

VAJIRAM & RAVI Institute for IAS Examination

The Analyst

CURRENT AFFAIRS Handout

10th February 2025

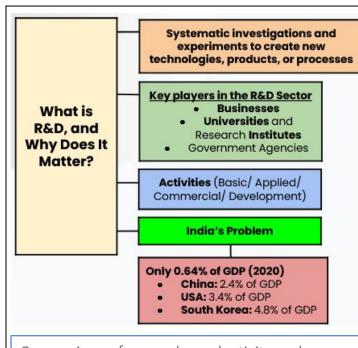
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The Analyst Handout 10 February 2025

India and R&D



CONTEXT: A comprehensive insight into India's R&D sector.



Comparison of research productivity and innovation metrics in selected countries (2021-22)

Country	Researchers per million inhabitants (2021) (FTE)	PhDs produced annually (2021) (Rank)	Publication output (2022) (Rank)	Top 1% most cited articles (% share)	Patents granted (2022) (Rank)
India	262	40,813 (3)	3,06,800 (3)	0.7	30,490 (6)
The U.S.	4,452	69,525 (1)	15,06,000 (1)	1.88	3,23,410 (2)
The U.K.	4,491	27,366 (5)	2,87,200 (4)	2.35	10,578 (15)
China	1,687	53,778 (2)	9,78,100 (2)	1.12	7,98,347 (1)
S. Korea	9,082	13,882 (11)	1,09,200 (16)	1.02	1,35,180 (4)
Japan	5,638	15,804 (10)	1,71,000 (9)	0.88	2,01,420 (3)

Key Budget Announcements on R&D (2025-26)

<u>₹20,000 crore</u>

Target: Build 5 SMRs by 2033 to enhance India's clean energy capacity

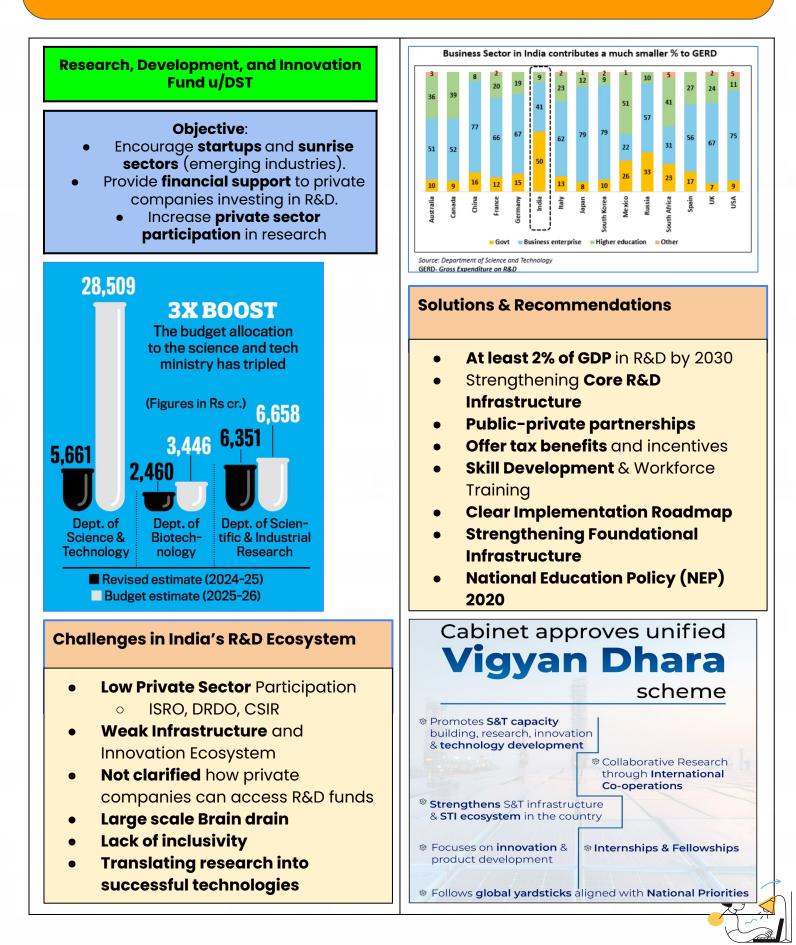


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India and R&D



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Initiatives to promote R&D

- Uchhatar Avishkar Yojana
- IMPRINT Initiative
- Anusandhan National Research Foundation
- SPARC Scheme
- Atal Tinkering Labs
- Research Parks
- One Nation One Subscription

IMPRINTINFUSING INNOVATION IN RESEARCH & INVENTION

122 NEW RESEARCH PROJECT PROPOSALS | RS 112 CRORE FUNDING

RESEARCH PROJECTS PROPOSALS SELECTED :

• ICT :35 • Advanced Materials: 18 • Healthcare Technology:17 • Energy Security :12 • Security & Defence: 11 Sustainable Habitat: 9 • Water Resource & River System: 7 • Environment & Climate:5 • Manufacturina: 4 • Nano Technology: 4 DEPARTMENT OF SCIENCE & TECHNOLOGY **Anusandhan National Research Foundation** Act **Formalised** A transformational step towards achieving global R&D leadership and making India Atmanirbhar Provides high level strategic direction for research, innovation, and entrepreneurship

<u>UPSC PYQ 2015</u>

Which of the following statements is/are correct regarding National Innovation Foundation-India (NIF)?

- 1. NIF is an autonomous body of the Department of Science and Technology under the Central Government.
- 2. NIF is an initiative to strengthen the highly advanced scientific research in India's premier scientific institutions in collaboration with highly advanced foreign scientific institutions.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

UPSC PYQ 2019

Atal Innovation Mission is set up under the

- (a) Department of Science and Technology
- (b) Ministry of Labour and Employment
- (c) NITI Aayog

(d) Ministry of Skill Development and Entrepreneurship

Mains Practise Question

The Budget 2025-26 announcements represent a bold step toward boosting scientific research and development in India. However, the success of these initiatives depends on addressing structural challenges. Discuss. (15 Marks, 250 words)

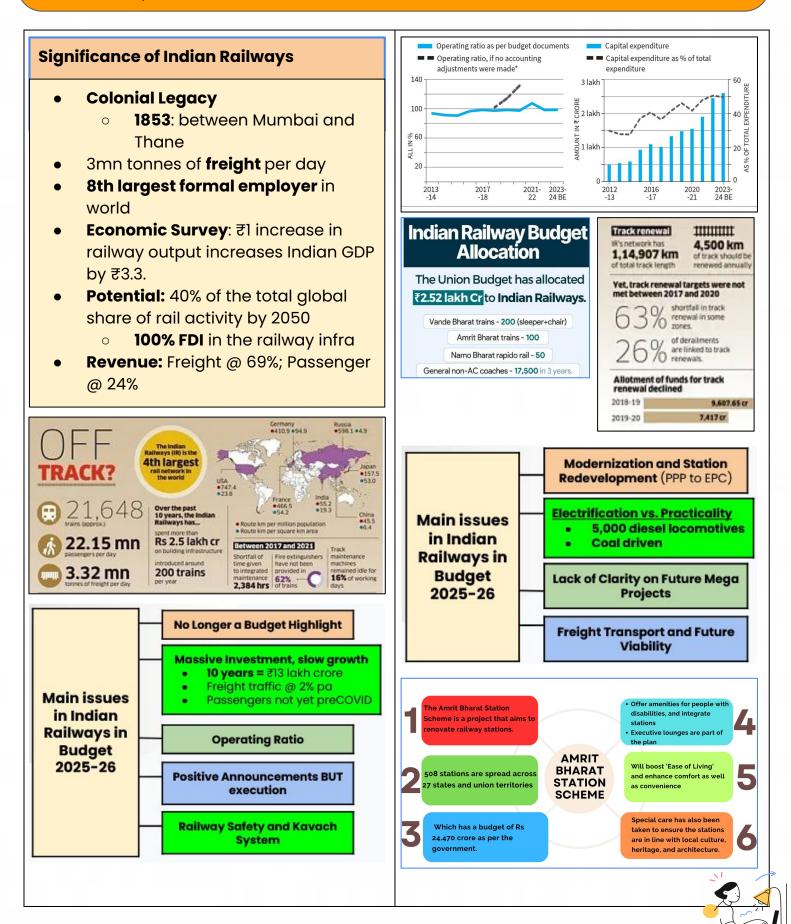
Estimated budget is ₹50,000 crores for five years (2023-28)

What Budget offers Railways?



10 February 2025

CONTEXT: Article offering crucial viewpoints of 2025-26 Union Budget considerations on Indian Railways.

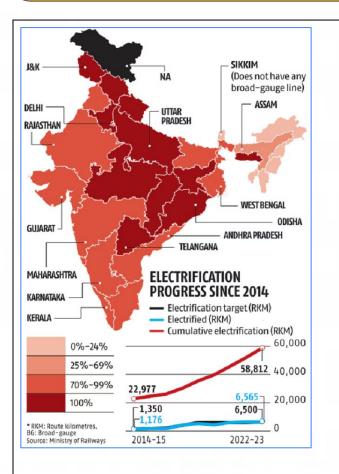


What Budget offers Railways?



10 February 2025

CONTEXT: Article offering crucial viewpoints of 2025-26 Union Budget considerations on Indian Railways.



Recommendations for Tomorrow

- Kakodkar Committee (2012)
 - Railway Safety Authority
 - Non-lapsable Rashtriya Rail
 Sanraksha Kosh (Rs. 1 lakh crores over 5 years)
 - Human resource development
 - Independent accident investigations
- Bibek Debroy Committee (2014)
 - Non-core activities
 - Railway Infrastructure
 Authority of India

- Vinod Rai Committee (2015)
 - Independent Railway Safety
 Authority; statutory powers
 - Railway Infrastructure
 Company
 - Railway Accident Investigation
 Board
- Rakesh Mohan Committee (2010)
 - Reform **accounting system**
 - Diversify in FMCG, Consumer
 Durables, IT, containerized
 cargo, and automobile
 segments
 - Long-distance and inter-city transport
 - High-Speed Rail corridors
 - Logistics parks

UPSC PYQ 2015

With reference to bio-toilets used by the Indian Railways, consider the following statements:

- 1. The decomposition of human waste in the bio toilets is initiated by a fungal inoculum.
- 2. Ammonia and water vapour are the only end products in this decomposition which are released into the atmosphere.

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

What Budget offers Railways?



10 February 2025

CONTEXT: Article offering crucial viewpoints of 2025-26 Union Budget considerations on Indian Railways.

Mains Practise Question

While progress is being made, serious financial and operational challenges remain in the Indian Railways. Comment. (15 Marks, 250 words)

Strategy for New India @ 75

14. Railways

Objectives

By 2022-23, India should have a rail network that is not only efficient, reliable and safe, but is also cost-effective and accessible, both with respect to the movement of people and goods. This requires achieving the following objectives:

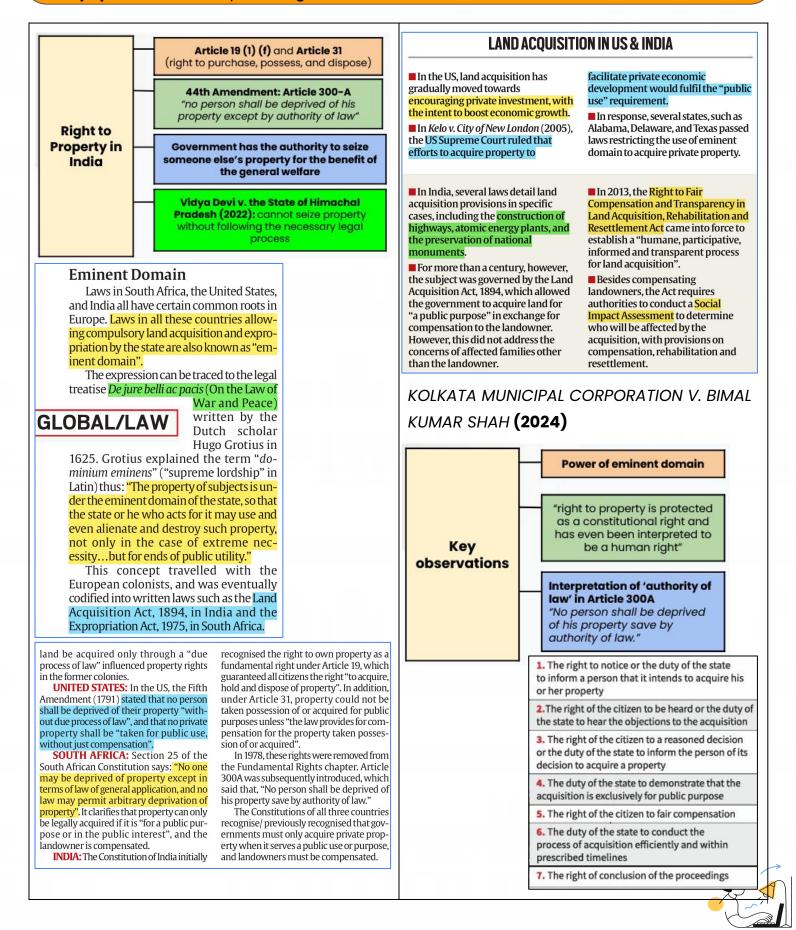
- Augment the capacity of existing railway infrastructure.
- Increase the speed of infrastructure creation from the present 7 km/day to 19 km/day by 2022-23.¹
- Achieve "100 per cent"² electrification of broad gauge track by 2022-23 from the 40 per cent level in 2016-17.
- Increase the average speed of freight and mail/ express trains to 50 km/hr (from about 24 km/hr in 2016-17) and 80 km/hr (from about 60 km/ hr), respectively.³
- Improve the safety of the railways, achieving zero fatalities from the 2016-17 level of 238 fatalities and reducing the number of accidents from the 73 recorded in 2017-18.⁴
- Enhance service delivery, achieving 95 per cent on-time arrivals by 2022-23.⁵
- By 2022-23, the railways should have a freight load of 1.9 billion tonnes and an improved modal share of 40 per cent of freight movement from the current level of 33 per cent.⁶
- Increase the share of non-fare revenues in total revenue to 20 per cent.

Private Property & State's Right to Acquire



10 February 2025

<u>SYLLABUS</u>: GS Paper 2 : Indian Constitution Prelims: Indian Polity & Governance Newspaper : The Indian Express, Page No : 17

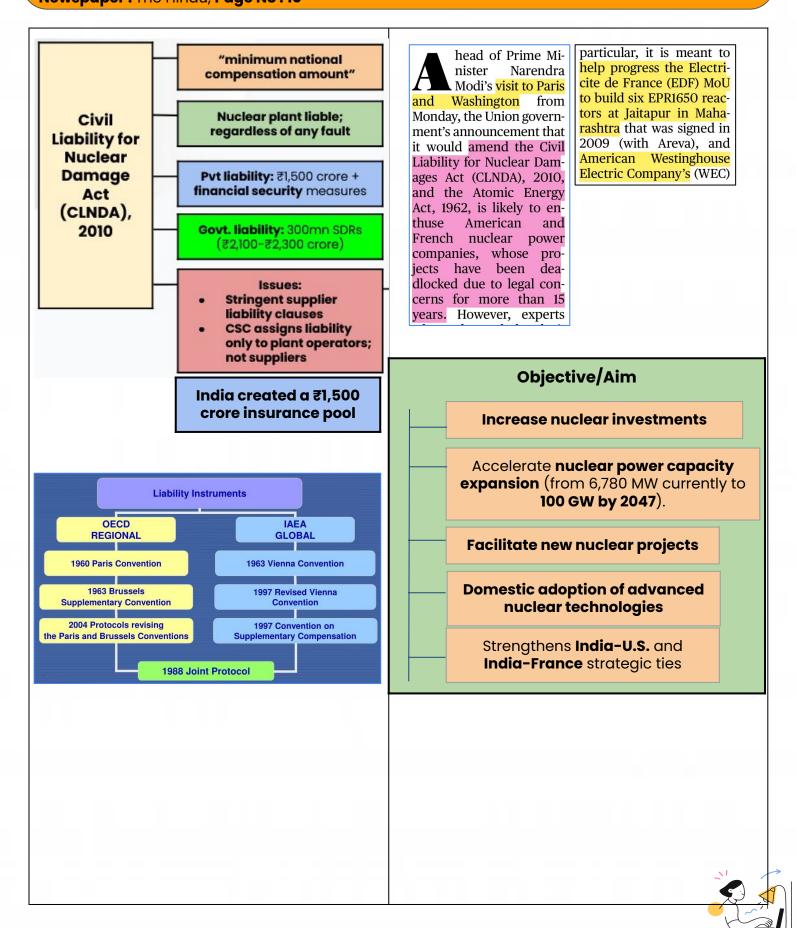


Nuclear Liability Law in News



10 February 2025

<u>SYLLABUS</u>: GS Paper 3 : Infrastructure: Energy Prelims: General Science Newspaper : The Hindu, Page No : 10

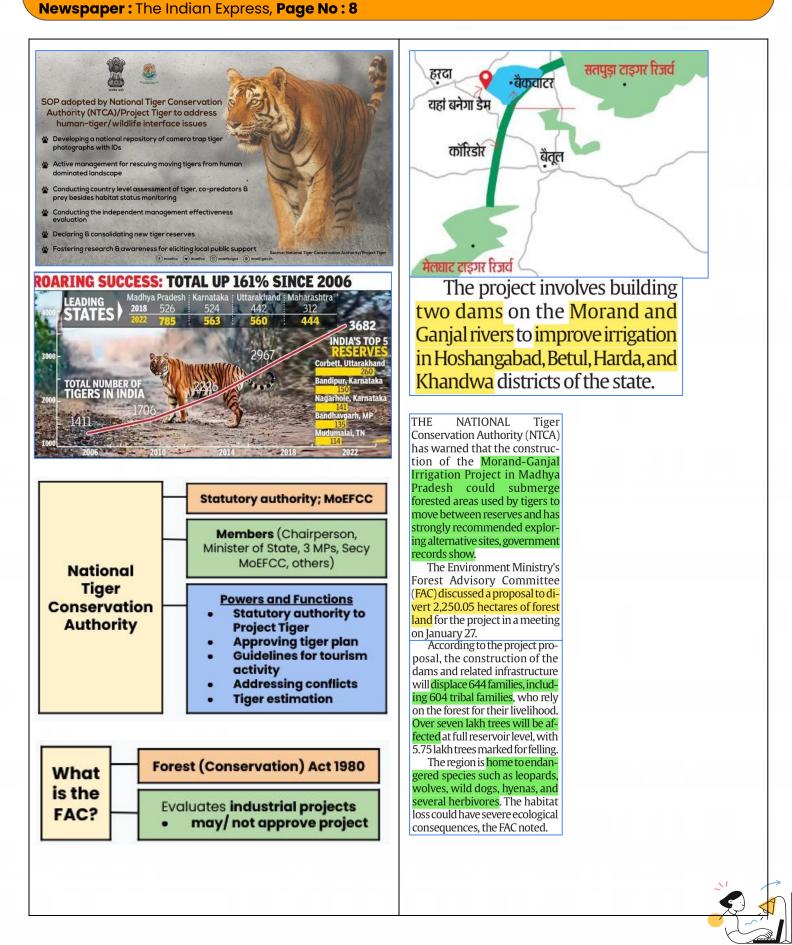


National Tiger Conservation Authority



10 February 2025

SYLLABUS: GS Paper 3 : Conservation Prelims: General issues on Environmental ecology



National Tiger Conservation Authority



10 February 2025

<u>SYLLABUS</u>: GS Paper 3 : Conservation Prelims: General issues on Environmental ecology Newspaper : The Indian Express, Page No : 8

The NTCA's analysis, based on the National Tiger Estimation 2022, shows that the project site is part of a critical tiger-occupied habitat.

It said that the dams would submerge forested areas essential for tiger movement between reserves, affecting "genetic exchange and population stability".

"Any disruption to this ecological connectivity will likely have long-term detrimental impacts on the viability of tiger populations and the broader wildlife community within this landscape," the NTCA said.

<u>UPSC PYQ 2018</u> Consider the following statements:

- 1. The definition of "Critical Wildlife Habitat" is incorporated in the Forest Rights Act, 2006.
- 2. For the first time in India, Baigas have been given Habitat Rights.
- 3. Union Ministry of Environment, Forest and Climate Change officially decides and declares Habitat Rights for Primitive and Vulnerable Tribal Groups in any part of India.

Which of the statements given above is/are correct?

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



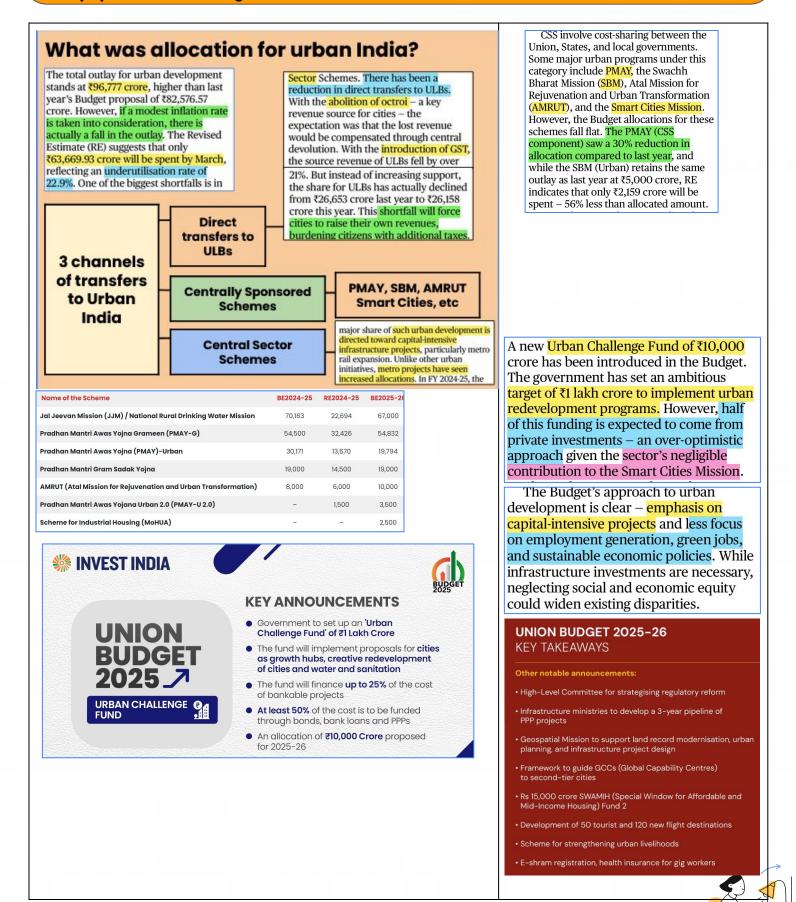
Budget and Urban Development



10 February 2025

<u>SYLLABUS</u>: GS Paper 2 : Welfare schemes for vulnerable sections of the population Prelims: Economic & Social Development

Newspaper: The Hindu, Page No: 8



Foreign Universities in India



10 February 2025

<u>SYLLABUS</u>: GS Paper 2 : Management of Social Sector/Services relating to Education Prelims: Economic & Social Development Newspaper : The Indian Express, Page No : 14

Need Money drain (\$80 billion/yr by 2024) Brain drain (4.4L in 2016 to 7.7L in 2019) Improve GER in higher education Cultural exchange Competition and spillover Aid NEP 2020 Key provisions of Foreign Education Campus Regulations Qualification Courses/Programs Universities: Top 500 in overall category or subject-wise category Joint application permitted Award of a degree/diploma or certificate on completion of Specific courses permitted in GIFT City Distance Learning courses not Equivalence of gualifications Freedom to determine Foreign recom to determine admission process, criteria & fees structure Scholarships may be provided Student & teacher exchange with host campus allowed "For-profit" operations with no restrictions on repatriation Flexibility to recruit & offer salaries at par with global Admission & Fees Profit & Repatriation Source: BDO India Analysis TH The Hindu UGC allows 18 Karnataka universities to collaborate with foreign universities UGC approves collaboration between 18 Karnataka universities and foreign institutions for twinning, joint, and dual degree programs,... 24 May 2024 FE Financialexpres First foreign university under UGC is Southampton, not Deakin

Surrey is the fourth university from the UK and seventh foreign university to announce an international branch campus in India.

Since then, foreign universities (mainly from Australia and the UK) have announced plans to enter India either through GIFT City or elsewhere under regulations by the University Grants Commission (UGC).

Australia's Deakin University (ranked 197th in QS World Rankings 2024), the University of Wollongong (ranked 162nd internationally), and Western Sydney University (375th position); and the University of Southampton (ranked 80th best university in the world), Coventry University (571st position internationally), Queen's University Belfast (202nd position worldwide) and the University of Surrey from the UK have announced plans to enter India.

"World Class Foreign University and Institutions will be allowed in the GIFT City to offer courses in Financial Management, FinTech, Science, Technology, **Engineering and Mathematics**, free from domestic regulations except those by the IFSCA to facilitate availability of high-end human resources for financial services and technology," Finance Minister Nirmala Sitharaman had announced in her Budget speech for Financial Year 2022-23.

GIFT City allows foreign universities 100% ownership of their India branch campuses and repatriation of profits to their parent campuses.

RANKED AMONG the top 300 higher education institutions in the world, the University of Surrey will open its India campus in Gujarat's GIFT (Gujarat International Finance Tec) City in 2026-27, initially offering programmes in artificial intelligence, finance and cyber security, as per Vice Chancellor Gaoqing Max Lu.

23 Sept 2024

Deakin is first in GIFT City, under IFSCA: Southampton in India, under UGC

There will be options to complete programmes along with semester exchange opportunities (in the UK). As for faculty, there will be a mix (of teachers from India and teachers from the UK campus)," Professor Lu said on the

Daily Quiz



10 February 2025

Q1. Consider the following statements:

- 1. India's R&D expenditure as a percentage of GDP was 0.64% in 2020.
- 2. South Korea has the highest R&D expenditure among India, China, and the USA.
- 3. The budgetary allocation to the Ministry of Science & Technology in 2025-26 has been doubled.

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

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

Answer: b

Q2. Match the following Indian Railway Committees with their key recommendations:

S. No.	Committee	R	ecommendation
1	Kakodkar Committee	Α.	High-Speed Rail corridors
2	Bibek Debroy Committee	А.	Non-lapsable Rashtriya Rail Sanraksha Kosh
3	Vinod Rai Committee	Α.	Railway Safety Authority
4	Rakesh Mohan Committee	A.	Railway Infrastructure Authority of India

Select the correct answer using the codes given below.

- a) $1 \rightarrow C, 2 \rightarrow A, 3 \rightarrow B, 4 \rightarrow D$
- b) $1 \rightarrow D, 2 \rightarrow C, 3 \rightarrow A, 4 \rightarrow B$
- c) $1 \rightarrow A, 2 \rightarrow B, 3 \rightarrow D, 4 \rightarrow C$
- d) $1 \rightarrow B, 2 \rightarrow D, 3 \rightarrow C, 4 \rightarrow A$

Answer: d

Q3. Consider the following statements regarding the NTCA:

1. NTCA is a statutory authority under the Ministry of Environment, Forest and Climate Change.

The NTCA approves Tiger Conservation Plans and conducts tiger population estimation. The Prime Minister of India serves as the Chairperson of the NTCA.

Which of the statements given above is/are correct?

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

Answer: a

Q4. Which of the following is NOT a key feature of the newly proposed Urban Challenge Fund under Budget 2025-26?

- a) The fund is ₹21 lakh crore.
- b) It aims to transform cities into growth hubs.
- c) A minimum of 50% of project costs must be funded through bonds, bank loans, and PPPs.
- d) 100% of the project cost will be covered by government funding.

Answer: d

Q5. Consider the following statements regarding Article 300-A:

- The 44th Amendment made the Right to Property a Fundamental Right under Article 19.
- 2. Article 300-A ensures that no person shall be deprived of their property except by authority of law.

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: b



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A unit of Vajiram & Ravi IAS Study Centre LLP

9-B, Bada Bazar Marg, Old Rajinder Nagar, New Delhi - 110060 • Ph.: 41007400, 41007500

New No. 62, P Block, 6th Avenue, Anna Nagar, Chennai - 600040 • Ph.: 044-4330-2121 Visit us at : www.vajiramandravi.com