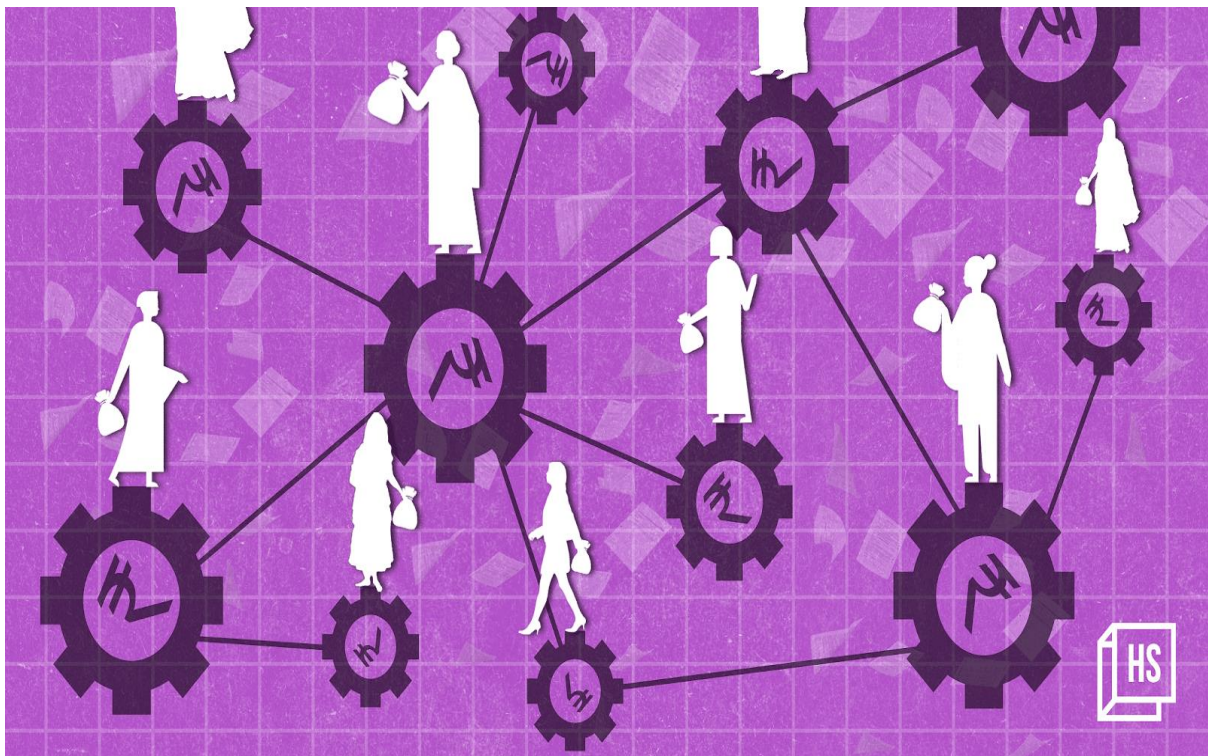


UPSC CURRENT AFFAIRS NOTES 03-10-2023

Workshop on enabling women led development - reaching the last Mile.

Under the aegis of NITI Aayog's State Support Mission, the Women Entrepreneurship Platform (WEP) is set to host a state-level workshop in collaboration with the Government of Goa. This workshop is taking place at the CSIR-National Institute of Oceanography (NIO) Auditorium, Goa on October 3, 2023 from 9:30 am onwards. It will welcome a diverse audience of women entrepreneurs including SHGs, collectives, women clusters, government officials and private sector representatives.



The Women Entrepreneurship Platform (WEP) incubated in NITI Aayog, and now transitioned into a public-private partnership is a one-stop shop for information relevant to women entrepreneurs, including SmartMatch feature for government schemes, incubators, accelerators and private sector initiatives, a community page, and mentorship module.

The State Support Mission, an umbrella initiative by NITI Aayog, is strategically designed to support states and union territories in achieving their socioeconomic goals by 2047. Under the State Support Mission, a series of workshops are being conducted to provide a platform for Centre-State exchanges and forging partnerships.

This workshop marks the commencement of the WEP State Workshop series. The primary goal is to augment awareness regarding the Women Entrepreneurship Platform (WEP) and unveil a range of pioneering initiatives that WEP has embarked upon. These initiatives include "Udyam Uplift," a collaborative effort with AIC-GIM-WEP, as well as the introduction of support cohorts tailored for green women entrepreneurs, among other exciting Partnership.

Throughout the workshop, there will be engaging fireside chats and deep dive discussions exploring topics such as mentoring, skill development, access to finance, and compliance.

The workshop will boast an impressive lineup of speakers, including notable figures such as the Honorable Chief Minister of Goa, Dr. Pramod Sawant, Dr. VK Saraswat, Member NITI Aayog, B.V.R Subrahmanyam, CEO NITI Aayog. Representatives from esteemed organizations like the Bill & Melinda Gates Foundation, Reliance Foundation, Piramal Foundation, ICAI (Institute of Chartered Accountants of India), SIDBI, Ola Foundation and others will also participate. Sulakshana P Sawant, President, Goa State Women's Self Help Group Association would grace the Valedictory session.

This event will present a unique occasion for women entrepreneurs to gain knowledge, share experiences, and access valuable resources and support. Moreover, it will provide an excellent platform for the government and the private sector to showcase their dedication to supporting women entrepreneurs and creating a more inclusive and equitable entrepreneurial ecosystem.

Mahatma Gandhi's birthday, Prime Minister Narendra Modi inaugurated the country's first high-tech sports training centre for Divyangjan

On the occasion of Mahatma Gandhi's birthday, Prime Minister Narendra Modi inaugurated the country's first high-tech sports training centre for Divyangjan, named after former Prime Minister Shri Atal Bihari Vajpayee, in Gwalior, Madhya Pradesh. He expressed admiration for persons with disabilities and highlighted that previous government did not pay attention to them and this Government is committed for Divyangjan. The Prime Minister also launched several other initiatives during the event. Dr. Virendra Kumar, Minister for Social Justice and Empowerment, was also present on this occasion.



In a heartwarming display of support for inclusivity and sportsmanship, Dr. Kumar, paid a visit to the Atal Bihari Vajpayee Training Centre for Disability Sports today morning before the inauguration. During the visit, the Minister interacted with Divyangjan and encouraged them

NESTS to organize 4th National EMRS Cultural, Literary and Kala Utsav - 2023 in Dehradun from 03rd to 06th October, 2023



Over 1500 EMRS students to participate from across the country; Event to showcase artistic talent of school students through Kala Utsav

The National Education Society for Tribal Students (NESTS), under the Ministry of Tribal Affairs, is organising the 4th National EMRS Cultural, Literary and Kala Utsav - 2023, from 3rd October to 6th October in Dehradun, Uttarakhand.

Union Minister for Tribal Affairs, Shri Arjun Munda, Chief Minister of Uttarakhand Shri Pushkar Singh Dhami & Minister of State for Tribal Affairs, Smt. Renuka Singh Saruta and other dignitaries will grace the occasion.

The four-day event will witness participation of over 1500+ Eklavya Model Residential School (EMRS) students from across the country. This year the event will also showcase the artistic talent of school students through the Kala Utsav.

Understanding the need to integrate tribals with the mainstream and to help them access equal opportunities to develop in various fields, the Ministry has been organizing EMRS Cultural Fests and Sports Meet each year, providing the tribal students a national platform to showcase their hidden talents across various domains.

This year Eklavya Vidyalaya Sangathan Samiti (EVSS), Uttarakhand (State EMRS Society) will host the event at Maharana Pratap Sports College, Dehradun.

EMRS is a Government of India scheme for model residential schools for Indian tribals (Scheduled Tribes) across India. It is one of the flagship interventions of the Ministry of Tribal Affairs, Government of India, and was revamped in 2018-19 to ensure quality education for tribal students in remote tribal areas.

By establishing the National Turmeric Board, we aim to harness the potential of our turmeric farmers :PM

The Prime Minister, Shri Narendra Modi has reiterated the government's commitment to the welfare of the farmers.



Replying to a post by Member of Parliament from Nizamabad, Shri Arvind Dharmapuri, regarding benefits of establishment of National Turmeric Board that the Prime Minister announced yesterday, the Prime Minister posted on X :

"The well-being and prosperity of our farmers has always been our top priority.

By establishing the National Turmeric Board, we aim to harness the potential of our turmeric farmers and give them the support they rightly deserve.

The benefits for Nizamabad are particularly immense.

We will keep doing whatever it takes to ensure a brighter future for our turmeric farmers."

MANAMBADI TEMPLE

The 1,000-year-old Naganathaswamy Temple, also known as the Kailasamudaiyar temple, located in Manambadi, Thanjavur district, Tamil Nadu, is set for a remarkable revival after surviving a tumultuous history that included a demolition attempt to make way for a highway.

Details



Built by the illustrious Rajendra Chola I, this temple is an exquisite example of Chola architecture, boasting intricate stone sculptures and historically significant inscriptions. The temple's restoration, undertaken by the Tamil Nadu Department of Archaeology, aims to breathe new life into this ancient treasure.

Historical Significance

Chola Legacy: Rajendra Chola I, one of the mighty Chola dynasty rulers (1012-1044 CE), commissioned the construction of the Naganathaswamy Temple. His reign is marked by significant achievements in art, architecture, and trade, and this temple stands as a testament to his patronage of art and culture.

Protected Monument: The temple is a protected monument, recognized for its cultural and historical importance. It houses remarkable stone sculptures and holds inscriptions that provide valuable insights into the Chola era.

Architectural Splendor

Structural Layout: The temple is designed with an ekatala vimana (single sanctum) and a mukha mandapa (main hall). The walls of both structures are divided into three bays, each housing exquisite niches adorned with sculptures.

Sculptural Beauty: The central bays of the vimana feature niches showcasing deities such as Dakshinamurthi, Lingodhbava, and Brahma. The mukha mandapa is adorned with niches featuring sculptures of Bikshatana, Adavallan, Ganapathi, Gangadarara, Durga, and Ammaiappar.

Makara Thoranas: Each niche is framed by well-carved and distinctive makara thoranas, ceremonial arches adorned with relief sculptures at the center, adding to the temple's architectural grandeur.

Inscriptions of Significance

Historical Records: The Naganathaswamy Temple boasts important inscriptions from the periods of Rajendra Chola I and Kulothunga I (1070-1120 CE). These inscriptions provide valuable historical records, including grants of land and mentions of cultural events.

Tamizh Koothu: Of particular note is an inscription referencing "Tamizh Koothu," which belongs to the 18th regnal year of Kulotthunga I. It pertains to a grant of land for the enactment of Tamil cultural performances during the Chithirai festival of the temple.

SYCAMORE GAP AND HADRIAN'S WALL



A 300-year-old tree in England that was famous for its beauty and unique location was cut down by a teenage boy, in what is being seen as a deliberate act of vandalism.

Sycamore Gap, located along Hadrian's Wall in Northumberland, England, is a place of exceptional historical significance and natural beauty.

Hadrian's Wall: A Historical Marvel

Construction and Purpose

Roman Emperor Hadrian: Hadrian's Wall, also known as Vallum Hadriani, was built during the reign of the Roman Emperor Hadrian in the 2nd century AD. It was constructed to mark the northern boundary of the Roman Empire in Britain and served as a defensive fortification.

Wall Structure: The wall stretches approximately 73 miles (117 kilometers) across northern England, from the east coast to the west coast. It consisted of a stone wall, ditches, and forts, with milecastles every Roman mile (about 1,620 yards or 1,480 meters).

Historical Significance

Symbol of Roman Power: Hadrian's Wall represented the might and authority of the Roman Empire. It served as a symbol of control, separating the Roman-controlled territory from the unconquered lands to the north.

Archaeological Treasure: Today, Hadrian's Wall is a UNESCO World Heritage Site and a testament to ancient engineering and military prowess. It continues to be a subject of archaeological research.

Sycamore Gap: A Natural Wonder

Iconic Symbolism: Sycamore Gap is renowned for the solitary sycamore tree that stands in a dramatic dip along the wall. This tree has become an iconic symbol, often referred to as the "Robin Hood Tree" due to its appearance in the 1991 film "Robin Hood: Prince of Thieves."

Natural Beauty: The tree's location amidst the rugged Northumberland landscape offers breathtaking views and photographic opportunities.

Sycamore Trees

Sycamore Species: The sycamore tree found at Sycamore Gap is typically *Acer pseudoplatanus*, commonly known as the sycamore maple. It is a species native to Central Europe and the British Isles.

Characteristics: Sycamore trees are known for their distinctive five-lobed leaves, which resemble those of the North American maple tree. They can grow to impressive heights and are characterized by their large, spreading canopies.

Natural Range: Sycamores are versatile trees that can thrive in a variety of environments, from woodlands and forests to urban areas and parks. They are often planted for their shade and aesthetic value.

A Plan for the Winter Crop

The Indian monsoon (June to September) has ended with a 5.6 per cent deficit compared to the long-period average (LPA).

Considering lower than the normal rainfall; 96 to 104 per cent of the LPA, which has impacted paddy and tur crops, the government should plan better for the winter crop.

Trends in the Current Kharif Cropping Pattern

Increased Planted Area of Paddy and Sugarcane: Despite the wide deviation in its temporal spread, especially in August which was the driest since 1901, the area planted under paddy and sugarcane is higher by 1.9 and 7.64% respectively, compared to last year.

Decreased Planted Area of Pulses

The area under pulses is significantly down, by 4.2 per cent, especially Arhar (tur) which has seen a 4.9 per cent fall in cultivated area.

In upcoming days, it will lead to the price inflation in tur which is already soaring at 32 per cent in August.

The Government's Preparations for Rabi Crops

Ensuring the Availability of Fertilisers

Recently, the Ministry of Agriculture and Farmers Welfare (MoA&FW) organised the Rabi Conference.

The ministry officials assured that the country has ample fertiliser stocks to take care of the demand of the rabi season.

Introduction of Heat-Resistant Seeds

Wheat is the main rabi crop, and it is vulnerable to a heat wave. In order to counter it, ICAR has released numerous heat-resistant wheat varieties.

These varieties are likely to cover roughly 60 per cent of the sown area up from 45 per cent last year.

In the last nine years, India's agri-research system has released 2,200 varieties of different crops, of which 1,800 are climate resilient.

Outcome of Government's 'Production-Centric' Approach in Last Two Years

Huge Gap in GoI's Estimates and Trade Estimates

As per the MoA&FW, wheat production in 2021-22 was 107 MT and in 2022-23, it was 112.7 MT.

But the trade estimates for these two years are far lower, below 100 MT in 2021-22 and below 105 MT in 2022-23.

This huge gap in the GoI's estimates and trade estimates creates inflationary market expectations.

Export Ban Policies Failed to Tame Wheat Inflation

In 2022, wheat procurement dropped to less than 19MT, a drop of more than 50 per cent from the previous year.

As a result, retail prices of wheat came under pressure. GoI put an export ban on wheat on May 13, 2022, fearing that the Russia-Ukraine war could escalate prices.

Wheat inflation, less than 10 per cent in May, climbed to 15.7 per cent in August.

When the GoI banned atta exports, the inflation did not stop there. It kept going up and in December 2022, it climbed to 22 per cent and further to 25 per cent in January 2023.

Policy Framework Led to Pro Consumer Bias at the Expense of Farmers

The wholesale wheat prices in mandis are hovering around Rs 2,700/quintal, while the minimum support price (MSP) for the coming marketing season of wheat is Rs 2,125/quintal.

The FCI has unloaded its stocks at prices way below its economic cost, fearing that it would not be able to procure enough for the public distribution system (PDS).

This was literally dumping to beat the market prices down to MSP levels. Offloading 3.4 MT in February-March ensured that market prices were down to MSP, and FCI was able to procure about 26 MT of wheat.

Its success cost wheat farmers Rs 40,000 crore. This is a transfer of resources from producers to consumers and indicates a typical pro-consumer bias in the policy framework.

Suggestions to Move from a Highly Production-Centric Approach to a Food Systems Approach

Change Pro-Consumer Bias Policy Framework

More than 800 million people already get free wheat or rice (5kg/person/month) under the PDS.

So, it seems the government is trying to protect the urban middle class at the cost of farmers.

This is not a rational policy to incentivise farmers to produce more.

This is what economists called the “plundering of agriculture” in their classic work, Political economy of agricultural prices.

Stop FCI’s Dumping and Abrupt Ban on Exports to Beat the Market Prices

The government did the same in the case of rice, when there was a complete ban on non-basmati white rice exports.

Then export duties were imposed on parboiled rice and a minimum export price was set for basmati rice.

The whole effort has been to beat market prices down to the MSP, even if that involves dumping.

FCI’s economic cost of rice is around Rs 3,700/quintal, but it is selling rice at below Rs 3,000/quintal.

If some other country had been dumping its products in India, the government would have taken the dispute to WTO.

But what can farmers do when the FCI dumps its wheat and rice at way below their economic costs.

Way Forward

Better Estimate and Monitoring of Production and Prices

For the upcoming rabi season, the government not only needs better and more accurate estimates of production, but also needs to monitor the prices that farmers get.

At a time when technology can track each moving car, why can't the government monitor the progress of crops every week.

Need to Upgrade the Patwari-Based Estimate System

There is a need to upgrade India's patwari-based production estimate system to one that is based on high technology.

This will help settle crop insurance claims and give enough lead time to the government to import in time if there is likely to be a shortfall.

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.

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 Panchnama 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 "Panchnama":

CONTENTS OF PANCHANAMA

- Name and place of police Station,
- Name and rank of officer commencing *panchanama*,
- Name, age and address of panchas,
- Details of particular place or persons,
- Detail list of articles found in that place or from the person which are incriminating,

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.

Medicine Nobel 2023

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.
- 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.

Basically, the mRNA vaccines carry the genetic code for the proteins that make up the non-lethal but key parts of a virus.

Since RNA is already present in cells, this method does away with the need for cell culture.

mRNA Covid-19 Vaccine

- The COVID-19 vaccines used the codes for the spike protein used by Sars-CoV-2 to enter the body.
- Once injected, the vaccine uses the body's own protein manufacturing centre to produce these viral proteins.
- The immune system then responds by creating antibodies against the viral protein and learns to fight the actual infection.

WHO recommends Oxford-Serum Institute malaria vaccine for global rollout

The R21/Matrix-M malaria vaccine developed by the University of Oxford and the Serum Institute of India has been recommended for use by the WHO.

The vaccine leverages Novavax's adjuvant technology and has met the required safety, quality and effectiveness standards.

Adjuvants are substances that enhance the immune system's response to a vaccine. They are commonly used to improve the effectiveness of a vaccine.

About

Malaria is an acute febrile illness caused by Plasmodium parasites, which are spread to people through the bites of infected female Anopheles mosquitoes. vivax – pose the greatest threat.

Steps taken

Ministry of Health and Family Welfare launched National Framework for Malaria Elimination (NFME) in 2016;

National Strategic Plan (NSP) for Malaria Elimination (2016-2030) was launched by the Health Ministry.

It has a vision of a malaria-free country by 2027 and elimination by 2030.

News Summary: WHO recommends Oxford-Serum Institute malaria vaccine for global rollout

The malaria vaccine developed by the University of Oxford and the Serum Institute of India has now been recommended for use by the WHO.

Hundreds of millions of doses of this vaccine, R21/Matrix-M, are to be supplied to countries that are suffering a significant malaria burden.

The Serum Institute of India has already established a production capacity for 100 million doses per annum, which will be doubled over the next two years.

This scale of production is critical because vaccinating those at high risk of malaria will be important in stemming the spread of disease, as well as protecting the vaccinated.

Green Ammonia

Recently, V.O. Chidambaranar Port Authority, Tamil Nadu, successfully received and handled Green Ammonia Containers from Damietta Port, Egypt.

About Green Ammonia:

It is produced by using hydrogen from water electrolysis and nitrogen separated from the air.

These are then fed into the Haber process (also known as Haber-Bosch) which is powered by sustainable electricity.

In the Haber process, hydrogen and nitrogen are reacted together at high temperatures and pressures to produce ammonia, NH₃.

Green ammonia production is where the process of making ammonia is 100% renewable and carbon-free.

It can be used in

- Fuel for engines such as locomotives and shipping, replacing diesel and marine fuel oil
- Fuel source for electricity and power generation
- Building block to make fertilisers for use in agriculture;
- Feedstock for industrial and manufacturing applications ranging from water purification through to pharmaceuticals

Key facts about Ammonia

- It is a colourless, highly irritating gas with a sharp suffocating odor.
- It dissolves easily in water to form ammonium hydroxide solution which can cause irritation and burns.
- Ammonia gas is easily compressed and forms a clear, colorless liquid under pressure.
- It is usually shipped as a compressed liquid in steel cylinders.
- Ammonia is not highly flammable, but containers of ammonia may explode when exposed to high heat.