a few examples.
- Extreme ideologies may sometime result in hatred towards other sections of society and may lead to terrorism. Examples of terrorist groups motivated by ideology include the Irish Republican Army (IRA) and the Liberation Tigers of Tamal Eelam (LTTE).

The linkages and obnoxious nexus of terrorism include:

- Terrorism and organised crime aid each other to thrive and survive. The financial proceeds of organised crime such as extortion/kidnapping are made legal through money laundering and then used to fund terrorist activities.
- Terrorist groups levy taxes on drug traffickers to provide security to criminals in their controlled area.
- Terrorist groups act as proxies of enemy governments which in turn provide them funding and shelter.

The measures undertaken to combat terrorism are:

- Adoption of a Comprehensive Convention on International Terrorism.
- Strengthening national coordination mechanisms to promote inter-agency participation and information exchange, facilitating joint monitoring, threat assessment.
- Updating national legislation to ensure that terrorist and organised crime offences are precisely defined.

\_\_\_\_\_

41





• Awareness generation and deradicalization of the youth to wean them away from the clutches of their influencers.

# Identify five ethical traits on which one can plot the performance of a civil servant. Justify their inclusion in the matrix. UPSC IAS Mains 2021 General Studies (Paper – 4)

Ethics are subjective standard of rights and wrong. For a civil servant, acting ethically is of utmost importance. A matrix of ethical traits can be helpful in performance evaluation of civil servants as discussed below:

| Ethical trait  | Reason for inclusion  |  |
|----------------|---|--|
| Integrity      | Integrity is important for elimination of corruption; Best utilization of public resources; Pursuit of professional excellence; Leadership quality to act as a role model for others. |  |
| Selflessness   | Helps in resolving conflicts of interest; Countering nepotism and cronyism; preventing misuse of entrusted public resources and authority.  |  |
| Compassion     | Brings empathy towards weaker section; Self-motivation to work for weak; Outcome and effectiveness orientation; An element of Emotional Intelligence                                  |  |
| Objectivity    | Makes a civil servant impartial and non-partisanship; Decisions based on merit without personal bias;<br>Fairness in action; Efficiency orientation; Tolerance towards opposing views |  |
| Accountability | Makes civil servants answerable for their conduct and decision; Makes administration transparent and public oriented; Build public trust; Deter unethical conduct.                    |  |

These five ethical traits form the ethical foundation of a civil servant and other values like non-partisanship, tolerance, responsiveness can emanate from them. These traits ensure that a civil servant fulfils his professional obligation even in adverse situations.







Impact of digital technology as a reliable source of input for rational decision making is a debatable issue. Critically evaluate with suitable example. UPSC IAS Mains 2021 General Studies (Paper – 4)

A decision maker is characterised by two binary relations. The first reflects decisions that are rational in an "objective" sense: the decision maker can convince others that she is right in making them. The second relation models decisions that are rational in a "subjective" sense: the decision maker cannot be convinced that she is wrong in making them. Objectivity or rationality in decision making depends upon availability, quantity and quality of data.

Digital technology has almost become ubiquitous in all phases of the decision-making process. At the data collection stage, people use technology to access information, and this information influences the decision maker in the following decision steps. Technology helps people filter, analyse, and process information as well as formulate alternatives and evaluate them, whether consciously or unconsciously.

Digital technologies can act as a reliable source of input for rational decision, as:

- Big data analysis can predict future progression of an event like climate change, COVID-19 outbreak etc., which helps in rational decisions and course corrections.
- It enables data sharing and monitoring in real time, helping in identifying bottlenecks and undertaking necessary reforms.
- Digital technologies have also made it easier to collect and collate data and convert it using various algorithms, which can help in surveys like census, NFHS etc.
- It also helps in integrating data and information spread across different departments, ministries and geographies, which provides a holistic picture.
- Through correct measures and ways, it can act as a reliable source to spread information and make people aware.

As a coin has two sides, every situation too has its pros and cons too. Digital technologies can be a reliable source, but at times, this perception changes. It can be concluded so by:

- Digital technologies are devoid of human emotions and decisions based on such information can violate basic principles of compassion and fairness.
- Digital technologies have resulted in targeted messages changing the attitude of recipients and manipulating them, as seen during elections.
- Digital technology impacts decisions and leads to bounded rationality.
- During the COVID-19 pandemic, digital media was the hub of unverified information creating confusions and cognitive dissonance.
- Thus, digital technology provides information but objectivity of decisions is also based on human values, attitudes and conscience.





What does each of the following quotations mean to you? (a): "Every work has got to pass through hundreds of difficulties before succeeding. Those that persevere will see the light, sooner or later."- Swami Vivekanand. UPSC IAS Mains 2021 General Studies (Paper – 4)

Perseverance is the ability to sustain one's efforts in face of immense difficulties. Perseverance is the key to success in matters, small and big, as discussed below:

- 1. Learning to walk involves falling over many times, before the first step is put forward in an upright posture.
- Integrity in adulthood, is built on years of value inculcation and winning over temptations of dishonesty – intellectual or material. For example, in school examinations, project dissertations, in personal life, etc.
- 3. Gautam Buddha subjected himself to the most severe austerities, intellectual queries and debates, before he could achieve enlightenment.
- Mahama Gandhi's 'experiments with truth' involved lying and stealing at immature age. His approach to freedom struggle evolved in contrasting ways between Chauri Chaura and Quit India movement.
- 5. Swami Vivekananda himself was an inquisitive young man, questioning all dogmas. His open and unsatisfied mind led him to meet his future Guru Shree Ramkrishna Paramhans and in him he met his mission in life.

Difficulties, trial and tribulations, and failure are part of the way to success. Those who persevere see the light, which those who quit cannot.







Attitude is an important component that goes as input in the development of human being. How to build a suitable attitude needed for a public servant?. UPSC IAS Mains 2021 General Studies (Paper – 4)

Attitude is indeed a crucial component in the development of any individual, especially for public servants who serve as representatives of the government and are responsible for serving the public.

Building aptitude

- Training and Development Programs: Conducting regular training and development programs for public servants can help them develop the necessary skills and attitudes required for their job.
- For example, training programs on ethics and integrity, communication skills, and conflict resolution can help public servants to build suitable attitudes.
- Role Modeling: Leaders and senior public servants can serve as role models for their subordinates. By demonstrating the right attitudes and behaviors, they can inspire their team members to emulate them.
- Reward and Recognition: Recognizing and rewarding public servants who exhibit the right attitudes and behaviors can reinforce positive attitudes and behaviors.
- For example, recognizing a public servant who goes above and beyond to serve the public can encourage other public servants to do the same.
- Accountability: Public servants should be accountable for their actions and decisions. They should take ownership of their work and be transparent about their decisions.
- Continuous Learning: Public servants should be committed to continuous learning and development. They should keep themselves updated with the latest trends and best practices in their field of work.

#### Examples:

The Delhi Metro Rail Corporation (DMRC) is an excellent example of building suitable attitudes for public servants. The DMRC is known for its punctuality, efficiency, and customer service. This is achieved by emphasizing the need for its employees to be professional, accountable, and customer-focused.

Building a suitable attitude for a public servant requires a multifaceted approach that focuses on professionalism, ethics and integrity, empathy, accountability, and continuous learning. By prioritizing these aspects, public servants can serve the public effectively and efficiently.





"Refugees should not be turned back to the country where they would face persecution or human right violation". Examine the statement with reference to ethical dimension being violated by the nation claiming to be democratic with open society. UPSC IAS Mains 2021 General Studies (Paper – 4)

Non-refoulment is a principle that forbids a country from returning refugee to a country where they may face persecution. However, countries claiming to be democratic with open society often refuse to accept refugees and send them back raising following ethical questions:

- National interest vs global responsibility: Countries deny refuge citing limited resources, security threats, primary responsibility towards their citizen. However, responsibility as a member of global community is often violated. Nations justify their actions on utilitarian perspective (protecting their citizen) while neglecting deontological aspect (duty to protect) in dealing with refugees.
- 2. Human rights are inalienable rights to life, liberty and opportunity to realize one's potential. Turning back the refugees deny them their basic human rights.
- 3. Turning back those in need goes against the Categorical imperativeof Kant as it cannot be made into a universal principle. Some countries are accused of using migrants as a tool of foreign policy as witnessed during 2021 Belarus–European Union border crisis. This amounts to using people as means and not as end in themselves. Such actions do not pass the test of Gandhiji's Talisman (action keeping in mind the interest of weakest).
- 4. Most of the refugees suffer without any faultof their own. They become victim of violence due to 'accidents of birth' being born in particular country (Syria, Afghanistan), into a persecuted community (Ahmadiyas, Rohningyas) etc. Denying them opportunity to escape violence and persecution goes against all ethical principle.
- 5. Historical responsibility: Western world is responsible for manyrefugee crisis. For example: colonial exploitation and policies (Sykes-Picot Agreement), armed humanitarian intervention leading to civil wars (Middle East), climate refugee They should take historical responsibility for their actions.
- 6. Standard of ethics in society: Dehumanizing refugeeand refusal to recognize their suffering set wrong example for future and lead to decline in values like care, empathy, compassion in the society.

Democratic liberal countries/societies with resources and capacities should accept refugees and allow them to exercise their basic human right of life and pursuit of happiness.





An independent and empowered social audit mechanism is an absolute must in every sphere of public service, including judiciary, to ensure performance, accountability and ethical conduct. Elaborate. UPSC IAS Mains 2021 General Studies (Paper – 4)

Social audit (SA) is an exercise of evaluation of performance of public services conducted jointly by service provider and public, especially the beneficiaries. MGNREGA was the first act to make SA by Gram Sabha mandatory. Further, most states have setup Social Audit Units (SAU) to facilitate SA of programmes like PMAY, MDM, etc. Meghalaya has even provided legal backing to SA.

Social audit is must to ensure performance, accountability and ethical conduct because:

- 1. Social audit goes beyond financial audit of official records to assessing the impact of public services in improving the quality of life of beneficiaries. This helps in improving performance of various public services.
- 2. It makes governance participatory and empowers beneficiary by giving them power to seek answers from authority (jansunwais).
- 3. It makes system more transparent and improve record keeping practices in public offices. (Jansunwai + transparency -> accountability)
- 4. It removes the accessibility gap and helps in building trust between public and administration.
- 5. Contempt provision of judiciary has restricted even constructive criticism and legislature cannot discuss judicial conduct. Social audit can help in improving justice delivery system by creating a feedback mechanism for judiciary and assisting in judicial process reengineering.
- 6. Service delivery agency becomes more aware of the expectations of public and public becomes aware of genuine administrative constraints. SA can provide insights that can help in reconciling objectivity of procedures with subjectivity of public opinions.

However, SA has not achieved its objectives due to lack of awareness, deficit in political and administrative will among other limitation. A national law mandating SA for public services can be a step forward.





Sunil is a young civil servant and has a reputation for his competence, integrity, dedication and relentless pursuit of difficult and onerous jobs. Considering his profile, he was picked up by his bosses to handle a very challenging and sensitive assignment. He was posted in a tribal dominated district notorious for illegal sand mining. Excavating sand from river belt and transporting through trucks and selling them in black market was rampant. This illegal sand mining mafia was operating with the support of local functionaries and tribal musclemen who in turn were bribing selected poor tribals and had kept the tribals under fear and intimidation. Sunil being a sharp and energetic officer immediately grasped the ground realities and the modus operandi followed by the mafia through their devious and dubious mechanism. On making inquiries, he gathered that some of their own office employees are in hand and glove with them and have developed close unholy nexus. Sunil initiated stringent action against them and started conducting raids on their illegal operations of movement of trucks filled with sand. The mafia got rattled as not many officers in the past had taken such strong steps against the mafia. Some of the office employees who were allegedly close to mafia informed them that the officer is determined to clean up the mafia's illegal sand mining operations in that district and may cause them irreparable damage. The mafia turned hostile and launched counter-offensive. The tribal musclemen and mafia started threatening him with dire consequences. His family (wife and old mother) were stalked and were under virtual surveillance and thus causing mental torture, agony and stress to all of them. The matter assumed serious proportions when a muscleman came to his office and threatened him to stop raids, etc., otherwise, his fate will not be different than some of his predecessors (ten years back one officer was killed by the mafia). (a) Identify the different options available to Sunil in attending to this situation. (b) Critically evaluate each of the options listed by you. (c) Which of the above, do you think, would be the most appropriate for Sunil to adopt and why? (UPSC IAS Mains 2021 General Studies Paper – 4)

a) The different options available to Sunil in this case are:

Option 1: Sunil can continue his actions against the Mafia, local functionaries, his corrupt subordinates. He can further, apply for police protection. At the same time, he should inform his superiors about the whole situation.

Option 2: Sunil can stop taking any action/measure, and can continue his tenure in his office.

Option 3: Sunil can request his superiors for his transfer from the district, describing the whole situation to them.

b) The above options can have the following consequences:





| Merits   | Demerits   |  |
|--|--|--|
| <ol> <li>It will reinforce the rule of law in the tribal district.</li> <li>It will aid in checking corruption in the public offices.</li> <li>Police protection will ensure security for Sunil, his mother and his wife.</li> <li>It will also free the tribals from the fear and intimidation of the sand mafias.</li> </ol> | <ol> <li>Sunil's family may have to face the brunt of his actions.</li> <li>It might be a possibility that some police personals too are hand in glove with the mafia</li> <li>Sunil will face continued resistance from his sub-ordinates.</li> </ol>   |  |
| Dption 2   |  |  |
| Merits   | Demerits   |  |
| <ol> <li>It will stop the aggression of the mafias towards Sunil and his family members.</li> <li>Sunil will be able to complete his tenure in peace.</li> </ol>   | <ol> <li>It will compromise the law and order situation in the district.</li> <li>Continued illegal sand mining will adversely affect the state exchequer, tribals and the environment.</li> <li>The will of the corrupt officials and the sand mafia will be emboldened.</li> <li>Sunil, being an honest officer, will be mentally frustrated.</li> <li>The reputation of Sunil in the eyes of his superiors as a dedicated and competent officer will be compromised.</li> </ol> |  |
| Option 3   |  |  |
| Merits   | Demerits   |  |
| <ol> <li>It will stop the stalking, mental agony and trauma for the family members.</li> <li>Sunil could work in peace in his next assignment.</li> </ol>  | <ol> <li>It will aggravate the problem of illegal sand mining.</li> <li>It will compromise the obligation and commitment of Sunil towards his public duty.</li> <li>The corruption in the public offices will continue without any hinderance/check.</li> <li>The rule of law in the district will be compromised.</li> </ol>  |  |

c) Even though the first option, is difficult and full of mental agony/trauma, it is still the most suitable option because:

- 1. It will check the incidents of illegal sand mining and uphold the rule of law in the region.
- 2. The police protection will deter the mafias/goons from intimidating Sunil and his family members.
- 3. Sunil will fulfil his duty by checking corruption in government departments, and restoring law and order.
- 4. This option will make Sunil an even braver and experienced civil servant, who stood his ground in the face of adversities. It will help him in his future career.
- 5. This option is also beneficial for the local tribals, who are living in the fear of the Mafia. Also, it will restore the ecological wealth of the river in the district.
- 6. Action can be taken against corrupt officials.

\_\_\_\_\_







You are Vice Principal of a degree college in one of the middle-class towns. Principal has recently retired and management is looking for his replacement. There are also feelers that the management may promote you as principal. In the meantime, during annual examination the flying squad which came from the university caught two students redhanded involved in unfair means. A senior lecturer of the college was personally helping these students in this act. This senior lecturer also happens to be close to the management. One of the students was son of a local politician who was responsible in getting college affiliated to the present reputed university. The second student was son of a local businessman who has donated maximum funds for running of the college. You immediately informed the management regarding this unfortunate incident. The management told you to resolve the issue with flying squad at any cost. They further said that such incident will not only tarnish the image of the college but also the politician and businessman are very important personalities for the functioning of the college. You were also given hint that your further promotion to Principal depends on your capability in resolving this issue with flying squad. In the meantime, you were intimated by your administrative officer that certain members of the student union are protesting outside the college gate against the senior lecturer and the students involved in this incident and demanding strict action against defaulters. (a) Discuss the ethical issues involved in the case. (b) Critically examine the options available with you as Vice Principal. What option will you adopt and why? (UPSC IAS Mains 2021 General Studies Paper – 4)

a) The ethical issues involved in the above case are:

Integrity: The foremost ethical issue in this case is that of professional integrity. While the senior lecturer has compromised his professional integrity, the situation is also a test of my own integrity, as it creates a conflict between my values/duty and personal interest.

Test of moral strength (morality): The present situation is also a test of my moral strength, as one hand it is the lucrative opportunity to become the principal of the college and on the other hand it is the duty to do the right thing.

Impartiality: The present situation involves the ethical issue of impartiality, as the examination procedure has to be fair for all, any leniency for a few students will make the process partial for other students.

Professional ethics: The situation involves a test of my professional ethics. As it remains to be seen, if I can carry out my duty without any considerations of fear or favour.

b) Theoptions available to meas a vice-principal are:

To listen to the advice of the school management and try to resolve the issue, at any cost, without taking any actions against the students.





|   |  | 1. It will compromise the sanctity of procedures.                        |
|---|--|--|
|   | 1. This option will save the reputation of the college, in short term. | 2. It will be impartial for the other students.                          |
| <ol> <li>The college will continue to gain, political and financial patronage from the politician and the businessman.</li> <li>It might make the possibility of my elevation as principal more certain.</li> </ol> |  | 3. It will tarnish the credibility of the college.                       |
|   |  | 4. It will set a bad precedent for the future.                           |
|   |  | 5. It will compromise my own professional ethics/morality and integrity. |
|   |  | 8. It will aggravate the student protests.                               |
|   |  |  |

2. To let the flying squad/concerned authorities take strict action against the senior lecturer, and the two students, according to the procedure, in a fair way.

| Merits   | Demerits  |
|--|---|
| 1. It will enforce the sanctity of procedures.                       | 1. It might jeopardise future of the two children                                 |
| 2. It will enhance the credibility of the college.                   | 2. It might have financial implications for the college.                          |
| 3. It will set a right precedent for the future.                     | 3. It might lead to a bad publicity for the college.                              |
| 4. It will ensure check against corruption/malpractices by teachers. | 4. It will/might tarnish the reputation of the families of the concerned students |
| 5. It will calm the protests by other students.                      | 5. My chances of elevation will be diminished.                                    |
|  |   |

3. To convince the flying squad not to take any action, and thereafter, punishing the boys and the lecturer after conducting an internal enquiry.

| Merits  | Demerits   |
|---|--|
| <ol> <li>It will save the reputation of the college in the short term and its patrons.</li> <li>It will save the career of the two students and the lecturer.</li> <li>It will show my capability for crisis management.</li> </ol> | <ol> <li>It will aggravate the protests.</li> <li>It might encourage more such incidents in the future</li> <li>It will compromise the sanctity of fair procedures.</li> </ol> |

I will adopt the second option. Even though, it might bring a bad name to the college and may sabotage my promotion, it is the right course of action because:

- 1. College is a place for students to learn righteous values. This option will teach the students importance of ethics and morality.
- 2. Also, involvement of a senior lecturer in the incident, highlights that the situation requires strict action.
- 3. As gaining promotion by unfair ways, will defy the sanctity of means, violating the principle of purity of means and ends.
- 4. This option will be fair towards all the students who were honestly writing their exams.
- 5. This option will aid in pacifying the protests by the students.
- 6. This option will uphold the credibility of the college as a fair and impartial institution.

**51** 





An elevated corridor is being constructed to reduce traffic congestion in the capital of a particular State. You have been selected as project manager of this prestigious project on your professional competence and experience. The deadline is to complete the project in next two years by 30 June, 2021, since this project is to be inaugurated by the Chief Minister before the elections are announced in the second week of July 2021. While carrying out the surprise inspection by inspecting team, a minor crack was noticed in one of the piers of the elevated corridor possibly due to poor material used. You immediately informed the chief engineer and stopped further work. It was assessed by you that minimum three piers of the elevated corridor have to be demolished and reconstructed. But this process will delay the project minimum by four to six months. But the chief engineer overruled the observation of inspecting team on the ground that it was a minor crack which will not in any way impact the strength and durability of the bridge. He ordered you to overlook the observation of inspecting team and continue working with same speed and tempo. He informed you that the minister does not want any delay as he wants the Chief Minister to inaugurate the elevated corridor before the elections are declared. Also informed you that the contractor is far relative of the minister and he wants him to finish the project. He also gave you hint that your further promotion as additional chief engineer is under consideration with the ministry. However, you strongly felt that the minor crack in the pier of the elevated corridor will adversely affect the health and life of the bridge and therefore it will be very dangerous not to repair the elevated corridor. (a) Under the given conditions, what are the options available to you as a project manager? (b) What are the ethical dilemmas being faced by the project manager? (c) What are the professional challenges likely to be faced by the project manager and his response to overcome such challenges? (d) What can be the consequences of overlooking the observation raised by the inspecting team?. (UPSC IAS Mains 2021 General Studies Paper – 4)

a) Options available to me as the project manager are as under:

- 1. I can opt to continue with the work, as my superior, the chief engineer, has overruled the observations of the inspecting team.
- 2. I can do further survey into the problem, and bring it into the notice of the senior political leadership or the CM himself.
- 3. As I believe that the quality of the project is compromised and have made my reservations about the same clear to my superiors, I can request my transfer from the project, to avoid the responsibility in case of a contingency.

b) Ethical dilemma faced by the project manager are as under:

- 1. Personal interest vs public interest: Going ahead with the project will give an assured promotion, however, it could possibly put the life of many citizens into severe jeopardy.
- 2. Ends vs means: While going ahead with the project will fulfil the end of timely inauguration and my promotion, it will destroy the purity of means involved.





- 3. Cost vs quality of service.: While demolishing the three pillars will add to cost and time over run of the project, more so, when it is deemed fit by the chief engineer, continuing on the other hand will compromise the quality-of-service delivery.
- 4. Administrative ethics vs work efficiency: While for completing the project on time, the project manager will be lauded for his efficiency, it will compromise his administrative ethics.
- c) Professional challenges likely to be faced by the manager are as under:
  - 1. Pressure from superiors: As the Chief engineer as exhorted the project manager, to continue the work with same tempo.
  - 2. Political pressure: As the contractor is a relative of the minister, and also, the CM intends to inaugurate the project before the elections.
  - 3. Career progression: As the career prospects of the project manager are linked to the completion of the project.
  - 4. Possible responsibility: In case the project fails and the bridge collapses, the project manager will be liable for a departmental/judicial enquiry.
  - 5. Corruption: As the material used was of poor quality, the project manager faces the challenge of tackling corruption in his department.

The project manager can overcome these challenges by:

- 1. Presenting a detailed report on his assessment, and sending a copy of the report each to, the CM, concerned minister, chief engineer, chief secretary and the vigilance officer of the state.
- 2. Conducting an enquiry, int the quality of the material used, and sending a show cause notice to the concerned persons in case of an anomaly.
- 3. Involving a third party, for conducting an independent survey on the fitness/health of the corridor.

d) The consequences of overlooking the observations of the inspecting team could be:

- 1. The corridor might collapse, which could cause a severe damage to the life/limbs and property of the citizens.
- 2. The collapse will come at a bigger cost and time over run in the project, as the whole project will have to be started afresh.
- 3. The failure of the project will bring a bad name both to the department and to the political leadership of the state.
- 4. Overlooking the observations of the inspecting team, will also mean going easy on the issue of poor quality of material used in the project.
- 5. It will also have the consequence of promoting nepotism in the working of government project.

\_\_\_\_\_

\_\_\_\_\_

<u>53</u>







The coronavirus disease (COVID-19) pandemic has quickly spread to various countries. As on May 8th, 2020, in India 56342 positive cases of corona had been reported. India with a population of more than 1.35 billion had difficulty in controlling the transmission of coronavirus among its population. Multiple strategies became necessary to handle this outbreak. The Ministry of Health and Family Welfare of India raised awareness about this outbreak and to take all necessary actions to control the spread of COVID-19. Indian Government implemented a 55-day lockdown throughout the country to reduce the transmission of the virus. Schools and colleges had shifted to alternative mode of teaching-learning-evaluation and certification. Online mode became popular during these days. India was not prepared for a sudden onslaught of such a crisis due to limited infrastructure in terms of human resource, money and other facilities needed for taking care of this situation. This disease did not spare anybody irrespective of caste, creed, religion on the one hand and 'have and have not' on the other. Deficiencies in hospital beds, oxygen cylinders, ambulances, hospital staff and crematorium were the most crucial aspects. You are a hospital administrator in a public hospital at the time when coronavirus had attacked large number of people and patients were pouring into hospital day in and day out. (a) What are your criteria and justification for putting your clinical and non-clinical staff to attend to the patients knowing fully well that it is highly infectious disease and resources and infrastructure are limited? (b) If yours is a private hospital, whether your justification and decision would remain same as that of a public hospital? (UPSC IAS Mains 2021 General Studies Paper – 4)

As the administrator in a public hospital in the given situation, I have conflicts within my professional roles such as among my responsibility towards patients, my staff, the government and the general public. There are moral demands on my conscience as well.

a)Criteria for putting clinical and non-clinicianstaff to attend the patients:

- 1. The staff should not have age or disease-vulnerability.
- 2. Segregate duties based on complexity of task and competence of the staff. For example, to prevent fire incidents in ventilators.
- 3. Simple but meaningful tasks like helping elderly make video calls to family can be assigned to non-clinical staff.

Justification for having all of my staff attend to infectious disease:

- 1. Consequentialism: Not attending to demands of public health would exacerbate the health crisis and will lead to large number of deaths, dysfunctional medical infrastructure and economy.
- 2. Kant's duty principle: As public servant, I have duty towards the government, and by extension the public. Dutifulness requires me to allocate resources for handling patients' needs.

<u>54</u>





- 3. Utilitarianism: Larger public interest is served if patients are taken care of, such as in control of pandemic, and assistance in economic recovery.
- 4. Common good: I have responsibilities towards my staff for their welfare, but common good lies in controlling pandemic through effective and efficient public health system.
- 5. Compassion: Compassion for the people affected by pandemic, preventing loss of lives like orphaned children, parents losing all their children, sufferings due to the crippled infrastructure, motivate me.

b)As administrator of a private hospital,my commitment to public health would remain the same. I would take following additional measures:

- 1. I would make sure my staff has sufficient protection from infection such as through their vaccination and providing protective gears of good quality.
- 2. I would attend to my staff's work load as best as possible under given circumstances through additional hiring, rotational shifts, intermittent rest and breaks. The staff can provide care to patients only if they are themselves mentally, emotionally and physically healthy.
- 3. The medical expenses would be graded as per patients' economic abilities through formal and informal methods of verification like tax filings or assets. Changes in health care costs would attend to needs of poor patients and provide motivational bonus to my staff for their extra efforts.

Ethics as an administrator in public or private hospital during pandemic induce me to render public service in challenging times. As private administrator I have opportunity to attend to the conflict in my conscience through extra care for my staff and needs of equity in healthcare.







A reputed food product company based in India developed a food product for the international market and started exporting the same after getting necessary approvals. The company announced this achievement and also indicated that soon the product will be made available for the domestic consumers with almost same quality and health benefits. Accordingly, the company got its product approved by the domestic competent authority and launched the product in Indian market. The company could increase its market share over a period of time and earn substantial profit both domestically and internationally. However, the random sample test conducted by inspecting team found the product being sold domestically in variance with the approval obtained from the competent authority. On further investigation, it was also discovered that the food company was not only selling products which were not meeting the health standard of the country but also selling the rejected export products in the domestic market. This episode adversely affected the reputation and profitability of the food company. (a) What action do you visualise should be taken by the competent authority against the food company for violating the laid down domestic food standard and selling rejected export products in domestic market? (b) What course of action is available with the food company to resolve the crisis and bring back its lost reputation? (c) Examine the ethical dilemma involved in the case. (UPSC IAS Mains 2021 General Studies Paper - 4)

The given case study presents a contest between public interest and profitability in corporate governance and highlights the problem of lack of ethics in private institutions.

a) Following actions can be taken against the company by competent authorities:

- 1. Recall and destroy: As the products under question are eatable, they pose danger to public health. Company should be instructed to recall products from the market and destroy them under supervision of authorities.
- 2. Monetary fine: A substantial monetary fine should be imposed to emphasize cost of ignoring public interest in pursuit of short-term business profitability.
- 3. Criminal proceedings against top officials should be based on graded response as per consequential impact on public health, such as carcinogenic or genetic impact, effect on children etc.
- 4. Cancel the approval to sell domestically as well as for exports till review and reapproval. This will help protect against loss of reputation for the country as a source, and promote respect for prescribed regulations.

b) The company can take following course of action to resolve the crisis and regain its reputation:

- 1. Public apology should express genuine regret for wrong conduct.
- 2. Internal audit and enquiry should be pursued to fix responsibility for the decisions that led to the crisis.

\_\_\_\_\_

<u>56</u>





- 3. Review company's values and process of value inculcation among employees, middlemanagement and top-leadership. Changes in leadership may be needed.
- 4. Changes in quality control governance with direct line of communication between topleadership and factory floor can put quality norms on a pedestal.
- 5. Communication of the internal emphasis on quality and health over short-term profits should reflect in benchmarking as per national and international best practices like 6-sigma.
- c) The ethical dilemmas in the case are as follows:
  - 1. Public health versus private profit: Corporates have interests of private profits but they also have responsibility towards society. Commerce without morality is a one of the seven Gandhian sins.
  - 2. Kantian right versus National Interest: Taking strict action if found rightful such as criminal proceedings can affect investments, create sensationalism and undermine reputation of India as source of food products-based exports.
  - 3. Common Good versus Business Interest: Narrow focus on business interest has threatened common good from public health and exports.
  - 4. Varying compliance with standards for exports and domestic market reflects lack of respect for domestic regulation and possibility of racial prejudices within company.

The pursuit of value and not profits must guide the conduct of corporates. Trust and customer loyalty are enviable values that a company can only build on foundation of ethical governance.





Pawan is working as an officer in the State Government for the last ten years. As a part of routine transfer, he was posted to another department. He joined in a new office along with five other colleagues. The head of the office was a senior officer conversant with the functioning of the office. As a part of general inquiry, Pawan gathered that his senior officer carries the reputation of being difficult and insensitive person having his own disturbed family life. Initially, all seemed to go well. However, after some time Pawan felt that the senior officer was belittling him and at times unreasonable. Whatever suggestions given or views expressed by Pawan in the meetings were summarily rejected and the senior officer would express displeasure in the presence of others. It became a pattern of boss' style of functioning to show him in bad light highlighting his shortcomings and humiliating publicly. It became apparent that though there were no serious work-related problems/shortcomings, the senior officer was always on one pretext or the other and would scold and shout at him. The continuous harassment and public criticism of Pawan resulted in loss of confidence, self-esteem and equanimity. Pawan realised that his relation with his senior officer was becoming more toxic and due to this, he felt perpetually tensed, anxious and stressed. His mind was occupied with negativity and caused him mental torture, anguish and agony. Eventually, it badly affected his personal and family life. He was no longer joyous, happy and contented even at home. Rather without any reason he would lose his temper with his wife and other family members. The family environment was no longer pleasant and congenial. His wife who was always supportive to him also became a victim of his negativity and hostile behaviour. Due to harassment and humiliation suffered by him in the office, comfort and happiness virtually vanished from his life. Thus, it damaged his physical and mental health. (a) What are the options available with Pawan to cope with the situation? (b) What approach Pawan should adopt for bringing peace, tranquility and congenial environment in the office and home? (c) As an outsider, what are your suggestions for both boss and subordinate to overcome this situation and for improving the work performance, mental and emotional hygiene? (d) In the above scenario, what type of training would you suggest for officers at various levels in the government offices?. (UPSC IAS Mains 2021 General Studies Paper - 4)

This is a case of poor work culture, abuse of authority, lack of emotional intelligence and inability to compartmentalize personal and professional life.

a. Following options are available with Pawan to cope up with the situation:

- Resign from the current position: This amounts to escapism and lack of courage. His personal responsibilities would also suffer.
- Take leave from office: This will give a short respite to Pawan but he will face same problems on rejoining.
- Seek transfer to other department: This is an administrative decision with little control of Pawan over it.





• Ignore his senior at work: Coordination in and quality of work will suffer. This may make him indifferent to work as whole.

Address the root cause of the problem as discussed in the next part.

b. Pawan should develop and exhibit emotional intelligencefor bringing peace, tranquillity and congenial environment in the office and home. This can be done through:

| Office  | Home   |
|---|--|
| <ol> <li>Introspect his own action to answer two questions (i) Were his actions annoying his senior? (ii) What is the behaviour of his senior towards other newly transferred colleagues?</li> <li>Have an open conversation with his senior to (i) explain his concerns (ii) understand reason for his senior's action.</li> </ol> | <ol> <li>Discuss the matter with his wife explaining the issue he is<br/>facing in office. His wife will understand and support him.</li> <li>Develop adversity quotient and learn to separate professiona<br/>and personal life.</li> </ol> |
| This will give opportunity for course correction to Pawan and his senior.   |  |
| 3. If this does not work, bring the matter to the knowledge of his senior's boss and  |  |
| lodge a written <b>complaint</b> .  |  |

| c. As an outsider, my suggestion to the boss and subordinates are:  |   |  |
|---|---|--|
| Boss  | Subordinates  |  |
| <ol> <li>Respect your subordinates. They are the productive force behind your organization.</li> <li>Develop emotional intelligence, act like a leader and a role model.</li> </ol> | <ol> <li>Work with dedication and commitment but not at the cost of self-respect/self-worth.</li> <li>Work is 'just a part of the life' not 'the life'.</li> <li>Enjoy small things in life and do not let work related tensions spill into your</li> </ol> |  |
| 3. Give constructive criticism, not belittle others.  | personal life.  |  |

d. I would suggest following type of trainingto the officers in government offices:

- 1. Sensitivity training: Being sensitive to how one's actions are impacting people around them.
- 2. Role playing training: To look into the situation from perspective of others to understand their problems and constraints.
- 3. Assertiveness training: Exercising authority without being condescending to others; build team spirit and foster cooperation.
- 4. Relaxation training: Physical exercise and meditation to keep body and mind in good shape; decreases negative thoughts and frustrations.
- 5. Communication training: Using verbal and non-verbal cues for effective communication.

The motive of this exercise is to increase positivity in outlook, promote inclusiveness and make work culture conducive for performance.

\_\_\_\_\_

<u>59</u>







The rock-cut architecture represents one of the most important sources of our knowledge of early Indian art and history. Discuss. (UPSC IAS Mains 2020 General Studies Paper – 1)

Rock-cut architecture in India indeed holds great significance as a valuable source of knowledge about early Indian art and history. It refers to the practice of carving architectural elements, temples, monasteries, and other structures directly into solid rock formations. These structures were created by cutting, chiseling, and sculpting the rock surfaces, resulting in magnificent and long-lasting architectural marvels. Rock-cut architecture is considered crucial for our understanding of early Indian art and history due to the following reasons:

- Historical Insights: Rock-cut structures provide important historical insights into various aspects of ancient Indian civilization. They offer evidence of the cultural, religious, and socio-economic aspects of the time in which they were built. By examining the architectural details, motifs, and inscriptions found in these structures, historians and archaeologists can reconstruct the chronology, patronage, and religious practices of the era.
- Preservation of Artistic Styles: Rock-cut architecture preserved a wealth of artistic styles and techniques that might not have survived in other forms. These structures showcase the evolution of architectural styles and artistic expressions over time, offering glimpses into the artistic traditions of specific regions and periods. They serve as tangible representations of the artistic and sculptural techniques that were prevalent during ancient times.
- Religious and Cultural Significance: Many rock-cut structures were dedicated to religious purposes, such as Buddhist monastic complexes, Hindu temples, and Jain caves. These structures reflect the religious beliefs, rituals, and practices of the communities that built them. They also provide insight into the interplay and interaction between different religious groups and their influence on each other's architectural and artistic expressions.
- Iconography and Symbolism: The carved sculptures and reliefs found in rock-cut structures depict a wide range of religious, mythological, and historical themes. These intricate artworks convey symbolic representations of gods, goddesses, deities, and narratives. The study of the iconography and symbolism in these carvings helps scholars interpret and understand the religious and cultural beliefs of the time, as well as the socio-political context in which they were created.
- Technological Advancements: Rock-cut architecture showcases the technical skills and engineering prowess of ancient Indian craftsmen. The excavation and carving techniques employed to create these structures reveal the level of technological advancement achieved in areas such as quarrying, rock-cutting tools, and architectural planning. Understanding these techniques provides insights into the engineering knowledge and craftsmanship of the period.
- Cultural Exchange and Trade Routes: Rock-cut structures were often located along ancient trade routes, pilgrimage routes, and cultural exchange centers. Their existence







and architectural styles provide evidence of the connectivity between different regions and civilizations, as well as the flow of ideas, artistic influences, and cultural interactions. They shed light on the economic, social, and cultural exchanges that shaped early Indian history.

Rock-cut architecture in India serves as a crucial source of knowledge for understanding early Indian art and history. It provides a tangible link to the past and continue to fascinate and enlighten researchers, historians, archaeologists, and art enthusiasts, contributing to our understanding of India's rich and diverse heritage.

### Pala period is the most significant phase in the history of Buddhism in India. Enumerate. (UPSC IAS Mains 2020 General Studies Paper - 1)

The Pala period, also known as the Pala dynasty, was a significant phase in the history of Buddhism in India. This period lasted from the 8th century to the 12th century and is characterized by several notable achievements that helped to shape and spread Buddhism throughout the Indian subcontinent. The major contributions of the Pala period to the development of Buddhism are as below:

- Promotion of Mahayana Buddhism: The Pala dynasty was a major patron of Mahayana Buddhism, which became the dominant form of Buddhism during this period. The Palas commissioned the construction of several Buddhist monasteries, stupas, and temples, and also supported the translation of Buddhist texts into Sanskrit and other languages.
- Development of the Bihar School of Buddhism: The Pala period saw the emergence of the Bihar School of Buddhism, which was characterized by a focus on the study of Buddhist philosophy and logic. This school was instrumental in the development of the Madhyamaka and Yogacara schools of Buddhist thought.
- Support for Buddhist scholars: The Palas provided patronage to several eminent Buddhist scholars, including Atisha Dipankara, Nagarjuna, and Vasubandhu. These scholars made significant contributions to the development of Buddhist philosophy and helped to spread Buddhist ideas throughout India and beyond.
- Construction of Buddhist monasteries and universities: The Pala period witnessed the construction of several large Buddhist monasteries, including the famous Vikramashila University. These institutions were centers of learning and attracted students and scholars from all over India and neighboring countries.
- Spread of Buddhism beyond India: The Palas played a crucial role in the spread of Buddhism beyond India, particularly to Tibet, Nepal, and Southeast Asia. Buddhist monks and scholars from these regions visited India to study at the great universities and monasteries established during the Pala period.

**61** 





Overall, the Pala period was a time of great significance for the development and spread of Buddhism in India and beyond. The Palas" patronage of Buddhist scholarship and the construction of Buddhist institutions helped to establish India as a center of Buddhist learning and contributed to the spread of Buddhist ideas throughout the world.

# Evaluate the policies of Lord Curzon and their long term implications on the national movement. (UPSC IAS Mains 2020 General Studies Paper – 1)

Lord Curzon, the youngest Viceroy, at the age of 39, came to India as the successor of Lord Elgin in the Year 1899. During his time from 1899 to 1905, India was seen as an important period in the history of the freedom struggle. Before his arrival, India witnessed severe economic and political crisis and looking at the situation, there was a dire need for a robust ideological person to control the situation, and Britishers found Lord Curzon to be the appropriate person. Lord Curzon followed a profoundly racist attitude and believed in white man supremacy, and thought Indians to be inferior to the British. He was intolerant towards India's political purpose. Innumerable policies were implemented during his tenure.

#### The Policies of Lord Curzon

#### Partition of Bengal:

The partition of Bengal was one of the major drawbacks of the Curzon policy. Its aim was to divide Bengal into a communal division: West Bengal had a Hindu majority, and East Bengal had a Muslim majority. In 1905, Curzon announced that it would be difficult to administer such a large province of Bengal, and for better administration, he decided to partition Bengal, but the real motive was different.

#### **Educational Reforms:**

Curzon played a vital role in university reform, and in 1904 he founded the University Committee. The commission has initiated a process to improve the quality of higher education. However, the real motive was that he wanted to control the voices coming from this university, and to suppress them he drafted the University Act of 1904. Gokhale called this a retrograde measure.

Calcutta Corporation Law and Ancient Monuments Act:

Curzon introduced the Calcutta Corporation Act in 1899, which reduced the number of elected Indian members to the company, and Indians were called incompetent and tried to subdue the British government completely.

<u>62</u>





TheAncient Monuments Act of 1904 was introduced by Curzon to protect the important monuments of the empire. The law requires the protection of monuments.

Agricultural Reforms:

In 1904, the Co-operative Credit Union Actwas passed, which encouraged people to set up deposits and loans, mainly to protect farmers from the clutches of moneylenders, who usually demanded exorbitant interest.

In 1900, the Punjab Land Seizure Act was passed, which prohibited the transfer of land to usurers in case farmers did not pay their loans.

#### Railways:

He appointed a railway committee headed by Robertson in 1901, and two years later the committee submitted its report, and Curzon accepted the recommendation by expanding the railway lines. He also abolished the railway department and transferred the railway administration from the Public Works Department to a three-member Railway Council. He organized the Railway administration on a commercial line with the objective of earning profit.

Foreign policies of Lord Curzon:

- With Afghan: Lord Curzon's Afghan politics were motivated by political and economic interests and fears of Russian expansion into Central Asia and the Persian Gulf. From the very beginning, there was a separation between the Afghans and the British. With an agreement between Abdur Rahman and the British, the latter has promised to provide financial aid to Afghanistan, thereby easing its tensions in Afghanistan.
- With Tibet:Lord Curzon's Tibetan policy was also influenced by the fear of Russian rule in the region. In 1890 the Tibetans entered into a trade agreement with the British, but when Lord Curzon became the Viceroy, trade relations between Tibet and British India broke down completely and it was the effort of Lord Curzon's which improved the trade relations between the two countries and Tibet agreed to pay large compensation to the British.
- With Northwest Frontier:Curzon, unlike his forefathers, pursued a policy of consolidating and protecting British-occupied territories in the North-West. He put Chitral under British control and built a road between Peshawar and Chitral, ensuring the security of Chitral. Khyber Pass, Khur Valley, and Waziristan were the places where their ancestors stationed small British soldiers.
- With Persia: In order to improve its relations with Persia, Lord Curzon personally visited the gulf in 1903 to protect the British interest by getting the support of the Persians.

Implications of Lord Curzon Policies

Increase In Nationalist Sentiments:

\_\_\_\_\_

\_\_\_\_\_

<u>63</u>





Curzon's policies arose nationalist sentiments among Indians. The role of the extremists came to the fore after Curzon's departure. The partition of Bengal started a mass movement in Bengal and throughout the country and the anti-partition movement, Swadeshi movement and Vande Mataram movement were all effects of Curzon's policies.

#### Birth of Divide and Rule policy:

Curzon believed in communal politics. It was Curzon who initiated the policy of division to rule over the territory of India. He turned Muslim leaders against Congress leaders to divide the country, but this gave force to the movement by making the Indians aware of the British's actual intention.

#### Rise of Extremism:

Lord Curzon's policies led to the rise of extremism in the Indian National Congress. Leaders like Dadabhai Naoroji dominated the congress before Curzon's arrival but later extremist leaders came to the fore of the national movement. However, Curzon's strict policies strengthened the ideology of leaders like Tilak, Lala Lajpat Rai, and others who played an important role in the freedom struggle.

#### Indians diaspora support:

Curzon's policies have almost alienated his sympathetic Indians from the British government. Curzon's policies exposed the true nature of the British to Indians and helped India gain the support of the diaspora.

#### Renaissance of Indian Culture:

Curzon's policies made Indians proud of their rich heritage and culture, and the inferiority complex of Indians was greatly reduced. They now realized the superiority of the Indian culture over the western culture. The Archaeological Survey of India was established to revive the pride of India.

#### Awakening of the nationalist movement:

Lord Curzon's policies exposed their true nature and compelled Indians to take steps to drive the British out of India. It strengthened the nationalist feelings of the Indians, and the request for swaraj became more intense.

#### Step towards self-reliant India:

Indians boycotted the schools and colleges during the partition of Bengal. Many factories, schools, and colleges were also opened in some places by different people. The university act also led to technological up-gradation of the education system. Such a step gave Indians the confidence to be self-reliant.

Thus the reactionary policies of Lord Curzon arose national consciousness among the Indians.

<u>64</u>





Discuss the geophysical characteristics of Circum-Pacific Zone. (UPSC IAS Mains 2020 General Studies Paper – 1)

The Circum-Pacific Zone, also known as the Pacific Ring of Fire, is a region of high seismic and volcanic activity that encircles the Pacific Ocean. It is home to more than 75% of the world"s active and dormant volcanoes and is also the site of some of the most powerful earthquakes in history. The geophysical characteristics of the Circum-Pacific Zone are shaped by the complex interaction of tectonic plates and geological processes.

- Plate boundaries: The Circum-Pacific Zone is characterized by a series of tectonic plate boundaries, including subduction zones, divergent boundaries, and transform faults. These plate boundaries are responsible for the formation of oceanic trenches, volcanic arcs, and island chains.
- 2. Volcanic activity: The Circum-Pacific Zone is home to a large number of active and dormant volcanoes. The volcanic activity in this region is due to the subduction of oceanic plates under continental plates, which leads to the melting of rock and the formation of magma. Some of the most famous volcanoes in this region include Mount Fuji in Japan, Mount Pinatubo in the Philippines, and Mount St. Helens in the United States.
- 3. Earthquakes: The Circum-Pacific Zone is also home to some of the most powerful earthquakes in history, including the 1960 Valdivia earthquake in Chile, which was the strongest earthquake ever recorded, and the 2011 Tohoku earthquake in Japan, which triggered a devastating tsunami. The high seismic activity in this region is due to the movement of tectonic plates along plate boundaries.
- 4. Oceanic trenches: The Circum-Pacific Zone is home to several deep oceanic trenches, including the Mariana Trench, the deepest point in the ocean. These trenches are formed by the subduction of oceanic plates under continental plates and are characterized by extreme pressure, low temperatures, and unique ecological communities.
- 5. Ring of Fire: The Circum-Pacific Zone is often referred to as the "Ring of Fire" due to the high concentration of volcanic and seismic activity in the region. The term was coined by geologist John Tuzo Wilson in the 1960s and has since become a popular way of referring to this dynamic and geologically active region.

The Circum-Pacific Zone is a region of high geophysical activity that is shaped by the interaction of tectonic plates and geological processes. It is characterized by volcanic activity, earthquakes, oceanic trenches, and unique ecological communities. Its geophysical characteristics have important implications for the people and ecosystems that inhabit this region.