

POLITY**Money Bill route to bring in the laws****Why in News?**

- Recently, the five-judge bench of Supreme Court declared the electoral bonds scheme unconstitutional.
- However, it postponed deciding on the government's use of money Bills to enact the laws introducing the electoral bonds.
 - Pleas challenging the use of the money Bill route is pending before a seven-judge bench that is yet to be formed.

Money Bill

- Article 110 defines a money Bill as one containing provisions dealing with taxes, regulation of the government's borrowing of money, and expenditure or receipt of money from the Consolidated Fund of India, among others.
- Article 109 delineates the procedure for the passage of such a Bill and confers an overriding authority on the Lok Sabha in the passage of money Bills.
- The Speaker certifies a Bill as a Money Bill, and the Speaker's decision is final.
- Over the last seven years, the government has introduced multiple legislations through the money Bill route, the most notable of which are the Aadhaar Act, 2016, and the Finance Act, 2017.

Difference between money Bills and financial Bills

- While all Money Bills are Financial Bills, all Financial Bills are not Money Bills.
 - E.g., the Finance Bill which only contains provisions related to tax proposals would be a Money Bill.
 - However, a Bill that contains some provisions related to taxation or expenditure, but also covers other matters would be considered as a Financial Bill.
 - The Compensatory Afforestation Fund Bill, 2015, which establishes funds under the Public Account of India and states, was introduced as a Financial Bill.
- The procedure for the passage of the two bills varies significantly.
 - The Rajya Sabha has no power to reject or amend a Money Bill.
 - After being passed by the Lok Sabha, money Bills are sent to the Rajya Sabha for its recommendations.
 - Within 14 days, the Upper House must submit the Bill back to the Lower House with its non-binding recommendations.
 - If the Lok Sabha rejects the recommendations, the Bill is deemed to have passed by both Houses in the form in which it was passed by the Lok Sabha without the recommendations of the Rajya Sabha.
 - Even if the Rajya Sabha doesn't respond with its recommendations within 14 days, the same consequences would follow.
 - However, a Financial Bill must be passed by both Houses of Parliament.
- While an ordinary Bill can originate in either house, a money Bill can only be introduced in the Lok Sabha, as laid down in Article 117 (1).
- Additionally, no one can introduce or move money Bills in the Lok Sabha, except on the President's recommendation.
- Amendments relating to the reduction or abolition of any tax are exempt from the requirement of the President's recommendation.
- The two prerequisites for any financial Bill to become a money Bill are that
 - It must only be introduced in the Lok Sabha and not the Rajya Sabha.
 - These bills can only be introduced on the President's recommendation.

News Summary: Money Bill route to bring in the laws

- Recently, a five-judge bench of the Supreme Court struck down the electoral bonds scheme as unconstitutional.
- However, it saved one aspect of the challenge for a larger bench – the issue of the government using the money Bill route to bring in the laws that introduced the electoral bonds.
- The SC declared that:
 - It had not examined the question of introducing these amendments through a money Bill under Article 110 of the Constitution.

- The scope of Article 110 of the Constitution has been referred to a seven-judge Bench and is sub-judice.

Other instances of the govt using the money bill route

- The government had brought several key legislations using the money Bill route:
 - The Foreign Contribution Regulation Act, 2010 by the Finance Acts of 2016 and 2018;
 - The Tribunals Reforms Act introduced as a money Bill in 2017.
 - Stringent amendments made to the Prevention of Money Laundering Act (PMLA) in 2022 and the passing of Aadhaar Act in 2018.
 - The Supreme Court has upheld the amendments of PMLA and the legality of Aadhaar.
 - CJI Chandrachud was the lone dissenter in the five-judge bench that upheld Aadhaar.
 - He had termed the government’s use of money Bill route a subterfuge and fraud on the Constitution.
 - However, these laws could still be struck down if the court decides that they were enacted through improper procedure (using the money bill route).

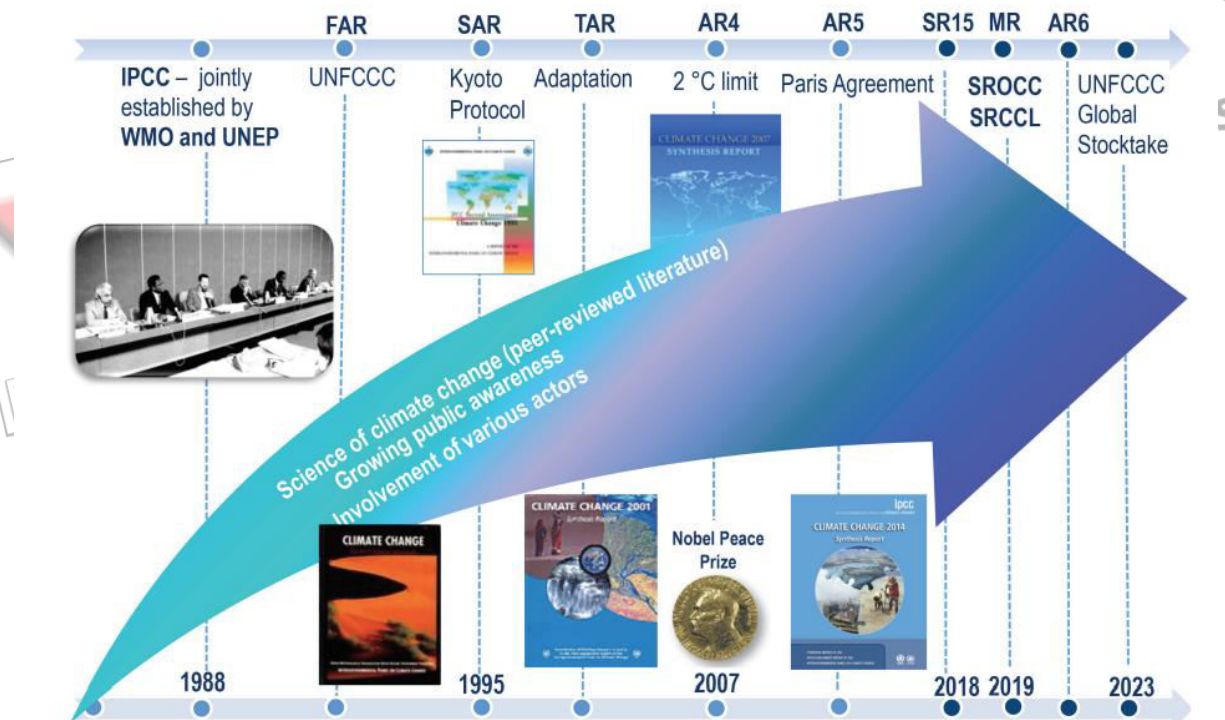
ENVIRONMENT & ECOLOGY

IPCC’s Assessment Reports

Why in News?

- Since 1988, the UN Intergovernmental Panel on Climate Change (IPCC) has produced six assessment reports that provide guidelines for estimating greenhouse gas emissions and removal.
- These documents - prepared by scientists from the 195 countries (part of the UNFCCC) - examine the science, consequences, adaptation, and vulnerability as well as the mitigation aspects of climate change.

What is IPCC and its Assessment Reports?



- IPCC is an intergovernmental body of the UN constituted to advance scientific knowledge about climate change caused by human activities.
- The World Meteorological Organisation (secretariat of IPCC is in Geneva, hosted by the WMO) and the UN Environment Programme (UNEP) established the IPCC in 1988 (endorsed by the UN in 1989).
- It has 195 member states who elect a bureau of scientists to serve through an assessment cycle.
- The bureau selects experts to prepare IPCC reports. It draws the experts from nominations by governments and observer organisations.
- Through its multiple assessment cycles beginning 1990, the IPCC has collated and analysed research by scientists on

- Global warming,
- The role humans have had in exacerbating it,
- The long-term climate impact from current and future emissions and what people can do about it.
- The IPCC does not itself undertake scientific assessments but only evaluates the state of scientific evidence on various aspects of climate change.

The Sixth Assessment Report (AR6) and Afterwards

- Key highlights of the AR6:
 - The report does not weigh in on new scientific evidence but synthesises findings from three working groups and also integrates evidence from three special reports during the sixth assessment cycle, which began in 2015.
 - The report was finalised at IPCC's 58th Session (13 to 17 March 2023) in Interlaken, Switzerland.
 - The AR6 warned that the time to limit the rise of the world's average surface temperature to 5 degrees Celsius from the pre-industrial era (as agreed in the Paris Agreement) is running out.
 - Also, the world is close to breaching adaptation limits.
 - It suggested some options and strategies to slow warming, and to adapt and build resilience in natural systems, in human-made systems, and in communities.
- What follows AR6?
 - After the AR6 synthesis report, the IPCC initiated its seventh cycle (AR7) by electing an IPCC bureau.
 - In (January) 2024, bureau members met for the first time in Turkey to discuss budgeting issues, timelines for the various reports, and the work programme.
 - Prior to this, member countries made a suggestion to guarantee that appropriate IPCC input is available for the 2nd global stocktake, which is scheduled to conclude in 2028.

What is Meant by 'Global Stocktake'?

- To assess the world's progress towards the goals of the Paris Agreement, UNFCCC countries conduct a 'global stocktake' (GST) every five years.
- The GST is a mechanism to measure collective progress, identify gaps, and chart a better course of climate action.
- The first GST started in 2022 and ended at the 28th session of the Conference of the Parties (COP28, Dubai) to the UNFCCC in 2023.
 - The first GST text, agreed by the member countries at the COP28, requested the IPCC to consider ways in which its work can be aligned with subsequent stocktakes.

The Second 'Global Stocktake'

- The second GST is due in 2028; and member countries have requested the IPCC to publish its AR7 assessment reports before so that countries could measure their progress against the state of the planet.
- But the bureau couldn't reach a consensus on the release date, because each assessment report in the past has required at least four years from start to finish.
- Countries also said a shortened cycle could compromise the content as not enough new research papers may be published to understand the changes in climate to the full extent.

PRELIM FACTS

1. Young Scientist Programme (YUVIKA)

- The Indian Space Research Organisation (ISRO) is set to conduct its special 'Young Scientist Programme' or 'YUVIKA' for school children.

About Young Scientist Programme (YUVIKA):

- "Young Scientist Programme", or "YuvaVigyaniKaryakram" YUVIKA, is a learning and awareness creating programme of the ISRO to impart basic knowledge on Space Technology, Space Science, and Space Applications to younger students with a preference to rural areas.
- The programme is aimed at creating awareness about the emerging trends in science and technology amongst the youngsters, who are the future building blocks of our nation. ISRO has chalked out this programme to "Catch them young".
- The programme is also expected to encourage more students to pursue Science, Technology, Engineering and Mathematics (STEM) based research /career.

- Eligibility:
 - Those who have finished class 8 and are currently studying in class 9 can apply for the programme.
 - Three students from each state/Union Territory will participate in this programme every year, covering CBSE, ICSE, and state-board syllabus.
 - The selection is based on 8th Standard academic performance and extracurricular activities.
 - Students belonging to the rural area have been given special weightage in the selection criteria.
 - In case there is a tie between the selected candidates, the younger candidates will be given priority.
- What is being offered?
 - It is a two-week residential programme offered by ISRO.
 - It will include invited talks, experience sharing by eminent scientists, facility and lab visits, exclusive sessions for discussions with experts and practical and feedback sessions.
 - A minimum participation will be ensured from each State / UT.

2. Sangam: Digital Twin Initiative

- Recently, the Department of Telecommunications (DoT) has unveiled the 'Sangam: Digital Twin' initiative.

About 'Sangam: Digital Twin Initiative:

- It is a Proof of Concept (PoC) distributed in two stages to be conducted in one of the major cities of India.
- First stage is exploratory for clarity of horizon and creative exploration to unleash potential.
- Second stage is for practical demonstration of specific use cases generating a future blueprint that may serve as a roadmap to scale and replicate successful strategies in future infrastructure projects through collaboration.
- Aim: The initiative aims to demonstrate practical implementation of innovative infrastructure planning solutions, to develop a model framework for facilitating faster and more effective collaboration and to provide a future blueprint that may serve as a roadmap to scale and replicate successful strategies in future infrastructure projects.
- Digital Twin technology offers a solution by creating virtual replicas of physical assets, allowing for real-time monitoring, simulation and analysis for experimental iterations and feedback loop to adapt to the changes for achieving the best outcomes.
- The initiative comes in the backdrop of past decade's breakthroughs in communication, computation and sensing in the era of techade striving for the vision 2047.
- Sangam: Digital Twin symbolizes a collaborative leap towards reshaping infrastructure planning and design, combining the prowess of 5G, IoT, AI, AR/VR, AI native 6G, Digital Twin and next-gen computational technologies with the collective intelligence of public entities, infrastructure planners, tech giants, startups, and academia to break the silos and engage in a whole-of-nation approach.
- Sangam brings all stakeholders on one platform aiming to transform innovative ideas into tangible solutions, bridging the gap between conceptualization and realization, ultimately paving the way for ground-breaking infrastructure advancements.

3. Lord Mahavir

- Archaeology students and professors in Tamil Nadu recently unearthed a rare 1000-year-old stone statue of Mahavir, the 24th Tirthankara of Jainism.

About Lord Mahavir:

- He was the twenty-fourth and the last Tirthankara of the Jain religion.
- Mahavir was born in 599 B.C. as a prince in Bihar. At the age of 30, he left his family and royal household, gave up his worldly possessions, including clothing, and became a monk.
- He followed an extreme ascetic life, attaining kevala, the stage of omniscience or highest perception.
- Teaching a doctrine of austerity, Mahavira advocated nonviolence (ahimsa) in all circumstances and the acceptance of the mahavratas, the five "great vows" of renunciation.
- At the heart of right conduct for Jains lie the five great vows:
 - Nonviolence (Ahimsa): not to cause harm to any living beings

- Truthfulness (Satya): to speak the harmless truth only
- Non-stealing (Asteya): not to take anything not properly given
- Chastity (Brahmacharya): not to indulge in sensual pleasure
- Non-possession/Non-attachment (Aparigraha): complete detachment from people, places, and material things.
- Mahavir's Teachings:
 - He organized his followers into a fourfold order, namely monk (Sadhu), nun (Sadhvi), layman (Shravak), and laywoman (Shravika). Later on, they are known as Jains.
 - The ultimate objective of his teaching is how one can attain total freedom from the cycle of birth, life, pain, misery, and death, and achieve the permanent blissful state of one's self. This is also known as liberation, nirvana, absolute freedom, or Moksha.
 - He preached that right faith (samyak-darshana), right knowledge (samyak-jnana), and right conduct (samyak-charitra) together will help attain the liberation of one's self.
 - Mahavir's message of nonviolence (Ahimsa), truth (Satya), non-stealing (Achaurya), celibacy (Brahma charya), and non-possession (Aparigraha) is full of universal compassion.
 - Mahavir rejected the concept of God as a creator, a protector, and a destroyer of the universe. He also denounced the worshiping of gods and goddesses as a means of material gains and personal benefits.

Who are Tirthankaras?

- Tirthankaras are also known as Arihants or Jinas.
- Arihant: One who destroys his inner enemies like anger, greed, passion, ego, etc.
- Jina: One who conquers his inner enemies like anger, greed, passion, ego, etc. The followers of Jina are known as Jains.
- Tirthankara: Those Jinas who establishes the four-fold order (Monk, Nun, Layman, and Laywoman) of religion.
- According to Jain philosophy, all Tirthankaras were human beings but they have attained a state of perfection or enlightenment through meditation and self-realization.
- They are the Gods of Jains.

4. Gulf Stream

- A recent scientific study estimates a timescale for the collapse of the Gulf Stream between 2025 and 2095, with a central estimate of 2050, if global carbon emissions are not reduced.

About Gulf Stream:

- It is a swift and warm ocean current that flows along the eastern coast of North America and crosses the Atlantic Ocean towards Europe.
 - This extension towards Europe is known as the North Atlantic drift.
- The Gulf Stream transports an amount of water greater than that carried by all of the world's rivers combined.
- Key characteristics:
 - Location: It originates in the Gulf of Mexico. It then travels northward along the eastern coast of the United States. It follows a north-eastward path across the western North Atlantic Ocean.
 - Sources: The two equatorial sources of the Gulf Stream are the North Equatorial Current (NEC), which flows generally westward along the Tropic of Cancer, and the South Equatorial Current (SEC), which flows westward from southwestern Africa to South America and then northward to the Caribbean Sea. Together, these two warm currents, along with waters from the Gulf of Mexico, form the Gulf Stream.
 - Warmth: The current carries warm water from the tropics (around 25 to 28°C or 77 to 82°F) to higher latitudes.
 - Width and Speed: The Gulf Stream is several hundred kilometres wide and can flow at an average speed of about four miles per hour (6.4 kilometers per hour). However, its speed can vary depending on the location and other factors.
 - Depth: The current is also very deep, extending to depths of up to 1,000 meters.
- Importance and Impact:
 - Climate Regulation: It moderates the temperatures along the eastern coast of North America, keeping the coastal areas warmer in winter and cooler in summer compared to inland regions

at the same latitudes. Since the Gulf Stream also extends toward Europe, it warms Western European countries as well.

- Weather Patterns: The warm and moist air above the Gulf Stream can lead to the formation of low-pressure systems, which may develop into storms or hurricanes. It can also contribute to the formation of fog in certain areas.
- Maritime Navigation: The Gulf Stream has been a crucial factor in maritime navigation for centuries. It provides a fast and efficient route for ships travelling between North America and Europe, as it aids in faster travel times due to its speed.
- Ocean Circulation: The Gulf Stream is an essential part of the larger oceanic circulation system known as the Atlantic Meridional Overturning Circulation (AMOC). The AMOC plays a vital role in redistributing heat around the Earth and regulating global climate patterns.

5. Golden-backed Frog

- Scientists made a surprising discovery in the foothills of the Western Ghats in India — a Bonnet mushroom growing out of the side of the Golden-backed Frog (*Hylarana inter-media*) frog.

About Golden-backed Frog:

- It is endemic to the Western Ghats of Karnataka and Kerala, specifically above the Palghat Gap, where it is known to thrive in relative abundance.
- It is about the size of a human thumb.
- Habitat: The Golden backed frog is predominantly found in evergreen and semi-evergreen forests in the Western Ghats of India.
- These frogs prefer to reside near streams, ponds, and other water bodies, where they can lay their eggs and find their food.
- They are primarily insectivorous and feed on a range of small insects and arthropods such as ants, beetles, and crickets.
- Threats: The major threats to the survival of these frogs are habitat loss and fragmentation, pollution of water bodies, and the introduction of non-native species.

What is Bonnet mushroom?

- It is commonly found as a saprotroph (an organism that feeds on non-living organic matter) on rotting wood.
- It belongs to the Mycena genus.
- Mycenas are hard to identify to species and some are distinguishable only by microscopic features such as the shape of the cystidia.
- Some species are edible, while others contain toxins.

ANSWER WRITING

Q. Discuss the various infrastructural development challenges associated with the North Eastern Region (NER) of India. Also, mention the measures taken up by the Government to enhance the connectivity in the NER of India.

Answer: The NER is linked to the mainland of India through a narrow strip of Siliguri Corridor in North Bengal that is also called the 'Chicken's Neck'. The region's average road density is lower than the rest of India. For the development of NER, the Ministry of Development of the North Eastern Region has been created to create infrastructure for the region's economic development.

Challenges associated with the infrastructural development in the NER are as follows:

- Geographical features: Due to rugged terrain and an inefficient connectivity landscape, the region faces significant transit times to markets of the other states in the country.
- Sparse distribution of population: About 72% of the region is covered by mountains, hills, and plateaus and only the remaining 28% of the area covered by plains that support the bulk of the population of the region.
- Delay in land acquisition: There is concern over delays in land acquisition for highway projects in the NER.
 - For example, the Sixth Schedule of the Constitution grants autonomy to District Councils, limiting state authority over land use.
- Societal protests: For example, the two projects (Tetelia-Byrnihat and Byrnihat-Shillong) taken up to connect the capital of Meghalaya had come to a standstill due to law & order problems.
- Environmental challenges: Protecting the biodiversity of the northeast, and frequent climate related disasters.

- For example, the historic floods in NER show that India's Act East Policy urgently needs to deal with disaster mitigation and resilience.

Measures taken by the Government to enhance the connectivity in the NER of India are as follows:

- Road connectivity: A total of 4686 km of National Highways have been sanctioned by Ministry of Road Transport & Highways in NER in the last 03 years.
 - For example, in addition, North East Special Infrastructure Development Scheme (NESIDS) and NorthEast Road Sector Development Scheme (NERSDS) has sanctioned 77 road projects.
- Air connectivity: Presently, there are 16 operational airports in the NER. Further, 13 major infrastructure works are under implementation in the States of Arunachal Pradesh, Assam, Manipur, Meghalaya and Tripura.
- Rail Connectivity: A total of 19 railway infrastructure projects, falling fully / partly in North Eastern States, covering a total length of 1909 km.
- Waterways connectivity: The Government aims development of the Inland Water Transport (IWT) infrastructure on two NWS (NW-2 and NW-16) for a period of five years, from 2020-21 to 2024-25.
- Last mile connectivity through special schemes: special Accelerated Road Development Programme for North East (SARDP-NE), scheme for Inter-State Neglected Roads etc.
- Power connectivity: In the renewable power sector, a total generation capacity of 578.54 MW has been installed in the North Eastern Region and Sikkim.
- Telecom connectivity: Under Bharat-Net project a total of 5665 villages of NER are proposed to be covered with 4G services.
- Logistics infrastructure: Through PM-DevINE Scheme announced under the Budget 2022-23 and PM GatiShakti for development of multi modal logistics parks.
- People to people connectivity: "Yuva Sangam" initiative to strengthen people-to-people connect specially between youth belonging to NER and other States.

Conclusion

Infrastructure development is crucial to achieve the India 2047 vision for a \$ 40 trillion economy and be reclassified from a developing economy to a developed economy.

MCQs

1. Consider the following statements regarding the Raisina Dialogue:
 1. It is India's flagship conference on geopolitics and geo-economics.
 2. It is jointly organized by the Ministry of External Affairs and the Observer Research Foundation.

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
2. Consider the following Diseases:
 1. Guinea Worm disease
 2. Alzheimer
 3. Cancer

How many of the diseases mentioned above are Neglected tropical diseases?

(a) **Only one**
(b) Only two
(c) All three
(d) None of the Above
3. Which of the following best describes 'venture Debt'?

(a) **Type of financing provided by specialized lenders to early-stage startups.**
- (b) Loans provided by the government to small, early-stage startups.

(c) Financing provided by banks and financial institutions to Small enterprises.

(d) Micro-financing provided to women entrepreneurs in urban areas.
4. Consider the following statements regarding Surrogacy rules in India:
 1. Only altruistic surrogacy is allowed and commercial surrogacy is penalized in India.
 2. Surrogate Mother must be married woman having a child of her own and between age of 25- 35 years.

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
5. Consider the following agencies:
 1. Reserve Bank of India (RBI)
 2. Securities and Exchange Board of India (SEBI)
 3. Insurance Regulatory and Development Authority of India (IRDAI)

How many of the above are the key regulatory bodies for Fintech in India?

- (a) Only one
(b) Only two
(c) **All three**
(d) None of the above
6. Which one of the following best relates to the term 'Human rating' in the context of Gaganyaan Programme?
(a) Achieve high speed transportation
(b) Compliance with environmental standards
(c) **Safe transportation of humans.**
(d) Resistance to wear and tear in outer atmospheric conditions.
7. Consider the following statements:
1. Halogens are highly reactive and don't exist freely in nature.
2. In compounds, fluorine is the most prevalent halogen found in Earth's crust.
Which of the statement(s) given above is/are correct?
(a) 1 only
(b) 2 only
(c) **Both 1 and 2**
(d) Neither 1 nor 2
8. Regarding the Indian Institute of Tropical Meteorology (IITM), consider the following statements:
1. The key areas of its study include monsoon meteorology and air-sea interactions in the South Asian climate.
2. IITM operates as an autonomous institute under the Ministry of Environment, Forest & Climate Change, Government of India.
Which of the statements given above is/are correct?
(a) **Only one**
(b) Only two
(c) All three
(d) None of the above
9. Regarding the Spur-winged Lapwing, consider the following statements:
1. Spur-winged Lapwing belongs to the family of Charadriidae.
2. The bird is commonly found within the Central and Sub-Saharan regions of Africa.
3. The bird is classified as critically endangered according to the IUCN status.
How many of the above statements are correct?
(a) **Only one**
(b) Only two
(c) All three
(d) None of the above
10. With reference to fiscal federalism, consider the following statements:
1. It is based on the principle that all levels of government have equal fiscal powers.
2. It emphasizes the importance of fiscal discipline and accountability at all levels of government.
3. Intergovernmental transfers play a crucial role in fiscal federalism.
How many of the statements given above are correct?
(a) Only one
(b) **Only two**
(c) All three
(d) None of the above