

NATIONAL SERVICE SCHEME AWARDS

Recently, the President of India presented the National Service Scheme Awards for the year 2021-2022 at Rashtrapati Bhavan.



About the National Service Scheme Awards:

- These awards were instituted in the years 1993-1994. Since then, these awards are given away every year at various levels.
- Ministry of Youth Affairs & Sports, Department of Youth Affairs, confers every year the National Service Scheme Award.
- Objectives
 - To recognize outstanding contribution by NSS student volunteers, NSS Programme Officers and the Programme Coordinators in community service.
 - To encourage young NSS student volunteers to develop their personality through community service.
 - To encourage the Programme Officers and the Programme Coordinators of NSS for catering the needs of National Service Scheme through the NSS volunteers.
 - To motivate NSS Volunteers for continuing their selfless service towards community work.

What is the National Service Scheme?

- It is a Central Sector Scheme of the Government of India.
- It provides an opportunity to the student youth of the 11th & 12th Class of schools at +2 Board level and student youth of Technical Institution, Graduate & Post Graduate at colleges and University level of India to take part in various Government led community service activities & programmes.
- Motto: The motto of National Service Scheme is NOT ME BUT YOU
- Nodal Ministry: Ministry of Youth Affairs & Sports.

MEDICINE NOBEL 2023

Why in news?

- The 2023 Nobel Prize in Physiology or Medicine has gone to scientists **Katalin Kariko and Drew Weissman**.
- Their work enabled the development of mRNA vaccines against Covid-19.
- Their groundbreaking findings fundamentally changed the understanding of how mRNA interacts with immune system of humans.
- These findings contributed to the unprecedented rate of vaccine development during one of the greatest threats to human health in modern times.

mRNA

- Messenger RNA (abbreviated mRNA) is a type of single-stranded RNA involved in protein synthesis.
- Ribonucleic acid (abbreviated RNA) is a nucleic acid present in all living cells that has structural similarities to DNA.
- RNA has three main roles in the cell:
 - It carries the instructions from the DNA in the nucleus to the ribosomes where proteins are made in the cytoplasm of the cell.
 - RNA picks up specific amino acids from the cytoplasm of the cell and delivers them to the ribosomes where protein synthesis takes place.
 - It makes up around 50% of the structure of the ribosomes.
- The role of mRNA is to carry protein information from the DNA in a cell's nucleus to the cell's cytoplasm (watery interior).
- At this point, the protein-making machinery reads the mRNA sequence and translates each three-base codon into its corresponding amino acid in a growing protein chain.

mRNA Vaccine

- **Background**

- Traditionally, vaccines have depended on introducing dead or weakened viruses into the human body, so it can develop antibodies against them.
 - Thus, when the actual virus infects someone, their body is prepared to fight it.
- As technology evolved, instead of the whole virus, just a part of the viral genetic code, began to be introduced through vaccines.
- But the large-scale development of such vaccines requires cell culture (growing of cells under controlled conditions) and takes time.
- **Challenge during Covid-19 pandemic**
- During the Covid-19 outbreak, **time was of the essence** in finding a weapon against the deadly and fast-spreading virus.
- This is where mRNA technology proved crucial.
- **mRNA vaccine**
- Instead of putting an inactivated virus in the body to activate an immune response, vaccines using this technology use messenger Ribonucleic Acid, or mRNA, to deliver a message to the immune system.
- Genetically engineered mRNA can instruct cells to make the protein needed to fight a particular virus.

COUNTING DEATHS IN INDIA'S PRISONS

Why in News?

- Recently, the **Supreme Court Committee on Prison Reforms** found **suicide** to be the leading cause of 'unnatural' deaths — deaths other than ageing or illnesses — among Indian prisoners.

Classification of Prison Deaths in India:

- Prison deaths are labelled as '**natural**' or '**unnatural**' by the Prison Statistics India report published by the **National Crime Records Bureau** every year.
- **In 2021, a total of 2,116 prisoners died in judicial custody**, with almost 90% of cases recorded as natural deaths.
 - U.P. recorded the highest number of overall deaths, with **481** inmates dying in 2021.
- **Natural Deaths:**

- ‘Natural’ deaths account for ageing and illness. Illness has been further subcategorised into diseases such as heart conditions, HIV, tuberculosis, and cancer, among others.
- As the prison population swells, recorded natural deaths have increased from 1,424 in 2016 to 1,879 in 2021.
- **Unnatural Deaths:**
 - ‘Unnatural’ deaths are more diverse in classification, profiled as:
 - Suicide (due to hanging, poisoning, self-inflicted injury, drug overdose, electrocution, etc.)
 - Death due to inmates
 - Death due to assault by outside elements
 - Death due to firing
 - Death due to negligence or excesses
 - Accidental deaths (natural calamities like earthquakes, snakebites, drowning, accidental fall, burn injury, drug/alcohol consumption, etc.)
 - The suicide rate among inmates was found to be more than twice in comparison to what is recorded in the general population.

Steps/Reforms Taken by the Government:

- The **Model Prison Manual of 2016** and the **Mental Healthcare Act of 2017**, outline inmates’ right to healthcare.
 - This includes adequate investment in healthcare facilities, setting up mental health units, training officers to provide basic and emergency care, and formulating suicide prevention programmes to thwart such instances.
- In light of rising suicide cases, the **NHRC in June this year issued an exhaustive 21-page advisory to States**, highlighting that suicides arise out of both medical and mental health issues.
- The NHRC recommended filling positions of “Prison Welfare Officers, Probation Officers, Psychologists, and Medical Staff”.
- To prevent suicides specifically, guidelines recommend a strict check on tools such as ropes, glasses, wooden ladders, pipes; initial mental health screening at the time of entry into jail; and installing CCTV cameras to monitor high-risk inmates.

WHAT IS PANCHNAMA?

The Supreme Court recently ruled that 'panchnamas' would be deemed inadmissible in a court of law if they were prepared in a manner violative of Section 162 CrPC.



About Panchnama:

- The word PANCHNAMA literally means “record of observation by five people”.
- A Panchnama is a document having legal bearings that **records evidences and findings that an officer makes at the scene of an offence/crime.**
- However, it is **not only the recordings at the scene of a crime; it can be anywhere that may be related to the crime/offence** and from where incriminating evidence is likely to be collected.
- The word **Panchanama is not used as such or defined particularly** anywhere in any book of law, but the same can be read into Section 100 under Chapter VII of The Code of Criminal Procedure, 1973 (Cr.P.C.), which mandates an Investigating Officer to prepare PANCHNAMA.

Reason behind the word "Panchanama":

- In the **ancient judicial system in India**, the justice system at the lowest rung, i.e., **village level**, which is still the case in certain kinds of issues, was **in the form of Panch**, which is a **group of five elected learned members of the village** who would preside and decide over a dispute amongst the villagers.
- In the said system, the **proceedings before the Panch** that were recorded on paper, were often **called a Panchanama.**
- **From this practice, the word was adopted** for a document prepared by the investigating office noting facts and the proceeds of an investigation.
- **There are different kinds of Panchnama** prepared during an investigation, which are **categorized as search, seizure, recovery, discovery, arrest, inquest, and test identification parade.**

- **Out of these, some are a part of the mandatory procedures laid down in different provisions of the Cr.P.C and others are performed to the establish genuineness of the investigation.**
- **Contents of Panchanama:**
 - **There is no guidance or prescription about the contents of Panchanama under CrPC or any other statute.**
 - **The witnesses are called "Panchas".**
 - **It is to be noted that the Panchas are to be two or more independent and respectable persons, e. persons who are not of disrepute.**
 - **If there are no eyewitnesses to an offence and the case is totally based on circumstantial evidence, then such a Panchanama is of immense value.**
 - **The Panch (witness) can refresh his memories while giving evidence in the Court as per Section 159 of the Indian Evidence Act, 1872.**

What is the need for the Panchanama?

- **It is one of the essential parts of criminal as well as civil investigation procedures.**
- **In criminal investigation, it is used to support evidence of the investigation conducted at the crime scene, seizure, if any from accused, identification of the accused, etc.**
- **In civil cases, it is used to show that the decree has been executed by handing over possession of the property as directed in the decree.**
- **The provision of the Panchanama is made to convince the Court that the officer-in-charge has in fact carried out the investigation, search, or seizure or has acted upon the directions of the Court if so directed.**

WHAT IS AUKUS?



As part of the AUKUS initiative with Australia and the US, the UK has given three UK businesses a 4 billion pound (\$4.9 billion) contract to design and build an attack submarine powered by nuclear energy.

About AUKUS:

- **Established in 2021**, the AUKUS is intended to be a **strategic partnership among Australia, the United Kingdom (UK), and the United States** to bolster their allied deterrence and defense capabilities in the Indo-Pacific.
- The trilateral partnership, which **builds on their decades-long security cooperation**, has **two pillars**.
 - **Pillar I** revolves around the **acquisition and development of conventionally armed nuclear-powered submarines for the Royal Australian Navy**;
 - **Pillar II** calls for **collaboration on advanced capabilities** that will involve **technology and information sharing**;

What is the submarine component?

- It is designed to **equip Australia with nuclear-powered attack submarines (SSNs)**.
- In total, **Australia will end up with eight of the new nuclear submarines, called SSN-AUKUS**.
- Those submarines will be **based on a British design but have American technology** or an American combat system.
- The deal marks the **first time the US has shared nuclear propulsion technology with an ally other than the UK**.
- It will significantly **enhance Australia's undersea capabilities in the Indo-Pacific**.
- These countries, however, made it clear that their **aim is not to arm the new submarines with nuclear weapons**. This is because **Australia is a signatory to the Nuclear Non-proliferation Treaty (NPT)**, which bans it from acquiring or deploying nuclear weapons.

WHO IS CONTROLLER GENERAL OF ACCOUNTS (CGA)?

The Central Government's fiscal deficit in the first five months of 2023-24 touched 36 percent of the full-year target, according to the data released by the Controller General of



Accounts (CGA).

About the Controller General of Accounts (CGA):

- CGA, in the Department of Expenditure, Ministry of Finance, is the Principal Accounting Adviser to the Government of India.
- It was established in October 1975 to administer matters pertaining to the departmentalisation of the accounts of the Union.

Functions:

- CGA is responsible for establishing and managing a technically sound management accounting system.
- The Office of CGA prepares monthly and annual analysis of expenditure, revenues, borrowings, and various fiscal indicators for the Union Government.
- It further formulates policies relating to general principles, forms, and procedures of accounting for the Central and State Governments.
- It administers the process of payments, receipts, and accounting in the Central Civil Ministries/ Departments.
- Through its Internal Audit Units in the respective Ministries/Departments, it is responsible for maintaining the requisite technical standards of accounting in the departmentalized accounting offices and for monitoring the financial performance and effectiveness of various programs, schemes, and activities of the civil ministries.
- It also administers banking arrangements for the disbursements of Government expenditures and the collection of government receipts and interacts with the Central Bank for the reconciliation of cash balances of the Union Government.
- It also looks after the pensions of the Central government employees.

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD)

According to the Review of Maritime Transport 2023 by the United Nations Conference on Trade and Development, in 2023, greenhouse gas (GHG) emissions from international shipping were 20 percent higher than in the last 10 years.



Key highlights of the review:

- Overall, the shipping **industry contributes to over 80 percent** of the world's trade volume and nearly **three percent** of global greenhouse gas emissions.
- **Containerised trade**, which **had declined by 3.7 per cent in 2022**, is expected to grow by 1.2 per cent in 2023 and grow further by three per cent between 2024-2028.
- Oil and gas trade volumes showed robust growth in 2022, while tanker freight rates saw a strong revival driven by geopolitical events.

About the United Nations Conference on Trade and Development (UNCTAD):

- It is the UN's leading institution **dealing with trade and development**.
- It is a **permanent intergovernmental** body established by the United Nations General Assembly in 1964.
- It supports developing countries to access the benefits of **a globalised economy more fairly and effectively**.
- It provides economic and trade analysis, facilitates consensus-building and offers technical assistance to help developing countries use trade, investment, finance, and technology for inclusive and sustainable development.

Headquarter: Geneva, Switzerland.

- **Reports published by the UNCTAD**
 - Trade and Development Report
 - World Investment Report
 - The Least Developed Countries Report