

6th May 2017

GS : 3 - SCIENCE AND TECH (SPACE)

India launches South-Asia satellite

(The Hindu)

- The “South Asia satellite” for use by countries of the South Asian Association for Regional Cooperation (SAARC) region has been launched.
- During the 2014 SAARC summit that held in Nepal, the plan for the satellite was announced and subsequently all SAARC countries have joined it **except Pakistan**.
- Hence, the beneficiaries of the satellite will be Nepal, Bhutan, Bangladesh, Afghanistan, Sri Lanka and Maldives.
- The **total cost of launching the satellite would be** met by the Government of India.

Key points:

- The 2,230 kg satellite called GSAT-09 has been built by the Indian Space Research Organisation (ISRO).
- It has 12 Ku-band transponders.
- The satellite was launched from Satish Dhawan Space Centre in Sriharikota using a Geostationary Launch Vehicle (GSLV) Mk-II launch vehicle.
- It will have a mission life of over 12 years.
- The launch vehicle, **GSLV-F09** is about 50m tall and is the 11th flight of the GSLV.
- Also, the launch is GSLV’s fourth consecutive flight with the indigenous Cryogenic Upper Stage (CUS) engine.
- The satellite will provide a full range of applications and services in the fields of telecommunication and broadcasting applications, namely, Television, Direct-to-Home (DTH), Very Small Aperture Terminals (VSATs), Tele-education, Telemedicine and Disaster Management Support.
- The participating countries would be made responsible for the content generation and its use.

GS : 3 - SECURITY

Entire Assam declared ‘disturbed’

(The Hindu)

- The Centre has declared the entire State of Assam a “disturbed” area under the Armed Forces (Special Powers) Act for three more months, citing various violent activities by insurgent groups ULFA, NDFB and others.
- The Ministry said there were 75 incidents of violence in Assam in 2016 in which 33 people, were killed.

What are ‘disturbed’ areas?

- The state or central government considers those areas as ‘disturbed’ “by reason of differences or disputes between members of different religious, racial, language or regional groups or castes or communities.”

WHAT IS ARMED FORCES SPECIAL POWERS ACT?

➤ **Introduced in 1958, AFSPA** confers on members of the armed forces special powers to rein in suspects in areas declared “disturbed” on account of insurgent activities or similar threats. It has been in **force in Manipur since 1980**, and the alleged **excesses committed under it are the reasons** why activist **Irom Sharmila** has been on a **hunger strike since 2000**.

WHAT ARE SPECIAL POWERS?

AFSPA allows any commissioned officer, warrant officer and non-commissioned officer – or any other



person of equivalent rank – to:

- Fire upon or use force against any person acting “in contravention of any law for the time being in force in the disturbed area”
- Arrest suspicious people without warrant
- Destroy any structure suspected to house an arms dump, shelter from which armed attacks are made or are likely to be made
- Conduct searches without warrants for evidence, to recover a wrongfully confined person or property or arms or explosives
- **AFSPA bars prosecution or proceedings— except with Centre’s nod— against personnel for action committed while exercising powers under the Act**

GS : 3 - SCIENCE AND TECH

Antimicrobial resistance (AMR) and Phage therapy for Antibody resistance

(Indian Express)

- Phage therapy has been emerged as a new counter measure for Antibody resistance.
- Antimicrobial resistance (AMR) is the ability of a microbe to resist the effects of medication previously used to treat them.
- Resistance arises through one of three ways: natural resistance in certain types of bacteria, genetic mutation, or by one species acquiring resistance from another.

New therapy:

- Bacteriophage therapy or simply phage therapy holds promise as an alternative treatment option.
- Bacteriophages are viruses that infect and kill bacteria.
- The revitalisation of phage therapy has received increased global attention since the appearance of multidrug-resistant bacteria.
- The most striking advantage of bacteriophage therapy is the ability to tailor treatment accurately to kill the pathogenic bacteria provided the diagnostic procedures are highly accurate.

MISCELLANEOUS

Facebook Launches 'Express Wi-Fi'

- Facebook has launched its "Express Wi-Fi" commercially in India.
- The service is now available via 700 hotspots across four states of Uttarakhand, Gujarat, Rajasthan and Meghalaya.
- "Express Wi-Fi" services are currently active in Indonesia, Kenya, Nigeria, and Tanzania.
- "Express Wi-Fi" services will complement mobile data offerings by providing a low-cost, high bandwidth service allowing users to get online for accessing apps, downloading contents amongst other things at affordable rates.
- Anyone will be able to access the Express Wi-Fi network by signing up with an Express Wi-Fi retailer and purchasing a daily, weekly or monthly data pack.
- They will then be allowed to start browsing by connecting to the Express Wi-Fi hotspot.

India's First Private Sector Small Arms Manufacturing Plant

- India's first private sector small arms manufacturing plant has been inaugurated in Madhya Pradesh to supply world class weapons to the armed forces in line with the India's defence indigenisation programme.
- The plant is a joint venture between India's Punj Lloyd and Israel Weapon Systems.

The US' Terminal High Altitude Area Defense (THAAD) anti-missile system

- THAAD is operational in South Korea to guard against missile threats emanating from North Korea.
- Salient Features THAAD, is a missile defence system capable of intercepting and destroying short and medium-range ballistic missiles in their final flight phase.
- Each THAAD system consists of interceptors, launchers, a radar, a fire control unit and support equipment.
- Its role is to simply track and destroy missiles.