



VAJIRAM & RAVI
Institute for IAS Examination

The Analyst

CURRENT AFFAIRS Handout

30th March 2026



How To Secure India's Supply Chains?



CONTEXT: Supply chain resilience requires an integrated, forward-looking approach.

What is SUPPLY CHAIN & GLOBAL SUPPLY CHAIN?

What is a Supply Chain?

A supply chain is the network of activities involved in producing and delivering a product or service to the end consumer.



GLOBAL SUPPLY CHAIN

The Network Connecting Products from Origin to Consumer



How To Secure India's Supply Chains?



CONTEXT: Supply chain resilience requires an integrated, forward-looking approach.

Global Interdependence vs Vulnerability

- India's imports \approx 19% of GDP
- Heavy dependence - RMs & Intermediaries
- Rising Geopolitical Risks - WEST ASIA - Strait Of Hormuz -
- Supply shocks ripple across -

SECTORAL ANALYSIS

Energy Security: A Critical Concern

- High Import Dependence - CRUDE OIL & NG -
- Economic Impact of Price Shocks - IMPORT BILL, INFLATION & GDP Growth
- Strategic Concerns? - Geographical Dependence & EXPOSURE

Food Security: Hidden Import Dependence

- High dependence on Imports - EO, Pulses & Fertilizers
- Domestic oilseed production -
- Risks? - INFLATION & Rural Distress, Malnutrition

Manufacturing & Industrial Supply Chain Risks

- Import Structure
 - RMs
 - Intermediates
 - Capital Goods
 - Consumer Goods
- Critical Dependencies
 - Strategic Materials -
- Sectoral Dependencies
 - Pharmaceuticals
 - Electronics
 - Capital Goods

Steps Already Taken

- NDCs -
- Green Hydrogen Mission
- Domestic Exploration - HELP & ORD Act, 2025
- Mission for Atma Nirbharta in Pulses
- NCMM
- PLI Scheme

Key Structural Challenges

- Upstream Weakness - Assembly vs Manufacturing
- Import Concentration Risk - APIs, OIL, Electronics
- Infrastructure Gaps - ICs, Storage, Logistics
- Technological Deficit - Low R&D, Weak in IPR, Low Domestic VAs
- Economic Impact of Price Shocks - IMPORT BILL, INFLATION & GDP Growth
- Policy Fragmentation - Fragmentation

Way Forward

- Build Domestic Manufacturing Ecosystems
 - Assembly \rightarrow Full VC Integration
 - Focus sectors -
- Diversification Strategy
 - Oil Diversification
- Strategic Reserves & Buffering
 - SPRs - Expand
 - Food & Grains -
- Smooth & Quick Energy Transition
 - Grid Integration
 - BSSs
- Strengthen Trade & Supply Chain Alliances
 - SCRI, IMEC, FTAs
- Boost R&D & Innovation - PVT. Sector?
- Policy Reforms
 - Logistics
 - EoDB Reforms - Investment

Mains Practice Question:

Discuss the nature of India's supply chain vulnerabilities in various sectors and suggest measures required to build a resilient and self-reliant manufacturing ecosystem.

(15 Marks, 250 words)



CONTEXT: Maharashtra's Anti-Conversion Bill.

What are Anti-Conversion Laws?

- Legislative measures - preventing or prohibiting religious conversions
- Aim to prevent forced or induced conversions

Union Law Ministry - 2015 - Parliament
- 'Freedom of Religion' statutes

How Anti-Conversion laws violate Rights?

- Article 25
- Article 19(1)(a)
- Right to Privacy
- Article 14
- Right to Dignity
- Alleged suppression of Minority

History of Anti-Conversion Laws

 Pre-independence	<ul style="list-style-type: none">• Introduced by Hindu Princely states during the 1930s and 1940s to preserve their religious identity from the influence of the Christian missionaries• Example includes: Raigarh State Conversion Act 1936, the Patna Freedom of Religion Act of 1942, the Udaipur State Anti Conversion Act 1946 etc.
 Failed attempts at national level	<ul style="list-style-type: none">• 1954: Indian Conversion (Regulation and Registration) Bill was introduced• 1960: Backward Communities (Religious Protection) Bill was introduced• 1979: freedom of religion bill• However, they failed due to lack of parliamentary support.
 Current stand	<ul style="list-style-type: none">• In 2015, the Law Ministry said that matter is "purely a state subject" and legislating such a law by Parliament would not be in accordance with the tenets of the Constitution.• This means anti-conversion laws are completely in the domain of the states.

- Supreme Court in **S.Pushpabai Case**

Need of Anti-Conversion Laws in India

- Prevent Coercion & Fraud
- Preserving Social Harmony
- Protecting Cultural Identity
- Address National Security Concerns

Supreme Court's Views

- Rev. Stanislaus v. State of MP, 1977
- Hadiya v. Ashokan K.M
- K.S. Puttaswamy Case
- Lata Singh v. State of Uttar Pradesh - 'Stringent Punishment'
- Sarla Mudgal vs. Union of India - Polygamy

Way forward

- Balance - Individual's right & Malafide Conversions

Anti
Conversion
Laws in India



Mains Practice Question:

"The subject matter of Anti-Conversion laws by different states in India is fraught with various debates. Elaborate."

(10 Marks, 150 words)



Arab League



SYLLABUS : Prelims : Organisations
Newspaper : Indian express Page No : 12

Egypt's Nabil Fahmy named Arab League chief

Associated Press
Cairo, March 29

ARAB FOREIGN ministers on Sunday appointed veteran Egyptian diplomat Nabil Fahmy as the head of the 22-member Arab League, at a time the Middle East is plunged in a monthlong Iran war that shows no sign of abating.

Fahmy, a former Egyptian foreign minister, won the support of the Arab foreign min-



Egyptian diplomat Nabil Fahmy

isters in a virtual meeting, according to the Egyptian Foreign Ministry.

Fahmy's five-year term will

start in July, succeeding Ahmed Aboul Gheit, who served as Arab League chief since 2016.

His appointment came as Iran's Arab neighbors are reeling from attacks by Iran and its proxies in response to massive airstrikes launched by the U.S. and Israel since Feb. 28.

Fahmy was the only nominee for the post, as it is a long-held protocol that Egypt as host of the Arab League traditionally

nominates the head of the body since its establishment in 1945.

The only time a non-Egyptian — Tunisian diplomat al-Shazly al-Qalibi — was appointed to the post was in 1979, after Egypt's membership was suspended following its peace treaty with Israel.

Egypt rejoined in 1989, with the headquarters of the Arab League returning to Cairo and a new Egyptian secretary-general appointed in 1990.

2nd India-Arab Foreign Ministers' Meeting

📅 January 29, 2026

India will host the 2nd India-Arab Foreign Ministers' Meeting (IAFMM) on 31 January 2026. The meeting will be co-chaired by India and the UAE. Foreign Ministers of other Arab League Member States and Arab League Secretary General will participate in the 2nd India-Arab Foreign Ministers' Meeting.

What is the Arab League?

▪ **About:**

- Arab League, also called **League of Arab States (LAS)**, is an intergovernmental pan-Arab organisation of all Arab states in the **Middle East** and North Africa.
- It was formed in Cairo, Egypt on 22nd March 1945, following the adoption of the **Alexandria Protocol in 1944**.

▪ **Members:**

- **Currently, there are 22 Arab countries:** Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen.



SYLLABUS : Prelims: Government Schemes

Newspaper : The Indian Express Page No :11

THE CURRENT SCHEME, LAUNCHED IN 2019, EXPIRES THIS MONTH

Centre may add battery storage under revamped PM-KUSUM 2.0

Centre extended timeline for financial closure & completion of projects under PM-KUSUM scheme on Saturday

Pratyush Deep
New Delhi, March 29

THE CENTRE is considering incorporating a new provision for battery energy storage in the revamped Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhayaan (PM KUSUM) scheme, as it works on formulating a new version of the flagship programme, *The Indian Express* has learnt.

Launched in 2019, the current PM-KUSUM scheme is set to expire this month, prompting discussions within the government on rolling out an updated version, likely to be called PM-KUSUM 2.0.

While the current scheme focuses on solarisation of agricultural pumps, it does not include battery storage. The addition is actively under consideration in order to address the growing challenge of mismatch between agricultural power demand and solar generation patterns.

As per a senior official, the battery energy storage system has become a necessary addition, primarily due to the diver-

gence between load demand and solar generation.

Agricultural demand rises in the morning, remaining steady throughout the day, and declines after sunset. In contrast, solar generation gradually increases during the day, peaks around noon, and tapers off thereafter. This misalignment has posed operational challenges for power distribution and grid management.

The proposed battery storage component is expected to bridge this gap by storing surplus solar power generated during peak hours and supplying it when demand persists but generation falls. Discussions on the design of the scheme are ongoing, with differing views between the Ministry of Power and the Ministry of New and Renewable Energy (MNRE) on the extent of storage to be provided. The Ministry of Power has suggested provisioning for up to four hours of battery storage, while MNRE has proposed a two-hour capacity, *The Indian Express* has learnt.

Queries sent to the Ministry

• SOLAR SUPPLY MISMATCH

THE CURRENT scheme focuses on solarisation of agri pumps and does not include battery storage

BATTERY STORAGE is under consideration to address the challenge of mismatch between agri power demand and solar generation patterns

THE PROPOSED battery storage component will store surplus solar power generated during peak hours, and supply it when demand persists but generation falls



THE MINISTRY of Power has suggested provisioning for up to four hours of battery storage, while MNRE has proposed a two-hour capacity

of 12,164 MW capacity has been installed under the scheme.

As per the data provided by MNRE in the parliament, 8394 MW of capacity has been installed under Component A. Under Component B, over 10 lakh standalone agricultural pumps have been installed. Under Component C, over 12,787 pumps have been solarised through IPS, while feeder-level solarisation has covered over 13 lakh pumps, with a total installed capacity of 6,636.9 MW.

On Saturday, the Centre also extended the timeline for financial closure and completion of projects under the scheme. The decision follows multiple requests from stakeholders who reported delays in loan extension by banks and financial institutions due to the current timeline of the scheme, which is expiring on March 31.

"The matter for extension of current scheme was taken with Department of Expenditure (DoE). The DoE has provided the guidance to subsume the existing timeline within the new scheme PM KUSUM 2.0. Thus, the states are requested to coordinate with banks to facilitate loans, and expedite financial closure of the projects as the current scheme is to be subsumed under PM KUSUM 2.0," MNRE's office memorandum said.

of Power remained unanswered at the time of filing this report.

In its response, MNRE confirmed that talks on PM-KUSUM 2.0 are underway, including consultations with the Ministry of Finance. "Relevant details will be communicated once discussions reach a certain level of conclusion," it said.

The Centre has consistently positioned PM-KUSUM as a key pillar of its clean energy transition. The scheme, aimed at promoting solarisation in the agriculture sector, comprises three components: setting up of decentralised solar power plants (Component A), installing stan-

dalone solar pumps in off-grid areas (Component B), and solarising grid-connected agricultural pumps (Component C).

Under Component C, the Centre supports both individual pump solarisation (IPS) and feeder-level solarisation (FLS). While IPS enables farmers with grid-connected agricultural pumps to solarise their individual units, FLS allows states to solarise entire agricultural feeders instead of individual pumps. Together, these components target the addition of 34.8 GW of solar capacity. However, progress has been slower than anticipated. As of February this year, a total



GOVERNMENT OF INDIA
MINISTRY OF NEW
AND RENEWABLE ENERGY

National Portal
PRADHAN MANTRI KISAN URJA SURAKSHA EVAM UTTHAAN MAHABHIYAN (PM-KUSUM)

Objective

The PM-KUSUM Scheme allows inter-se transfer of quantities between Component-B and Component-C. All three components of the scheme aim to add Solar capacity of about 34,800 MW by March 2026 with the total Central Financial support of ₹ 34,422 crore. The PM KUSUM Scheme has the following components:

- **Component A:**
Setting up of 10,000 MW of Decentralized Ground/ Stilt Mounted Grid Connected Solar or other Renewable Energy based Power Plants by the farmers on their land.
- **Component B:**
Installation of 14 Lakh Stand-alone Solar Agriculture Pumps.
- **Component C:**
Solarisation of 35 Lakh Grid Connected Agriculture Pumps including Feeder Level Solarization.

• Scheme Available Till 31.03.2026



SYLLABUS : Prelims: Government Schemes

Newspaper : The Indian Express Page No :11

Salient Features

• **Component A:**

- Renewable Energy Power Plant (REPP) of capacity 500 kW to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/Water User associations (WUA) hereinafter called Solar Power Generator (SPG). In the above specified entities are not able to arrange equity required for setting up the REPP, they can opt for developing the REPP through developer(s) or even through local DISCOM, which will be considered as SPG in this case.
- DISCOMs will notify sub-station wise surplus capacity which can be fed from such REPP to the Grid and shall invite applications from interested beneficiaries for setting up the solar energy plants.
- The solar power generated will be purchased by DISCOMs at a feed-in-tariff (FIT) determined by respective State Electricity Regulatory Commission (SERC).
- DISCOM would be eligible to get PBI @ Rs. 0.40 per unit purchased or Rs. 6.6 lakh per MW of capacity installed, whichever is less, for a period of five years from the Commercial Operation Date (COD).

• **Component B:**

- Individual farmers will be supported to install standalone solar Agriculture pumps in off-grid areas, where grid supply is not available.
- CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar Agriculture pump will be provided. The State Government will give at-least a subsidy of 30%; and the remaining at-most 40% will be provided by the farmer. Bank finance can be availed by farmer, so that farmer has to initially pay only 10% of the cost and remaining up to 30% of the cost as loan.
- In North Eastern States, Ladakh, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep and Andaman And Nicobar Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar pump will be provided. The State Government will give at-least subsidy of 30%; and the remaining at-most 20% will be provided by the farmer.

• **Component C: Individual Pump Solarisation (IPS)**

- Individual farmers having grid connected agriculture pump will be supported to solarise pumps. Solar PV capacity up to two times of pump capacity in kW is allowed under the scheme.
- The farmer will be able to use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOMs.
- CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component will be provided. The State Government will give at-least subsidy of 30%; and the remaining at-most 40% will be provided by the farmer. Bank finance can be availed by farmer, so that farmer has to initially pay only 10% of the cost and remaining up to 30% of the cost as loan.
- In North Eastern States, Ladakh, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep and Andaman And Nicobar Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component will be provided. The State Government will give a subsidy of at-least 30%; and the remaining at-most 20% will be provided by the farmer.

• **Component C: Feeder Level Solarisation (FLS)**

- Instead of the individual solar pumps the states can solarize the agriculture feeders.
- Where agriculture feeders are not separated, loan for feeder separation may be taken from NABARD or PFC/REC. Further, assistance for feeder separation may be availed from the Revamped Distribution Sector Scheme (RDSS) of the Ministry of Power. However, mixed can also be solarised.
- Solar plants of capacity that can cater to the requirement of the agriculture load of the selected feeder can be installed through CAPEX/RESCO mode for a project period of 25 years.
- CFA of 30% on the cost of installation of solar power plant (up to Rs. 1.05 Cr/MW) will be provided. However, in the North Eastern States, Ladakh, Jammu & Kashmir, Himachal Pradesh and Uttarakhand, Lakshadweep, and Andaman And Nicobar Islands 50% (up to Rs. 1.75 Cr/MW) subsidy is available.
- The farmers will get day-time reliable power for irrigation free of cost or at tariff fixed by their respective state.



SYLLABUS : Prelims : Science & Tech.

Newspaper : Indian Express **Page No :** Explained

THE EFFECTIVE halt in vessel movements through the Strait of Hormuz due to the West Asia war has severely affected India's energy supplies, particularly liquefied petroleum gas (LPG) and liquefied natural gas (LNG).

India's crude oil supplies have also been hit, but its import dependence is greater for LPG and LNG. LPG is of particular concern. India depends on imports to meet around 60% of the fuel's needs, and 90% of those imports came through the critical maritime chokepoint of the Strait. This means that around 54% of India's LPG supplies are effectively disrupted, forcing the government to heavily cut supplies to commercial and industrial consumers to ensure uninterrupted supplies to crores of households that use the fuel for cooking.

Some stress is also visible in the natural gas segment, where supplies to commercial and industrial consumers has been reduced to some extent to ensure supplies to priority segments like households using piped natural gas (PNG) and vehicles running on compressed natural gas (CNG).

India depends on LNG imports to meet half of its natural gas requirement, and 55-60% of it comes from West Asia through the Strait of Hormuz. This means that the Strait's effective closure has cut off roughly 30% of India's natural gas supplies. Relative to LPG, the situation is much better, which is evident from the fact that the government has been urging LPG consumers to shift to PNG wherever feasible.

The chemistry and physics of LPG and LNG

LPG is a gaseous fuel mix primarily comprising propane and butane that is a byproduct of crude oil refining and natural gas processing. It may also contain some propylene,

butylene, and isobutylene or isobutene.

Under relatively low temperatures or moderate pressure, the gas mix becomes a liquid. It is mostly used for cooking and heating, with some industrial applications as well; it is also used as an automobile fuel in some parts of the world. LPG's volume is around 1/260th of its gaseous volume.

LNG is primarily natural gas — mainly methane — cooled to below -160 degrees Celsius and cryogenically turned into a liquid. Now, LNG itself doesn't have too many direct uses, except for an upcoming fuel to power heavy vehicles, ships, and trains. The key purpose of liquefaction of natural gas into LNG is to transport it over long distances across seas, where supplying natural gas through pipelines is not feasible.

Unlike LPG, LNG must be stored in



SYLLABUS : Prelims : Science & Tech.

Newspaper : Indian Express **Page No :** Explained

cryogenic tanks and requires trained handling to prevent vapourisation or boil-off. In its liquid state, LNG occupies roughly 1/600th the volume of natural gas in gaseous form, making it viable for transport and storage over long distances. The problem, though, is that this has to be done cryogenically, and is energy intensive.

Essentially, LNG is natural gas that is liquefied for easier storage and transportation, and is mostly converted back to natural gas before being used. Natural gas itself has a number of applications — cooking fuel, transportation fuel, and industrial fuel or feedstock in sectors like refineries, fertilisers, power plants, and petrochemicals.

Delivery, storage, safety

LNG is transported in specialised cryo-

genic ships and lands at LNG regasification terminals, where it is converted back into natural gas and then transported further, mostly using pipeline networks. The natural gas is sent to the end user usually through pipelines — sold as PNG to households and industries, and as CNG or automobile fuel sold through dispensing stations.

By contrast, every household that wants to use PNG must have pipeline connectivity at doorstep, and natural gas itself cannot be really stored, unless it is liquefied. This is why LPG is now increasingly being seen as a fuel for rural and remote areas, while PNG is being encouraged in urban areas.

Although PNG requires pipeline infrastructure, once it is established, the fuel scores higher than LPG in terms of convenience for users. The pipeline provides uninterrupted supply and there is no need to store or keep track of the gas stock as in the case of LPG, where cylinders need to be booked and exchanged at regular intervals. PNG supplies are constant and metered, like power supply, and there is no need to make bookings.

PNG is also considered safer than LPG. This is because natural gas is lighter than air, which allows it to disperse quickly in case of a leak. LPG is heavier than air. It sinks and accumulate in the air in case of leak, which makes it much more prone to fires and explosions in such instances.



SYLLABUS : Prelims : Science & Tech.

Newspaper : Indian Express **Page No :** Explained

• USAGE TO IMPACT: HOW LPG DIFFERS FROM LNG

The Strait of Hormuz closure has hit a large chunk of India's energy supply — crude oil, and, to greater degrees, LPG and LNG. Here's what they are used for and how they differ.

MEANING

LNG, OR LIQUEFIED NATURAL GAS,

is primarily a natural gas — mainly methane. It is cooled to below -160 degrees Celsius and cryogenically turned into a liquid for storage or ease of transportation

LPG, OR LIQUEFIED PETROLEUM GAS,

primarily comprises propane and butane. LPG is a byproduct of the crude oil refining process. Under relatively low temperatures or moderate pressure, LPG becomes a liquid, allowing it to be bottled in cylinders.

LNG is regasified into natural gas and is called:

- PNG, or piped natural gas, when supplied to households
- CNG, or compressed natural gas, when used to power vehicles



USE

LPG: Cooking, heating and limited industrial applications

LNG: Regasified into natural gas, it is used in transportation, industrial applications such as power generation and machinery operations, cooking

India is the world's 6th biggest LPG producer and the 3rd biggest LPG consumer

TOP LPG PRODUCERS (IN THOUSAND TONNES)

COUNTRY	2023
1. US	104,732
2. China	51,658
3. Saudi Arabia	25,538
4. Russia	17,344
5. Canada	16,556
6. India	12,777

TOP LPG CONSUMERS (IN THOUSAND TONNES)

COUNTRY	2023
1. China	81,647
2. US	47,993
3. India	31,317
4. Saudi Arabia	17,560
5. Russia	13,627

SOURCE: STATISTICAL REVIEW OF GLOBAL LPG

The dependency is greater for LPG...

- **33 million** tonnes India's annual consumption
- **13 million** tonnes is the share of domestic production in annual consumption
- **60%** India's import dependency
- **90%** of these imports came via the now-closed Strait of Hormuz
- **54%** the effective hit to total supplies

...than for LNG

- **71 billion** cubic metres India's annual consumption
- **35.6 billion** cubic metres is the share of domestic production in annual consumption
- **50%** India's import dependency
- **60%** of these imports came via the now-closed Strait of Hormuz, mainly from Qatar and the UAE
- **30%** the effective hit to total supplies



SYLLABUS : Prelims : Organisations

Newspaper : The Hindu Page No : 10

ASI explores Balirajgarh site for ancient settlement

Santosh Singh
Patna, March 29

THE ARCHAEOLOGICAL Survey of India (ASI) has begun excavation at Bihar's historic Balirajgarh site, which is believed to be the gateway to ancient Mithila.

Balirajgarh, located in the Babubarhi block of Madhubani district, holds great mythological and historical significance, with local folklore identifying it as the capital of the legendary King Bali. Some scholars believe the site served as a major administrative hub of the ancient Videha Kingdom.

Previous preliminary explorations (2013-2014) indicated a massive brick fortification spanning approximately 176 acres and unearthed small artefacts that hinted at the site's potential, leading to the current large-scale scientific investiga-



The Balirajgarh site where the excavation will take place

tion. Earlier, ASI surveys established a continuous timeline of habitation at the site, spanning several era-defining dynasties: the Mauryan, Sunga, Kushan, and Pala periods. Balirajgarh was declared a protected site by the ASI in 1938.

Hari Om Sharan, Superintending Archaeologist of the ASI Patna Circle, said, "Our objective is to reach the virgin soil — the original, undisturbed ground — to determine exactly when human settlement first began. The excavations will

help us verify if the site predates the Mauryan era. Preliminary data suggest it could be part of the Iron Age Videha Kingdom, potentially pushing the documented history of the region back by several centuries."

The ASI team will dig approximately 20 trenches to study the "cultural fabric" and continuity patterns across five distinct phases: Mauryan (NBPW), Sunga, Kushan, Gupta, and Pala periods. The ASI has confirmed that it is using modern tools, including satellite imagery and systematic mapping, to identify high-interest areas within the 176-acre mound to avoid technical hurdles, such as high water tables, that have stopped work in the past.

JD(U) Rajya Sabha MP Sanjay Kumar Jha, who is also chairman of the Parliamentary Standing Committee on Trans-

port, Tourism, and Culture, told The Indian Express: "This scientific excavation is a big step forward to bring the untouched aspects of the ancient civilisation of Mithila to the global stage. We will develop a modern museum at the site, modelled after the Patna Museum, to preserve findings. This will transform the local economy through tourism and infrastructure development."

Prior digs have yielded a treasure trove of artefacts, including ancient beads, copper objects, bone tools, terracotta figurines, toys, and punch-marked coins. Experts note that these findings prove the region was highly proficient in urban planning even in ancient times. The excavation is expected to solidify Madhubani's standing as a world-renowned centre of Indian philosophy and cultural heritage.

About Archaeological Survey of India

- ASI, under the **Ministry of Culture**, Government of India, is a **premier organisation** for archaeological research and protection of the **tangible heritage** of the nation.
- It was **established in 1861** by **Sir Alexander Cunningham**, with its **headquarters in New Delhi**.
- **After independence**, it was established as a **statutory body** under the **Ancient Monuments and Archaeological Sites and Remains Act, 1958 (AMASR Act)**.
- The prime concern of ASI is the **maintenance of ancient monuments, archaeological sites**, and remains of national importance.
- Besides, it **regulates all archaeological activities** in the country as per the **provisions of the AMASR Act**.
- It also **regulates the Antiquities and Art Treasure Act, 1972**.
- The Central Government has declared **3679 monuments and sites as of national importance**, and ASI shoulders the responsibility of protecting and maintaining them.
- The organization has a **large workforce of trained archaeologists, conservators, epigraphists, architects, and scientists** for conducting archaeological research projects through its Circles, Museums, Excavation Branches, Prehistory Branch, Epigraphy Branches, Science Branch, Horticulture Branch, Building Survey Project, Temple Survey Projects, and Underwater Archaeology Wing.



Korean Peninsula



SYLLABUS : Prelims : Events/Places
Newspaper : The Hindu Page No : 14

N. Korea tests missile engine capable of reaching the U.S.

Associated Press
 SEOUL

North Korean leader Kim Jong-un observed a test of an upgraded solid-fuel engine for weapons capable of reaching the U.S. mainland, and called it a significant development boosting his country's strategic military arsenal, state media reported on Sunday.



Kim Jong-un inspecting a combustion test of a solid-fuel rocket engine at an undisclosed location in North Korea. AFP

While the test was in line with Mr. Kim's stated goal of acquiring more agile, hard-to-detect missiles targeting the U.S. and its allies, some experts speculate North Korea's claim may be an exaggeration. Missiles with built-in solid propellants are easier to move and conceal their launches than liquid-fuel weapons, which in general must be fuelled before liftoffs and cannot last long.

The official *Korean Central News Agency* reported Mr. Kim watched the ground jet test of the engine using a composite carbon fibre material. It said the engine's maximum thrust is 2,500 kilonewtons, up from about 1,970 kilonewtons reported in a similar solid-fuel engine test in September.

Mr. Kim said the latest engine test had "great significance in putting the country's strategic military muscle on the highest level," according to KCNA.

KCNA reported the test was conducted as part of



Q1. With reference to the Arab League, consider the following statements:

1. It was established in 1945 with the objective of promoting political, economic, and cultural cooperation among Arab countries.
2. Only countries located in the Middle East region can become members of the League.
3. Its headquarters is located in Cairo, Egypt.

How many of the statements given above is/are correct?

- a) Only One
- b) Only Two
- c) All Three
- d) None

Answer: b

Q2. With reference to Liquefied Petroleum Gas(LPG) and Liquefied Natural Gas(LNG), consider the following statements:

1. LPG mainly consists of propane and butane and is obtained as a byproduct of crude oil refining and natural gas processing.
2. LNG is primarily methane that is cooled to about -160°C to convert it into liquid form.
3. Unlike LNG, LPG must be stored in cryogenic tanks to prevent vaporisation.

Which of the statements given above is/are correct?

- a) 1 only
- b) 1 and 2 only
- c) 2 and 3 only
- d) 1, 2 and 3

Answer: b

Q3. With reference to the PM-KUSUM Scheme, consider the following statements:

1. It is implemented by the Ministry of New and Renewable Energy and aims to promote solar energy use in the agriculture sector.
2. Under Component B of the scheme, 35 lakh grid-connected agriculture pumps are solarised, including feeder-level solarisation.

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

Answer: a

Q4. With reference to the Archaeological Survey of India, consider the following statements:

1. It was established in 1861 by Alexander Cunningham.
2. It functions under the Ministry of Culture.
3. It is responsible for the protection of all UNESCO World Heritage Sites in India, irrespective of whether they are declared as monuments of national importance.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 only
- c) 1 and 3 only
- d) 1, 2 and 3

Answer: a

Q5. With reference to North Korea, consider the following statements:

1. It is bounded by the Sea of Japan to its west and the Yellow Sea to its east.
2. The 38th Parallel forms the boundary between North Korea and China.

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

Answer: d





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