



INSIGHTSIAS

SIMPLIFYING IAS EXAM PREPARATION



INSIGHTS IAS - WEEKLY COMPILATION

PYQ INITIATIVE

“PRACTICE TO PROGRESS”

30 JANUARY - 04 FEBRUARY 2023

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1. CONSOLIDATED FUND OF INDIA

Q. The expenditure which can be charged on the Consolidated Fund of India: [IES 2016]

- is discussed and voted by the Parliament.
- can be discussed but is not put to before Parliament.
- can be neither be discussed nor voted by the Parliament.
- is discussed and voted by the Lok Sabha only.

SOLUTION

Ans: B

Exp:

CHARGED EXPENDITURE:

- The charged expenditure is NON-VOTABLE by the Parliament, that is, it can ONLY BE DISCUSSED BY THE PARLIAMENT.
- Charged Expenditure refers to non-votable expenditures from India's consolidated fund while presenting the annual budget.
- The government of India cannot spend any money from the Consolidated Fund unless and until it is approved by the Lower House of Parliament or the State Assemblies.
- However, there are some charged expenditures that do not require a vote and are charged from the consolidated fund, pursuant to Article 112(3) and Article 202 (3) of the Indian Constitution.

THE LIST OF THE CHARGED EXPENDITURE IS:

- Emoluments and Allowances of The President.
- Salaries and allowances of the Chairman and the Deputy Chairman of the Rajya Sabha and the Speaker and Deputy Speaker of the Lok Sabha.
- Salaries, allowances, and pensions of the SC judges.
- Pensions of the judges of the HCs;(Note- Salaries and Allowances of HC judges are 'charged' on the Consolidated Fund of State.)
- Salary, allowances, and pension of the CAG.
- Salary, allowances, and pension of the Chairman and members of the UPSC.
- The debt charges for which the Govt is liable.
- Any sum required to satisfy any judgment, decree, or award of any court, tribunal.

- Any other expenditure declared by the Parliament to be so charged.

Charged Expenditure



- ☞ Mentioned in Article 112 (3) and Article 202 (3)
- ☞ It does not require vote of Lok Sabha and is charged from Consolidated Fund of India
- ☞ It includes :
 - ◆ Salary, allowance and Pension of President, Governors, speaker and deputy speaker of Lok Sabha, CAG, Supreme Court and High Court
 - ◆ Interest and other debt related charges of government
 - ◆ Any sum required to satisfy any court judgment pertaining to government

2. ENVIRONMENT: INTERNATIONAL CONVENTIONS

Q. Basel Convention provides

[IES 2020]

- a. Indian standards for pollution measurement and prevention.
- b. International guidelines to control the transboundary movements of hazardous wastes between different countries.
- c. Indian standards for the disposal of municipal and Industrial wastes.
- d. International standards to categorize pollution in air and wastewater.

SOLUTION

Ans: B

Exp:

BASEL CONVENTION

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is a comprehensive treaty that was adopted in 1989 by the Conference of Plenipotentiaries.

It aims to protect the human environment from the adverse effects of hazardous waste that is generated, managed and disposed of in the world community.

BASEL CONVENTION: FEATURES

- The Basel Convention (1989), which currently has 189 parties which includes 53 signatories.
- East Timor, Fiji, Grenada, Haiti, San Marino, Solomon Islands, South Sudan, Tuvalu, and the United States are the nine UN members that aren't parties to the treaty.
- India is a party to the Basel Convention as well. The Basel Convention was signed by India in June 1992, and it went into effect on September 22, 1992.

PRIOR CONSENT APPROVAL PROCEDURE: In order to control the transboundary transport of hazardous and other wastes, the Prior Consent Approval procedure is used.

NON-PARTIES: Non-parties are not permitted to transport hazardous waste to or from one another unless expressly permitted. According to Basel Convention, such conveyance is prohibited.

DOMESTIC LEGISLATION: The treaty requires that the member countries establish domestic legislation for both the prevention and the punishment of such hazardous waste trafficking.

OBJECTIVES OF BASEL CONVENTION:

- To safeguard human health and the environment from the harmful effects of hazardous wastes.
- It aims to safeguard the environment for people by establishing the appropriate controls and regulations over hazardous waste produced by the global society.
- This convention also helps Least developed countries (LDCs) manage their generated hazardous garbage and other disposable waste in an environmentally sound manner.
- By reducing the volume and toxicity of trash that each nation produces, it also seeks to ensure the environmentally sound management of other nations.
- Reduced hazardous waste generation and promotion of environmentally sound hazardous waste management, regardless of disposal location.
- Prohibition of transboundary movement of hazardous wastes except where it is perceived to be in accordance with environmentally sound management principles.

- A regulatory system that applies when transboundary movements are permitted.

Wastes covered by Basel Convention

- Toxicity
- Corrosivity
- Ignitability
- Reactivity
- Eco-toxicity



- Clinical wastes.
- Mining wastes.
- Industrial wastes.
- Agricultural wastes.
- End of life equipments and commodities
- (asbestos, PCB equip., stockpiles, batteries, e-wastes, ships, etc.)



POISON
Pesticides, Chemicals
Rat poison, Bleach
Pharmaceuticals
Cleaning fluids



EXPLOSIVE
Aerosols
Propane cylinders



CORROSIVE
Batteries
Drain cleaners
Oven cleaners



FLAMMABLE
Paints, Solvent
Oils, Gasoline
BBQ starter

■ Currently addresses 27 specific categories of waste and 18 waste streams (Source :UNEP ,2005)

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3. GEOGRAPHY: TIDAL RANGE IN THE WORLD

- Q. The largest tidal range in the world is** **[IES 2022]**
- Bay of Fundy
 - Ungava Bay
 - Bristol Channel
 - Turnagain Arm of Cook Inlet

SOLUTION

Sol: A

Exp:

Tides are considered the heartbeat of our planet's oceans.

They are the periodic rise and fall of the earth's bodies of open water, and are a result

SOLUTION

of the gravitational pull of the moon and sun on the earth, as well as the perpetual spinning rotation of the earth itself.

JET STREAM MAX: BAY OF FUNDY: THE HIGHEST TIDES IN THE WORLD

- **BAY OF FUNDY** Located in Canada, between the provinces of Nova Scotia and Brunswick, sits the Bay of Fundy, home to the world largest tidal variations.
- While the earth's average height variation in sea level from tides is three feet, the water level near Wolfville, in Nova Scotia's Minas Basin can be as much as 53 feet (16 meters) higher than at low tide.
- Tides along the Atlantic coast are basically semi-diurnal, meaning there are two significant high tides every 24 hours.
- Along the Atlantic coast side of Nova Scotia Atlantic coast, outside of the Bay of Fundy, the tidal range is from four to eight feet (1½-2½meters) and without much variation in the time of the high and low tides.

Why is there such a large variation in the tide inside of the Bay of Fundy versus outside?

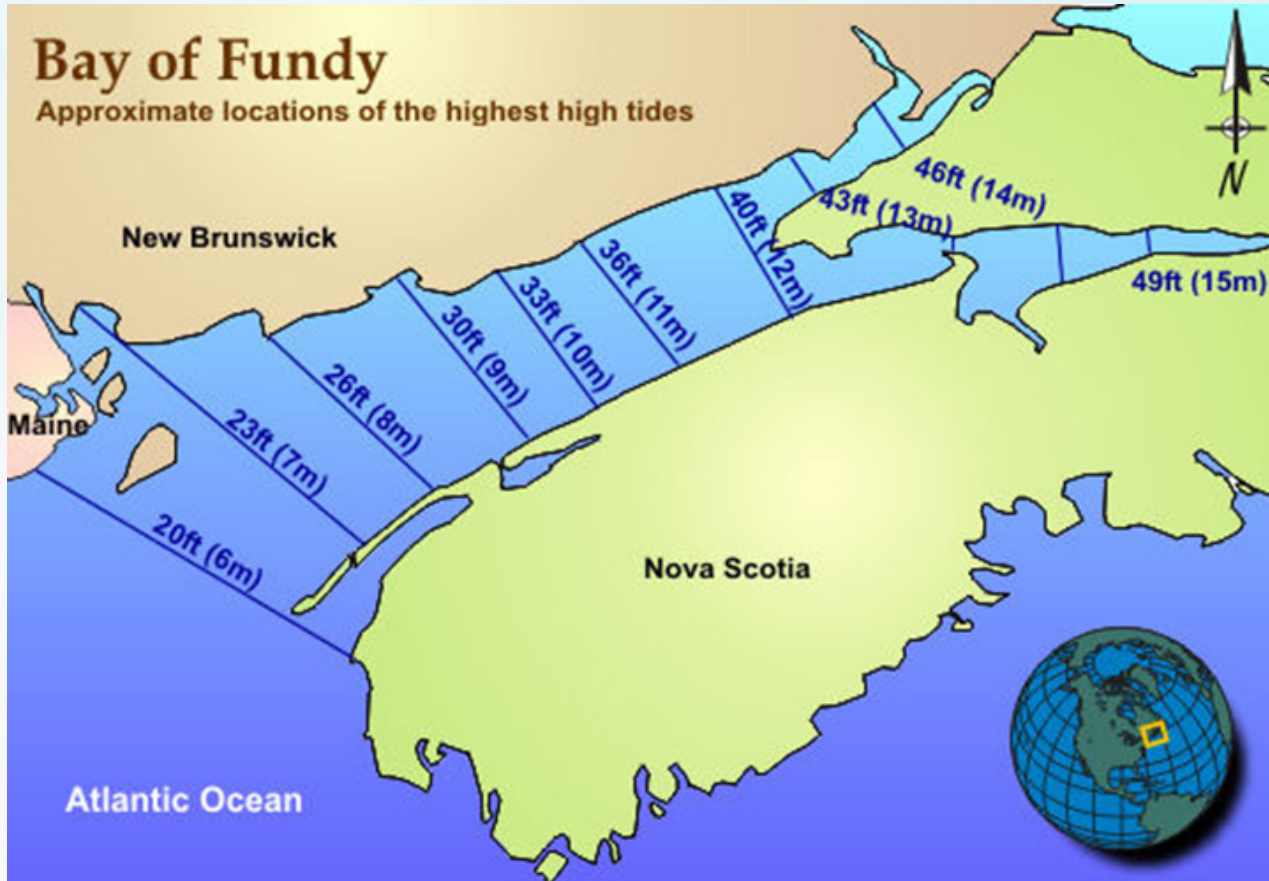
- It is because of the **FUNNEL SHAPE** and **DEPTH OF THE BAY**.
- The huge volume of tidal water flowing through of the bay four times daily has created some unique features such as the "Old Sow" whirlpool (the largest whirlpool in the Western Hemisphere).
- The "Reversing Falls" (series of rapids on the Saint John River that reverse direction with each flood and ebb tide) and the Hopewell Rocks (rocky islands at high tide and a place where you can walk the beach and explore these formations along with the many caves cut into the cliff walls at low tide).

ABOUT NEAP & SPRING TIDES

- The Sun also exercises a gravitational attraction on the earth, which causes a secondary, less powerful, tidal effect (solar tide).
- Approximately twice a month, the sun, moon and earth will more or less align to form either a full moon or a new moon.
- During each phase of a new moon or a full moon, the two tidal effects strengthen one another, resulting in higher high tides and lower low tides. These extremes are referred to as "spring tides", a term derived from the springing up of the water.
- Conversely, twice each month when the sun and moon are at right angles to the earth and opposing each other (first and third quarter moons), the tidal ranges

are less than normal and are defined as “neap tides”.

- Because of these periodic fluctuations in gravitational pulls from the sun and moon, the height of the tides varies from day to day.



4. IR: NAVAL EXERCISE

Q. ‘Naseem-Al-Bahr’ is a bilateral naval exercise between India and [N D A 2020]

- a. United Arab Emirates
- b. Iran
- c. Saudi Arabia
- d. Oman

SOLUTION

Ans: D

Exp:

NASEEM AL BAHR-2022 BILATERAL NAVAL EXERCISE

- 13th edition of bilateral exercise between the Indian and the Royal Oman navies,

Naseem Al Bahr-2022, commenced off the coast of Oman.

- The exercise is being conducted in two phases: the Harbour Phase and the Sea Phase.
- The Indian Navy's guided missile frigate Trikand and Offshore Patrol Vessel Sumitra, with their integral helicopters, and the maritime patrol aircraft, Dornier, are participating in the exercise.

AIMS TO INTENSIFY MARITIME EXCHANGES:

- The exercise facilitates operational-level interaction between the two navies to foster mutual cooperation and enhance good order at sea.
- The exercise also aims to strengthen the ancient maritime and cultural linkages between India and Oman.
- Friendly sports fixtures were conducted amongst participants from the two navies on the side-lines of the conference.
- The exercise aims to intensify maritime exchanges between the two countries and enhance maritime security in the region.

INDIA AND OMAN:

- India has ancient maritime tradition and maritime interaction with Oman dates back to over 4000 years BC.
- Bilateral relations between both countries were formally established with signing of 1953 Indo-Oman Treaty of friendship, Navigation and Commerce. It was first between India and Arab country.
- Since then, bilateral naval exercises have contributed to strengthening of bilateral ties between both countries. The first exercise Indian Navy with Royal Navy of Oman was conducted in 1993.

INDIA'S OTHER BILATERAL MARITIME EXERCISES:

- Thailand: India-Thailand Coordinated Patrol (Indo-Thai CORPAT)
- Indonesia: Samudra Shakti
- Singapore: Singapore-India Maritime Bilateral Exercise (SIMBEX)
- Qatar: Zair-Al-Bahr
- Bangladesh: Bongosagar Exercise
- Sri Lanka: Sri Lanka-India Naval Exercise (SLINEX)
- Japan: Japan Maritime bilateral exercise (JIMEX), Maritime Partnership Exercise (MPX)
- France: VARUNA



5. S&T SPACE: INDIAN REMOTE SENSING (IRS) SATELLITES

**Q. In which of the following activities are Indian Remote sensing (IRS) satellites used?
[UPSC CSE 2015]**

1. Assessment of crop productivity
2. Locating ground water resources
3. Mineral exploration
4. Telecommunications
5. Traffic studies

Select the correct answer using the code given below

- a. Only 1, 2 and 3
- b. Only 4 and 5
- c. Only 1 and 2
- d. 1,2,3,4 and 5

SOLUTION

Ans: A

Exp:

INDIAN REMOTE SENSING (IRS) SATELLITES

India's Remote Sensing starts following the successful demonstration flights of Bhaskara-1 and Bhaskara-2 satellites launched in 1979 and 1981, respectively, with the development of indigenous Indian Remote Sensing (IRS) satellite program.

Indian Remote Sensing (IRS) satellite system was commissioned with the launch of IRS-1A, in 1988.

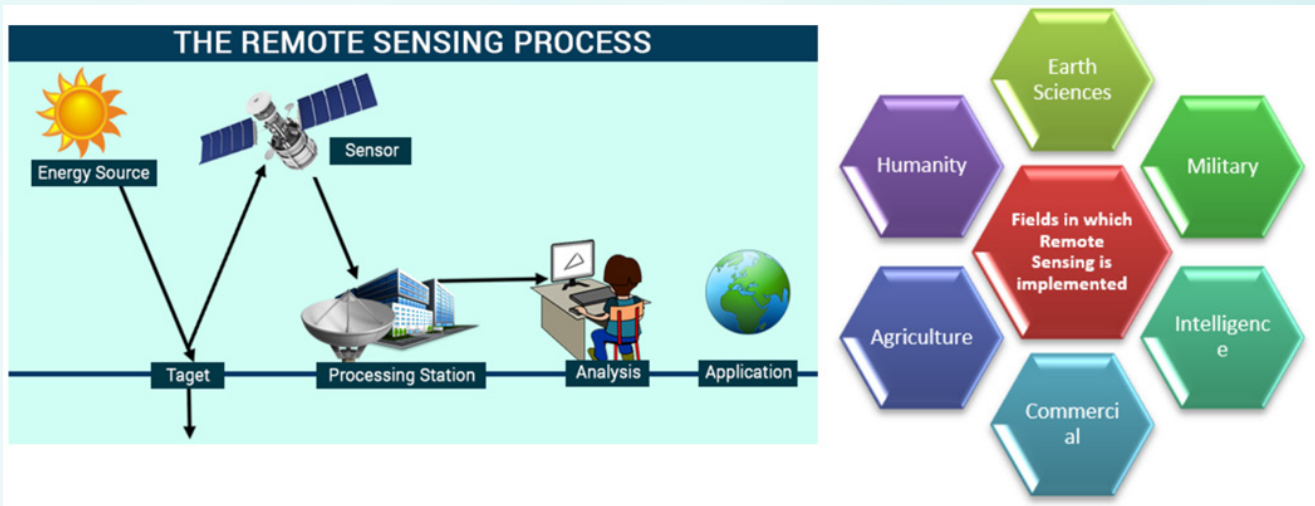
- Indian Remote Sensing satellite is basically used to study national economy in areas of agriculture, water resources, forestry, ecology, geology, water sheds, marine fisheries and coastal management.
- Indian Remote Sensing satellite is not applied in telecommunications or in traffic studies as for these purposes geo-stationary satellite is used.
- The Indian Remote Sensing satellite system has one of the largest constellations of remote sensing satellites in operation in the world today.
- IRS series of satellites provide data in a variety of spatial, spectral and temporal resolutions.
- With these and the planned thematic series of satellites, such as Cartosat-3, Megha Tropiques, SARAL, and Insat-3D.

WHAT IS ABOUT REMOTE SENSING MEANS?

- Remote sensing can be defined as a technology of acquiring data without making the physical contact with the object.
- It is a technology which is in contrast to the on-site observation of the data. It is applied to Earth and other planets also.
- It has a wide variety of uses and is being augmented with other technologies to get better results.
- Due to wide variety of its applications, it is a major technology which is used by almost all the countries in the world in one or the other way.
- Since its inception a number of technological advancements have also taken place thus increasing its usage.

There are three essential elements for Remote Sensing:

- A platform to hold the instrument
- A target or object
- An instrument or sensor



6. GENERAL SCIENCE: ORGANISMS

Q. The organisms that prefer high salt concentration habitats refer to as [CAPF 2022]

- a. Alkaliphiles
- b. Calcifuges
- c. Halophiles
- d. Nitrophiles

SOLUTION

Ans: C

Exp:

HALOPHILES:

A living organism can live in the air, water, and soil and are cosmopolitan. The organisms that prefer high salt concentration habitats refer to as halophiles.

It belongs to the domain of archaea, bacteria, and eukaryotes. It is found in lakes and the dead sea. Brine shrimp is one of its examples.

HALOTOLERANT ORGANISMS:

- High salinity represents an extreme environment in which relatively few organisms have been able to adapt and survive.
- Most halophilic and all halotolerant organisms expend energy to exclude salt from their cytoplasm to avoid protein aggregation ('salting out').

- To survive the high salinities, halophiles employ two differing strategies to prevent desiccation through osmotic movement of water out of their cytoplasm.
- Both strategies work by increasing the internal osmolarity of the cell.
- The first strategy is employed by some archaea, the majority of halophilic bacteria, yeasts, algae, and fungi; the organism accumulates organic compounds in the cytoplasm—osmo-protectants which are known as COMPATIBLE SOLUTES.
- These can be either synthesised or accumulated from the environment.

ALKALIPHILES:

- These organisms can tolerate high alkaline pH. It survives at a pH above 9. It includes prokaryotes, eukaryotes, and archaea.
- Bacillus and streptomyces are examples. It is used to produce antibiotics.
- **CALCIFUGES:**
- These are the plants that live at low pH. It is grown in low- calcium soil.
- Tea is an example of a calcifuge plant. Tea boost our immune system.
- **NITROPHILES:**
- These are the plants that live in soil that is rich in nitrate. Cannabis sativa is an example of Nitrophiles.
- It is used to treat asthma and depression.

Halophiles are salt-loving organisms.

They live in ultra-salty water, like the Dead Sea and the Great Salt Lake in Utah. These bodies of water can be eight times saltier than the ocean.

One example of a halophile is the brine shrimp.

