GLOBAL TRADE

❖ **What is affecting trade momentum?**

➤ **Context:** Mired in a slowing economy, inflationary setting and tighter monetary controls worldover, India's merchandise exports shrunk 12.7% on a year-on-year (YoY) basis to $34.66 billion in April — a six-month low. Imports fell sharper by 14% to $49.90 billion during the same period. The fall in imports and exports is not limited to India as other countries too have recorded similar declines — affirming the notion about slowing global demand.

➤ **What are the current underlying trends in global trade?**
- The essential headwinds observed with respect to global trade are weaker economic activities worldwide, inflation and tightening of monetary policies, disrupted supply chains because of the Russia-Ukraine conflict and financial instability because of the collapse of several financial institutions in advanced economies.
- The ongoing conflict in Eastern Europe continues to have a bearing on the prices of energy, food and commodities.
- As observed by the World Trade Organization (WTO), though food and energy prices receded from their post conflict peaks by the fourth quarter last year, "they remained high by historical standards and continued to erode real incomes and import demand" during the mentioned period.
- The impact of energy prices was strongest during the winter months in Europe as Russia was among the largest suppliers of energy to Europe before it was sanctioned. Europe responded to the loss of gas shipments from Russia by shifting to other suppliers, including the U.S., Qatar, Norway and Algeria. This potentially increased LNG prices elsewhere such as Japan, where the prices doubled between January last year to February this year.
- The collapse of financial institutions — such as of the crypto exchange FTX (November 2022) alongside three banks in the U.S. since March (the Silicon Valley Bank, Signature Bank and First Republic Bank), and the loss of confidence in Credit Suisse added to the troubled scenario. As the United Nations Conference on Trade and Development (UNCTAD) in its latest update (in April) concluded, the events raised "the spectre of financial contagion in an already slowing economy".

➤ **What are we looking at?**
- The EU is India's third largest trading partner after the U.S. and China. The European Economic Forecast (published in February) held that the region would "narrowly escape the recession" that took shape around September. Moreover, as per the latest published statistics for the Euro area, food, alcohol and tobacco experienced the highest annual rate of inflation (on a sequential basis) in May followed by non-energy industrial goods, services and energy.
- As for the U.S., in May, Fed Chair Jerome Powell said that inflation had "somewhat" moderated since the middle of the last year. Nonetheless, inflation pressures continued to run high with expectations of it receding to 2% having a "long way to go".
- The JP Morgan Global Manufacturing Purchasing Managers' Index (PMI), compiled by S&P, registered 49.6 in May — unchanged for the third consecutive month and indicating a marginal deterioration of business conditions. The indicator is used to assess manufacturing business conditions. It observed that, "while there was some brighter news on the production front, with output rising for a fourth month in a row, the production gains were again driven by improved supply (enabling the fulfilment of orders placed in prior months) rather than any new inflows of orders."

➤ **How are these related to trade?**
- To put it simply, in a period of economic slowdown, international trade, both exports and imports, falls sharply as overall demand for goods and services stand reduced. There is an aversion for discretionary spending which particularly weighs on some imports and postponable expenditures.
- It is in this light that the exports of engineering goods, gems and jewellery, chemicals, and readymade garments and plastics, along with petroleum products contracted or grew at a slower pace in 2023.
- Similarly, inflation, the uneven rise in prices especially of essentials such as food and energy erodes the purchasing power of an individual. However, it may happen that people in the country may turn to buying imports if they are cheaper than their indigenous products, but this is where the conversion rate may potentially have a bearing to offset the dynamics. Additionally, inflation also affects the flow of capital to a developing country. Important to note, the share of exports of goods and services combined in GDP stood at 21.4% in FY 2021-22.

➤ **What next for India?**
- Global demand is not looking good from markets like the EU and the US. For the next two-three months, the demand scenario doesn't look very optimistic, the government will initiate inter-ministerial talks to find ways to diversify and sustain the exports momentum.

1

- Likewise, a global slowdown, especially in the U.S. which is our major trading partner would have implications on demand for our merchandise exports. High base effect may also reflect on growth numbers. However, services exports will hold the fort. Imports may remain low as commodity prices and INR value stabilise. However, quicker recovery may add pressure on import demand.
- As for the concern about lower imports, the non-crude non-jewellery segment that has grown by 15% in the last fiscal — higher than the long-term average growth. This shows that domestic demand remains robust. A cyclical correction should not be seen as a slowdown. Lower imports have been because of stable oil prices, reducing our imports bills.

LAW & POLICY

❖ **Adverse possession: What is it, what has the Law Commission said about it**

➢ **Context:** "There is no justification for introducing any change in the law relating to adverse possession," the 22nd Law Commission has said in its recent report.

➢ The Law Commission, headed by former Chief Justice of Karnataka High Court Ritu Raj Awasthi and comprising retired Kerala High Court judge KT Sankaran, said in its 280th report that there is no reason for increasing the period of limitation. However, two of its ex officio members filed a dissent note stating that the law does not stand judicial scrutiny and "promotes false claims under the colour of adverse possession".

➢ **What is Adverse Possession?**
- Adverse possession is the legal process whereby a non-owner occupant of a piece of land gains title and ownership of that land after a certain period of time.
- The concept of adverse possession stems from the idea that land must not be left vacant but instead, be put to judicious use. Essentially, adverse possession refers to the hostile possession of property, which must be "continuous, uninterrupted, and peaceful."

➢ **Legality of Adverse Possession in India:**
- The concept originally dates back to 2000 BC, finding its roots in the Hammurabi Code.
- The Hammurabi code of laws, a collection of 282 rules, established standards for commercial interactions and set fines and punishments to meet the requirements of justice. It is a Babylonian legal text composed during 1755–1750 BC.
- First legal statute was the Statute of Westminster, 1275 in England.
- The first attempt to bring the law of limitation to India was the "Act XIV of 1859", which regulated the limitation of civil suits in British India.
- After the passage of the Limitation Act in 1963, the law on adverse possession underwent significant changes.

➢ **What Provisions Did the Limitation Act, 1963 Bring With It?**
- **The 1963 Act fortified the position of the true owner of the land**, as he now had to merely prove his title, while the burden of proof of adverse possession shifted to the person claiming it.
- Under the Limitation Act, 1963, any person in possession of private land for over 12 years or government land for over 30 years can become the owner of that property as laid down in Articles 64, 65, 111, or 112 of the 1963 Act, relating to suits for possession of immovable property.
- According to Article 65 of Schedule I of the 1963 Act, a person in adverse possession of immovable property acquires title to that property. However, the possession must be open, continuous, and "in defiance of the title of the real owner for twelve years." Similarly, Article 64 governs suits for possession based on previous possession and not on title.
- Meanwhile, Article 112, which applies to government property, mandates a requirement of 30 years for granting a title by adverse position. Further, Article 111 says that the limitation period for the State will be 30 years from the date of dispossession for land belonging to a private person where any public street or road or any part of it has been dispossessed and no suit has been moved for its possession "by or on behalf of any local authority".

➢ **Supreme Court on Adverse Possession:**
- In the 2004 Apex Court ruling in Karnataka Board of Wakf v Government of India, the court dealt with the ingredients of adverse possession. According to the observations made by former SC judge S. Rajendra Babu in the case, "A person who claims adverse possession should show:
  a) on what date he came into possession,
  b) what was the nature of his possession,
  c) whether the factum of possession was known to the other party,
  d) how long his possession has continued, and
  e) his possession was open and undisturbed.
- However, in a series of decisions, the SC recommended that the government seriously consider the issue of "adverse possession" and make suitable changes.

2

➢ **Why Did the Supreme Court Suggested Changes?**
- A two-judge SC bench, in its 2008 ruling in Hemaji Waghaji Jat v. Bhikhabhai Khengarbhai Harijan and Others, while dealing with Article 65 of the Schedule of the Limitation Act, 1963, observed that the law of adverse possession "ousts an owner on the basis of inaction within limitation" and is "irrational, illogical, and wholly disproportionate".
- The court said that the law as it exists is extremely harsh for the true owner and a windfall for a dishonest person who has illegally taken possession of the property.
- Adding that the law should not benefit the illegal action of a "rank trespasser" who had wrongfully taken possession of the true owner's property, the court said that it also "places a premium on dishonesty".
- Emphasising the "urgent need" for "a fresh look regarding the law on adverse possession", the court recommended the government "to seriously consider and make suitable changes in the law of adverse possession".
- Following this, on December 19, 2008, a reference was made to the Law Commission by the Ministry of Law and Justice, requesting it to examine the matter and furnish its report on the same.

➢ **Law Commission's Opinion on Adverse Possession:**
- The 22nd Law Commission, in its report, has said that there is no justification for introducing any change in the law relating to adverse possession.
- The Law Commission's rationale is that "society will benefit from someone making use of land the owner leaves idle," and "persons who come to regard the occupant as owner may be protected."
- The report said that the original title holder who neglected to enforce his rights over the land cannot be permitted to re-enter the land after a long passage of time.
- However, two of its ex officio members filed a dissent note stating that the law does not stand judicial scrutiny and "promotes false claims under the colour of adverse possession".

➢ **What Did the Dissent Note Say?**
- Citing troubles that true owners have been subjected to, the note said that the already overburdened machinery of the courts is further saddled with avoidable work, much to the misery of the litigants.
- "If the law of adverse possession is struck off from the Limitation Act it will not hinder anybody's right nor will it cause any neglect of land resources," the note reads.
- The fact that land prices are skyrocketing in both rural and urban areas defeated the Commission's argument that land is not put to proper use, the note said.
- "In an over-populous country like India where land is scarce, the law of adverse possession only promotes false claims under the colour of adverse possession which ultimately does not stand judicial scrutiny," the note contended.

GOVERNANCE

❖ **National Institutional Ranking Framework (NIRF)**
➢ **Context:** The National Institutional Ranking Framework (NIRF), under the Union Ministry of Education, announced the India Rankings 2023 of higher education institutions. The Indian Institute of Technology (IIT)-Madras in Chennai remained the best educational institution in overall rankings for the fifth consecutive term. The Indian Institute of Science (IISc), Bengaluru ranked as the best university in the country for eight years in a row.

➢ **Highlights of the NIRF 2023:**
- **Overall rankings:** The IIT-Madras remained the best educational institution in overall rankings for the **fifth consecutive term**. It has also been ranked the **best engineering college for the eighth consecutive year** (from 2016 to 2023).
- **Best university:** The Indian Institute of Science (IISc), Bengaluru ranked as the best university in the country **for eight years in a row.** It stood first in **'Research Institutions'** category too, for the third consecutive year
- **Best college:** Miranda House, Delhi is ranked the best college for the seventh consecutive year.
- **Top management institute:** Indian Institute of Management (IIM), Ahmedabad is the top management institute for the fourth consecutive year.
- **Top in pharmaceutical studies:** National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad is ranked number one (first time) for pharmaceutical studies.
- **Best medical and dental college:** The AIIMS, Delhi is ranked the best medical college (for the sixth consecutive year), and Saveetha Institute of Medical and Technical Sciences, Chennai is the top dental college.
- **Best law college:** National Law School of India University, Bengaluru is ranked the best law college in the country for the sixth consecutive year.

3

- **First in Architecture subject:** IIT-Roorkee stood at first position in Architecture subject.
- **Agriculture sector:** Indian Agricultural Research Institute, New Delhi took the top slot in 'Agriculture and Allied Sectors'.

Ministry of Education
Government of India

INDIA RANKINGS 2023
National Institutional Ranking Framework

nirf

Universities

Indian Institute of Science, Bengaluru	1
Jawaharlal Nehru University, New Delhi	2
Jamia Millia Islamia, New Delhi	3
Jadavpur University Kolkata	4
Banaras Hindu University, Varanasi	5
Manipal Academy of Higher Education, Manipal	6
Amrita Vishwa Vidyapeetham, Coimbatore	7
Vellore Institute of Technology, Vellore	8
Aligarh Muslim University, Aligarh	9
University of Hyderabad, Hyderabad	10

➢ **About The National Institute Ranking Framework (NIRF):**
- The NIRF was launched by the Ministry of Human Resource Development (MHRD now **Ministry of Education**) in **2015** (first edition came in 2016). This framework, which is the **first-ever effort** by the Government of India, **outlines a methodology** to rank Higher Educational Institutions across the country. While participation in the NIRF was initially voluntary, **it became mandatory** in 2018 for all government-run educational institutions.

➢ **Ranking parameters:**
It considers 5 parameters for its ranking-
1. Teaching, Learning & Resources
2. Research and professional Practice
3. Graduation Outcomes
4. Outreach and Inclusivity
5. Perception

- **Categories:**
  - ✓ Initially, NIRF ranked best institutions across 11 categories - overall national ranking, universities, engineering, college, medical, management, pharmacy, law, architecture, dental and research.
  - ✓ With the addition of 2 new categories (Innovation and Agriculture & Allied Sectors), the existing portfolio of India Rankings has **increased to 13 categories.**

PRELIM FACTS

1. Varunastra
➢ **In News:** Indigenously designed and developed heavy weight torpedo (HWT) Varunastra was successfully test-fired with a live warhead against an undersea target, by the Indian Navy.
- Varunastra is a ship-launched anti-submarine torpedo having low drift navigational systems, acoustic homing, advanced acoustic counter measure features, autonomous guidance algorithms, insensitive munitions warhead and a GPS-based recovery aid for practice torpedo.
- Varunastra was designed and developed by Vizag-based Naval Science and Technological Laboratory (NSTL) under the Defence Research and Development Organisation (DRDO) and is manufactured by Bharat Dynamics Ltd (BDL).
- According to BDL, the torpedo, with a maximum speed of 40 knots and a maximum operating depth of 600 m, has a long range with multi-manoeuvering capabilities and is capable of acoustic homing with a wide look angle capable of tracking silent targets. It features autonomous advanced guidance algorithms and has drift navigational systems over long endurance.

2. Exercise Ekatha
➢ **In News:** Indian Navy divers and marine commandos are in the Maldives for the sixth edition of Exercise Ekatha with Maldives National Defence Force (MNDF) . The Annual Exercise is conducted between the two forces to enhance interoperability in diving and special operation.
➢ **About India-Maldives relation:**

4

- India was among the first to recognise Maldives after its independence in 1965 and to establish diplomatic relations with the country.
- India established its resident High Commissioner in Maldives in 1980.
- Maldives opened a full fledged High Commission in New Delhi in November 2004, at that time one of its only four diplomatic missions worldwide.
- India and Maldives signed a trade agreement in 1981, which provides for export of essential commodities.
- Since 1988, defence and security have been major areas of cooperation between India and Maldives.
- India provides the largest number of training opportunities for Maldivian National Defence Force (MNDF), meeting around 70 per cent of their defence training requirements.
- In 2016, the two countries also signed a comprehensive action plan to consolidate defence partnership.
- Exercise Ekuverin: The Indian Army and the Maldives National Defence Forces have been conducting Exercise Ekuverin meaning 'Friends' in the Dhivehi language since 2009.

3. Van Dhan Vikas Kendras

➤ **In News**: Around 120 tribal women members of the Odisha state's Van Dhan Vikas Kendras prepare laddus, cakes, jam, toffees, pickles, squash, pakodas and biscuits using dry mahua flowers and supply them in the local market.

➤ **About Van Dhan Vikas Kendras:**
- The Ministry of Tribal Affairs and Tribal Cooperative Marketing Development Federation of India (TRIFED) launched the Van Dhan scheme in 2018 to improve tribal income through the value addition of tribal products.
- The Van Dhan Vikas Kendra Clusters provide the Van Dhan Vikas Kendras economies of scale, livelihood and market linkages, as well as entrepreneurship opportunities to Tribal forest gatherers.

➤ **Key Facts about Mahua Tree**
- It is mainly cultivated or harvested in the wild in Southern Asia for its edible flowers and oil seeds.
- It is commonly known as madhūka, madkam, mahuwa, Butter Tree, mahua, mahwa, mohulo, Iluppai, Mee or vippa chettu.
- It is a frost resistant species that can grow in marginal areas of dry tropical and subtropical forests up to an altitude of 1200-1800 m.
- It can be found scattered in pastures, in crop fields in central India, and on rivers banks in semi-evergreen forests.
- It grows well where annual rainfall is between 500 mm to 1500 mm, and where temperatures are in the range of 2-46°C.
- It requires loamy or sandy-loam soils with good drainage and also occurs on shallow stony, clayey and calcareous soils.

4. Kerala Fibre Optical Network (KFON)

➤ **In News:** The Kerala government Monday officially launched the Kerala Fibre Optical Network (KFON), one of its flagship projects envisaged during the first term of Chief Minister Pinarayi Vijayan.
- Through KFON, Kerala, which was the first state to declare the right to internet as a basic right, aims to reduce the digital divide by ensuring high speed broadband internet access to all houses and government offices. It is also intended to give a fillip to e-governance and accelerate Kerala's journey towards being a knowledge-based economy.
- The aim of the KFON is to create a core network infrastructure (information highway) with non-discriminatory access to all service providers, and to ensure a reliable, secure and scalable intranet connecting all government offices and educational institutions.

➤ **About KFON:**
- Basically, KFON will act as an infrastructure provider. It is an optical fibre cable network of 30,000 kms, with 375 Points-of-Presence across Kerala. The KFON infrastructure will be shared with all service providers, including cable operators. While KFON will do the cable work for government offices, individual beneficiaries will have to depend on private, local internet service providers.
- In the first stage of KFON, the government wants to provide connectivity to 30,000 government offices and 14,000 BPL families in the state. As on June 5, connectivity has been provided to 17,412 government offices and 2,105 houses, and cable network has been laid down to give connection to 9,000 houses.
- KFON promises an internet speed from 10 mbps to 10 Gbps. The quality of mobile phone calls is also expected to improve. Once KFON is connected to mobile towers in Kerala, it will speed up transition to 4G and 5G.

5

- The Rs 1,611-crore KFON project is a joint venture of Kerala State Electricity Board (KSEB) and Kerala State IIT Infrastructure Limited.The project implementation was taken up by a consortium led by Central PSU Bharat Electronics Limited.
- Kerala State Information Technology Infrastructure Ltd (KSITIL) would be responsible for the operations and maintenance of the project, the infrastructure asset shall be owned by KSEBL. Bharat Electronics (BEL) is the system integrator for the KFON project.
- The project is fully funded by Kerala Infrastructure Investment Fund Board (KIIFB), the state government agency for funding infrastructure projects.

5. **Lavender Festival**

➢ **In News:** Recently, the Union Minister of Science & Technology inaugurated the Lavender festival at Bhaderwah in the Jammu region.

- Lavender is a flowering plant in the mint family that's easily identified by its sweet floral scent. It's believed to be native to the Mediterranean, the Middle East, and India.

➢ **About Lavender Festival:**

- It is the 2nd year of the lavender revolution. Bhaderwah a town in Jammu has emerged as the Lavender capital of India and an Agri StartUp destination.
- The Council of Scientific & Industrial Research- Indian Institute of Integrative Medicine (CSIR-IIIM) in supporting farmers in the cultivation of Lavender in the Bhaderwah, Doda district, J&K under CSIR-Aroma Mission.

➢ **Key facts about CSIR-Aroma Mission:**

- It is a flagship project of CSIR under which Lavender cultivation is being promoted in the temperate regions of J&K.
- It was launched under the Ministry of Science and Technology.
- The project aims to increase the income of small and marginal farmers and develop agriculture-based Startups.

ANSWER WRITTING

Q. Elucidate the ethical issues that arise with the use of Artificial Intelligence tools. Suggest some measures to address these concerns to ensure that such tools are used responsibly and ethically.

Artificial Intelligence (AI) involves the development of intelligent machines that can complete tasks without requiring explicit instructions from humans, such as visual perception, speech recognition, decision-making, and natural language processing. AI systems are designed to learn from data and experiences and to adapt to new situations and tasks, making them highly flexible and versatile. It is being used in various applications, including autonomous vehicles, personalized healthcare, fraud detection, virtual assistants, and smart homes.

But along with the benefits of AI come ethical and social challenges. The World Economic Forum has highlighted several ethical issues surrounding artificial intelligence (AI), including:

- Bias in decision-making: AI systems can perpetuate and even amplify biases based on the data used to train them. For example, facial recognition technology has been criticized for having higher error rates for people of colour and women.
- Job displacement: As AI technology advances, it can automate tasks previously performed by humans, leading to job displacement and economic inequality.
- Responsibility and accountability: Autonomous AI systems raise questions about responsibility and accountability. For example, if an autonomous vehicle causes harm, who is responsible for the accident?
- Privacy concerns: The collection and analysis of large amounts of personal data for AI can raise privacy and surveillance concerns. E.g. mobile phone apps that use AI to track individuals' movements during a pandemic may raise human rights concerns with respect to privacy.
- Transparency: The lack of transparency in AI decision-making processes can lead to suspicion and mistrust of the technology.
- Discrimination: AI can be used to discriminate against individuals or groups based on characteristics such as race or gender. For E.g. AI-based hiring systems might discriminate against candidates with specific names or demographic backgrounds, perpetuating existing biases.
- Human control: The potential loss of human control over AI systems raises questions about their autonomy and decision-making processes.
- Autonomous weapons: The development of autonomous weapons raises ethical concerns about accountability and the potential for these weapons to act in ways that are not aligned with human values.
- Inequality: The development and deployment of AI systems may exacerbate societal inequalities. E.g. AI-powered educational tools may be inaccessible to low-income or underserved communities, creating disparities in educational outcomes.

6

- **Impact on human well-being:** AI systems have the potential to impact human well-being in both positive and negative ways, such as in healthcare or the workplace. E.g. in healthcare, AI is being used to develop more accurate medical diagnoses, personalize treatment plans, develop new drug therapies and track and predict disease outbreaks. In the field of employment, AI can automate repetitive and dangerous tasks, improving workplace safety.

Measures to address the issues:

- **Establish clear ethical guidelines:** IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems has developed ethical guidelines for AI, which aim to promote transparency, accountability, and justice in the use of AI.
- **Address issues of bias and discrimination:** Facial recognition technology can have higher error rates for certain groups of people, so it is important to train models using diverse datasets and avoid perpetuating existing biases.
- **Ensure data privacy and security:** European Union's General Data Protection Regulation (GDPR) sets stringent rules for data protection and gives individuals control over their personal data.
- **Foster collaboration:** Partnership on AI brings together academics, researchers, and industry leaders to develop best practices for the development and deployment of AI.
- **Regular assessments:** An audit of an AI system can identify any biases or ethical issues that need to be addressed.
- **Promote transparency and explainability:** IBM's "AI Fairness 360" toolkit can help developers mitigate bias in machine learning models and improve transparency.
- **Promote education and awareness:** Google has developed an educational program called "Machine Learning Crash Course" to teach people about AI and machine learning.

Thus, the ethical implications of AI cannot be ignored, and there is a need for continued discussion, research, and regulation to ensure that AI is developed and deployed in a way that aligns with human values and promotes the well-being of society. Ultimately, the ethical issues raised by AI are complex and multifaceted, requiring ongoing engagement from researchers, policymakers, and the general public.

MCQs

1. With reference to the National Institutional Ranking Framework, consider the following statements:
    1. The ranking is given to only those institutions which are involved in scientific research and development.
    2. It uses inclusivity and perception as one of the parameter for ranking the institutions.
    Which of the statements given above is/are correct?
    a) 1 Only
    b) 2 Only
    c) Both 1 and 2
    d) Neither 1 nor 2

2. In which context the term "ATLAS and CMS" are often mentioned in news?
    a) Indigenous Navigation System
    b) Cloud Computing
    c) Particle Detector
    d) Heart Transplantation Device

3. Consider the following statements:
    1. Adverse possession refers to the hostile possession of property, which must be continuous, uninterrupted, and peaceful.
    2. Right to Property is a fundamental right in the Constitution of India.
    3. Right to Property is a Constitutional right in the Constitution of India.
    Which of the statements given above is/are correct?
    a) 2 and 3 only
    b) 1 and 3 only
    c) 2 only
    d) 1, 2 and 3

4. Consider the following statements, with respect to Commission for Railway safety
    1. It is a statutory body under the ministry of civil aviation.
    2. It is safety controlling authority for the working and operation of Government and Company managed railways.
    3. It is chaired by the railway minister.
    Select the correct answer using the code given below.
    a) 1 & 2 only
    b) 2 & 3 only

7

c) 1 & 3 only

d) 1, 2 & 3

5. Kakhovka dam was in news recently. Consider the following statements regarding the Dam.
   1. Kakhovka dam supplies water to the Crimean Peninsula
   2. Kakhovka dam is built over Dnipro River which supplies water to Zaporizhzhia nuclear plant
   Which of the statements given above is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

6. With reference to the Aroma Mission, consider the following statements:
   1. It is a flagship initiative of the Council of Scientific & Industrial Research.
   2. It aims to increase the income of small and marginal farmers and develop agriculture-based Startups.
   Which of the statements given above is/are correct?
   a) 1 Only
   b) 2 Only
   c) Both 1 and 2
   d) Neither 1 nor 2

7. With reference to the Mahua Tree, consider the following statements:
   1. It is native to the evergreen forests of South Asia.
   2. It requires sandy-loamy soil with good drainage for its growth.
   Which of the statements given above is/are correct?
   a) 1 Only
   b) 2 Only
   c) Both 1 and 2
   d) Neither 1 nor 2

8. Twenty-five crew members and 152 of the 2,144 passengers onboard the 2023 voyage of the Celebrity Summit recently reported norovirus symptoms. Consider the following statements regarding Norovirus:
   1. It is a common and highly contagious virus that causes nausea, vomiting and diarrhea.
   2. No vaccines are currently available to prevent norovirus.
   Which of the statements given above is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

9. Exercise Ekatha, is a bilateral defence exercise between Indian and which one of the following countries?
   a) Nepal
   b) Maldives
   c) Sri Lanka
   d) Malaysia

10. Goa Power Minister recently said that bitumen used in road construction is a major cause of pollution. Consider the following statements regarding Bitumen:
    1. It is a dense, highly viscous, petroleum-based hydrocarbon.
    2. It is obtained only as a residue of the distillation of crude oil and is not found naturally.
    3. Bitumen is known for its waterproofing and adhesive properties.
    Which of the statements given above is/are correct?
    a) 1 and 2 only
    b) 2 and 3 only
    c) 1 and 3 only
    d) 1, 2 and 3

8