

(SOLUTION) TEST - 36 (IPM 2021)

Brahmaputra is braided and unstable in its entire reach in Assam except for a few places. **The main reasons behind the instability of the river are high sedimentation and steep slopes. The river also receives very high rainfall in its catchment area as it enters Assam.**

The reasons behind this high flood prone area percentage are both man-made and natural.

Assam and some other parts of the north-eastern region are prone to frequent earthquakes, which causes landslides. The landslides and earthquakes send in a lot of debris in the rivers, causing the river bed to rise.

Assam has also faced bank erosion around the Brahmaputra and Barak rivers as well as their tributaries. It is estimated that annually nearly 8000 hectares land is lost to erosion. Bank erosion has also affected the width of the Brahmaputra river, which has increased up to 15 km.

Among the man-made reasons, the key cause of floods in Assam region is releasing of water from dams situated uphill. Unregulated release of water floods the Assam plains, leaving thousands of people homeless every year.

Also, Guwahati's topography — which is shaped like a bowl — does make it susceptible to water logging.

Unplanned expansion of the urban areas has led to severe encroachments in the wetlands, low lying areas, hills and shrinkage of forest cover.

The river also changes course frequently and it's virtually impossible to contain it within embankments. The pressure of the surging water takes a toll on these walls.

QSource:<https://economictimes.indiatimes.com/news/india/meeting-held-to-mitigate-flood-in-kaziranga-national-park/articleshow/83185268.cms>

38. Correct Answer : A

Answer Justification :

It is a joint venture of NTPC Limited, Power Finance Corporation, Rural Electrification Corporation and POWERGRID set up under Ministry of Power to facilitate implementation of energy efficiency projects.

EESL seeks to unlock energy efficiency market in India, estimated to at US\$12 billion that can potentially result in energy savings of up to 20 per cent of current consumption, by way of innovative business and implementation models.

It is the largest public Super Energy Service Company (ESCO) in the world.

EESL has been able to successfully aggregate demand and has undertaken bulk distribution of LED bulbs that has led to more than 80% reduction of costs.

Q Source:Based on UPSC papers

39. Correct Answer : D

Answer Justification :

S1: Vertical Launch **Short Range** Surface to Air Missile (VL-SRSAM) was launched by Defence Research & Development Organisation (DRDO).

- It is indigenously designed and developed by **DRDO**, along with Research Centre Imarat, and the Pune-based Research and Development Establishment (Engineers).
- Once deployed, the VL-SRSAM system will prove to be a force multiplier for the **Indian Navy**.
- With an effective Weapon Control System (WCS), it would neutralize various aerial threats at close ranges including sea-skimming targets.
- [Sea-skimming targets have the capability to avoid detection by radar or infrared sensors.]

S2: Progress MS-16 Cargo Ship

- Progress MS-16 or Progress 77 cargo ship has delivered water, propellant and other supplies to the International Space Station (ISS).
- Progress MS-16 is an **unmanned Russian cargo ship** launched by Russian Space Agency, **Roscosmos**.

Q Source: Current events

40. Correct Answer : D