







### 14 December 2024 National and International News

IndiaAl Mission	<ul> <li>Why in news?</li> <li>Union Minister for Electronics and Information Technology Ashwini Vaishnaw has announced that 8.6 lakh candidates have enrolled in the IndiaAl Future Skills platform, a program aimed at democratizing Artificial Intelligence (AI) education and skilling.</li> </ul>
	<ul> <li>Key Points: <ul> <li>It aims to build a comprehensive ecosystem that fosters Al innovation by democratizing computing access, enhancing data quality, developing indigenous Al capabilities, attracting top Al talent, enabling industry collaboration, providing startup risk capital, ensuring socially impactful Al projects, and promoting ethical Al.</li> <li>This mission drives responsible and inclusive growth of India's Al ecosystem through following seven pillars.</li> <li>IndiaAl Future Skills Platform: <ul> <li>It is one of the seven foundational pillars of the IndiaAl Mission.</li> <li>It aims to enhance India's Al workforce readiness by mitigating barriers to entry in Al programs and advancing the Al talent pipeline.</li> <li>The pillar will increase Al courses in undergraduate, postgraduate, and Ph.D. programs.</li> <li>It further aims to foster inclusive access to Al education by establishing Data and Al Labs in Tier 2 and Tier 3 cities across India to impart foundational level courses.</li> <li>It is developed in collaboration with industry partners, to provide cutting-edge training programs tailored to meet evolving industry demands.</li> </ul> </li> </ul></li></ul>
Gene Therapy Treatment for Haemophilia	<ul> <li>Why in news?</li> <li>Indian scientists have developed a novel gene therapy for haemophilia A, offering a one-time treatment to replace frequent clotting factor injections.</li> </ul>
	<ul> <li>Key Points: <ul> <li>It is a technique that involves altering the genetic material of cells to treat or prevent disease.</li> <li>It aims to introduce a normal, functional gene to compensate for the defective, disease-causing gene.</li> <li>It employs various approaches: replacing a mutated gene with a healthy copy, inactivating a mutated gene, and introducing a new gene.</li> <li>Gene therapy has primarily focused on treating monogenic disorders caused by a mutation in a single gene, such as SCID, haemophilia, and muscular dystrophy.</li> </ul> </li> <li>About Haemophilia:</li> </ul>













	<ul> <li>Haemophilia is a medical condition, mostly inherited, in which the ability of blood to clot is severely reduced, so that even a minor injury can cause severe bleeding.</li> <li>Haemophilia is caused by a mutation or change, in one of the genes, that provides instructions for making the clotting factor proteins needed to form a blood clot.</li> <li>This change or mutation can prevent the clotting protein from working properly or to be missing altogether. These genes are located on the X chromosome.</li> </ul>
Willow	<ul> <li>Why in news?</li> <li>Google has developed a state-of-the-art quantum computing chip called Willow.</li> </ul>
	<ul> <li>Key Points: <ul> <li>A quantum chip is a special type of computer chip designed to use the principles of quantum mechanics, the science of very tiny particles like atoms.</li> <li>While regular chips use 'bits' (0 or 1) to process information, quantum chips use 'qubits', which can be 0 or 1 or both at the same time.</li> <li>This unique ability allows quantum chips to handle complex calculations much faster than traditional computers.</li> <li>About Willow: <ul> <li>Willow operates using superconducting transmon qubits—tiny electrical circuits exhibiting quantum behaviour at extremely low temperatures.</li> <li>Achievements: <ul> <li>It has solved a complex computation under 5 minutes that would have taken a supercomputer around 10 septillion (10^25) years to complete.</li> <li>Willow can reduce errors exponentially as we scale up using more qubits. This cracks a key challenge in quantum error correction that the field has pursued for almost 30 years.</li> </ul> </li> </ul></li></ul></li></ul>
IFAD & PM-JANMAN Mission	<ul> <li>Why in news?</li> <li>The Odisha government is planning to secure a ₹734.86-crore external loan from the International Fund for Agricultural Development (IFAD) to implement Phase II of the Odisha Particularly Vulnerable Tribal Groups (PVTGs) Empowerment and Livelihood Improvement Programme (OPELIP-II).</li> <li>Tribal experts have raised concerns about the international loan, questioning its necessity given the Central government's PM-JANMAN Mission with substantial financial backing.</li> </ul>
	<ul> <li>Key Points:         <ul> <li>About IFAD:</li> <li>The International Fund for Agricultural Development (IFAD) is an international financial institution and a specialized agency of the United Nations focused on poverty eradication in rural</li> </ul> </li> </ul>















	<ul> <li>areas of developing countries.</li> <li>It provides grants and low-interest loans for projects aimed at</li> </ul>
	improving livelihoods.
	<ul> <li>IFAD works with marginalized and vulnerable groups, including smallholder farmers, foresters, pastoralists, fishermen, and</li> </ul>
	small-scale entrepreneurs.
	$\circ$ The institution supports these groups by offering disaster
	preparedness, access to weather information, technology transfer, and social learning opportunities.
	<ul> <li>About PM-JANMAN Scheme:</li> </ul>
	<ul> <li>PM JANMAN is a government scheme that aims to bring tribal</li> </ul>
	communities into the mainstream.
	$\circ$ The scheme (comprising Central Sector and Centrally
	Sponsored Schemes) will be implemented by the Ministry of
	Tribal Affairs, in collaboration with the State governments and
	<ul> <li>the PVTG communities.</li> <li>The scheme will concentrate on 11 critical interventions</li> </ul>
	<ul> <li>The scheme will concentrate on 11 critical interventions overseen by 9 line Ministries, ensuring the implementation of</li> </ul>
	existing schemes in villages inhabited by PVTGs.
	<ul> <li>The scheme is expected to enhance the quality of life and well-</li> </ul>
	being of the PVTGs, by addressing their multiple and
	intersecting forms of discrimination and exclusion, and by
	recognizing and valuing their unique and valuable contribution
	to national and global development.
	• Who are PVTGs, or Particularly Vulnerable Tribal Groups?
	<ul> <li>PVTGs, or Particularly Vulnerable Tribal Groups, are a category</li> </ul>
	of tribal communities in India that are considered more
	vulnerable than other tribal groups.
	<ul> <li>The Indian government created the PVTG list to improve the living standards of these endangered groups.</li> </ul>
	<ul> <li>The 13 Particularly Vulnerable Tribal Groups (PVTGs) in Odisha</li> </ul>
	are:
	Birhor, Bondo, Chuktia Bhunjia, Didayi, Dongria
	Kondh, Hill Kharia, Juang, Kutia Kandha, Lanjia
	Soura, Lodha, Mankirdia, Paudi Bhuyan, and Soura.
Person in news:	Why in news?
Madhav Gadgil	• Recently, India's veteran ecologist, Madhav Gadgil has been
	named as one of the six 'Champions of the Earth' by the United
29	Nations Environment Programme (UNEP) for 2024.
S SEL	<ul> <li>Gadgil's research has helped to protect marginalised people, promote the community driven concernation of accountement from forests to</li> </ul>
A Martin Contraction	the community-driven conservation of ecosystems, from forests to wetlands, and influence policymaking at the highest level.
	Key Points:
	UNEP is an agency of the United Nations.
	<ul> <li>It coordinates the UN's environmental activities.</li> <li>It assists developing countries in implementing environmentally cound</li> </ul>
	<ul> <li>It assists developing countries in implementing environmentally sound policies and practices.</li> </ul>













- It was founded as a result of the United Nations Conference on the Human Environment 1972.
- It has overall responsibility for environmental problems among United Nations agencies.
- Addressing climate change or combating desertification, are overseen by other UN organizations, like the UNFCCC and the United Nations Convention to Combat Desertification.
- UNEP has registered several successes, such as the 1987 Montreal Protocol, and the 2012 Minamata Convention, a treaty to limit toxic mercury.
- UN Environment is also one of several Implementing Agencies for the Global Environment Facility (GEF) and the Multilateral Fund for the Implementation of the Montreal Protocol.



#### Copyright © by Adda247

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Adda247.





