1. Understanding the Regional Rapid Transit System (RRTS) and Its Significance

Introduction

The Regional Rapid Transit System (RRTS) is an ambitious mass rapid transit initiative in India, dedicated to enhancing regional connectivity. Its upcoming inauguration by Prime Minister Narendra Modi marks a significant milestone in India's transportation sector.

What is the RRTS Project?

The RRTS is an integrated, high-speed rail network aiming to facilitate balanced and sustainable urban development across the National Capital Region (NCR). Its inception dates back to a comprehensive study initiated by the Indian Railways in 1998-99, subsequently gaining momentum through the National Capital Region Planning Board's (NCRPB) vision in the "Functional Plan on Transport for NCR-2032."

The Namo Bharat Initiative by NCRTC

The National Capital Region Transport Corporation (NCRTC), a joint venture of the Central government and the governments of Delhi, Haryana, Rajasthan, and Uttar Pradesh, has spearheaded the construction of the RRTS, popularly known as Namo Bharat, under the Ministry of Housing and Urban Affairs.

RRTS vs. Existing Metro and Railway Systems

Distinguishing itself from conventional metro and railway systems, the RRTS offers increased speed and connectivity for commuters traversing longer distances across the NCR, providing enhanced comfort and frequency.

Objectives Behind the RRTS Project

The RRTS project is geared towards unlocking the NCR's full potential by improving multi-modal connectivity, reducing congestion, fostering economic growth, and creating employment opportunities across the region's diverse suburban landscape.

The Corridors and Operational Speed

The RRTS project encompasses the development of eight corridors, with phase I focusing on the construction of three key corridors and the potential for further expansion in the future. The operational speed of the RRTS trains is expected to be between 160 km/hour and 180 km/hour, surpassing the capabilities of existing metro systems.

Inauguration and Future Prospects

The upcoming inauguration by PM Modi will mark the unveiling of the 'priority section,' covering a 17-km stretch of the Delhi-Ghaziabad-Meerut corridor, a significant step towards the project's full operationalization by 2025. This initiative is expected to revolutionize the NCR's transportation landscape, catering to the needs of a rapidly growing urban population.



Relevance: GS Prelims & Mains Paper II; Governance

Source: The Indian Express

2. Gyan Sahayak Scheme Overview and Controversy related to it

Why in news?

The Gyan Sahayak Scheme, introduced by the Gujarat state government, has generated opposition from various quarters, including student groups, political parties, and educators. This scheme is designed to address teacher vacancies in government schools by appointing teachers on a contractual basis until regular appointments can be made. The controversy surrounding the scheme has even led to protests and calls for its cancellation.

Gyan Sahayak Scheme - An Interim Solution

The Gyan Sahayak Scheme was launched in July to ensure that teaching positions in primary, secondary, and higher secondary government schools are temporarily filled until regular appointments can be completed. The scheme's primary objective is to prevent any disruptions in the educational process. Teachers under this scheme are appointed on a contractual basis.

Basis for the Scheme: National Education Policy (NEP) 2020

The scheme draws its foundation from the National Education Policy (NEP) 2020, which emphasizes the development of communication, critical thinking, problem-solving skills, and interdisciplinary expertise among students. The Gyan Sahayak Scheme aims to equip teachers with these skills to enhance the holistic development of students.

Applicability: Government and Grant-in-Aid Schools

The Gyan Sahayak Scheme is targeted at government and grant-in-aid schools. The government has announced the hiring of 15,000 Gyan Sahayaks in primary schools and 11,500 in secondary and higher secondary schools. Salaries for Gyan Sahaks vary depending on the school level.

Eligibility and Appointment Process

Candidates for Gyan Sahayak positions in primary schools must have cleared the Gujarat Examination Board's Teachers Eligibility Test (TET)-2, while secondary and higher secondary Gyan Sahayaks must have cleared the Teacher Aptitude Test (TAT). There are age limits for candidates, and the selection process is based on merit and preference.

Contract Terms and Provisions

Gyan Sahayaks are appointed on an 11-month contract, which may be renewed after a review. School Management Committees have the authority to make and renew these contracts. The Samagra Shiksha office in Gandhinagar advertises vacant positions and invites applications from candidates annually.

Protests and Controversy

Since the announcement of the Gyan Sahayak Scheme, it has faced opposition from various groups, including political parties, teachers, and candidates awaiting regular appointments. Concerns have been raised about the scheme's impact on education quality, and protests have been organized to push for its cancellation. Even the Akhil Bharatiya Vidyarthi Parishad (ABVP), affiliated with the BJP, has expressed dissent.

On one hand while lakhs of candidates, who have cleared TET and TAT, are waiting for regular appointments as teachers, parents have expressed their concern over contractual teachers not taking 'interest' in teaching students.

Relevance: GS Prelims: Governance

Source: The Indian Express and The Hindu

3. Why are earthquakes frequent in Afghanistan?

Introduction: Earthquake Activity in Afghanistan

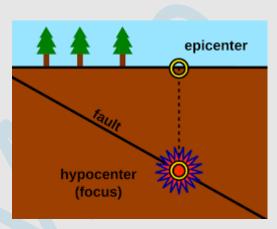
Afghanistan has experienced a series of devastating earthquakes, with the most recent one occurring on October 15, 2023. This follows a previous earthquake on October 11, which led to significant casualties.

History of Earthquakes in Afghanistan

Afghanistan has a history of enduring powerful earthquakes. Notable events include a 2022 earthquake which claimed over 1,000 lives, and a 2015 earthquake in the country's northeast that killed more than 200 people. The region has witnessed destructive earthquakes for many years.

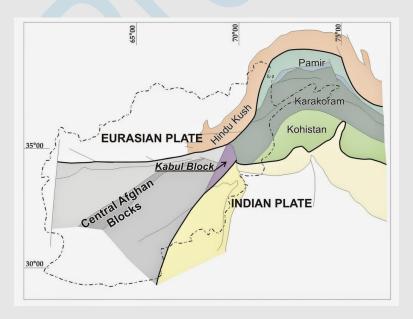
Understanding Earthquake Occurrence

To comprehend why earthquakes happen, it is essential to know the geological processes involved. Earth's lithosphere comprises tectonic plates that move and interact along fault lines due to tectonic forces and stress. Earthquakes occur when these plates suddenly slip past each other, releasing energy and generating seismic waves. The point of origin within the Earth is termed the focus or hypocenter, while the surface point directly above it is the epicenter.



Frequent Earthquakes in Afghanistan

Afghanistan's vulnerability to frequent earthquakes can be attributed to its location above multiple fault lines, especially where the Indian and Eurasian tectonic plates converge. These interactions lead to substantial tectonic activity, contributing to frequent earthquakes in the region.



Tectonic Plate Movements

Afghanistan is situated on the Eurasian plate, with the Arabian plate subducting northward under Eurasia in the west and the Indian plate doing the same in the east. In southern Afghanistan, the Arabian and Indian plates meet, both subducting northward under the Eurasian plate. This collision, convergence, and subduction generate significant tectonic forces and earthquakes.

The Hindu Kush mountain range and the Pamir Knot are regions where these tectonic plates meet, resulting in a complex geological landscape.

Active Fault Systems

Afghanistan is crisscrossed by active fault systems such as the Chaman Fault and the Main Pamir Thrust, which serve as sources of seismic activity in the region. The constant movement and interaction of tectonic plates at these plate boundaries generate substantial tectonic stress, increasing the likelihood of earthquakes.



In summary, Afghanistan's geological position at the convergence of tectonic plates and the presence of numerous fault systems make it prone to frequent and powerful earthquakes. These natural phenomena result from the ongoing tectonic activity and plate interactions in the region.

Relevance: Prelims & Mains Paper I; Geography

Source: The Hindu