

**PRELIMS EDGE 2025****01-08-2025****SCHEMES IN NEWS****Skill Impact Bonds**

- It is an innovative **financing tool aimed at improving employment outcomes for young people.**
- Under this initiative, first skilling is provided to young people, and then provide them jobs or making them perform better within their current jobs.
- India's Skill Impact Bond (SIB) was launched in **November 2021.**
- It is the **country's first development impact bond focused on employment.**
- It is backed by the **Ministry of Skill Development and Entrepreneurship through the National Skill Development Corporation,**
- Its objective is to benefit 50,000 young Indians over four years, with

60% of the beneficiaries being women.

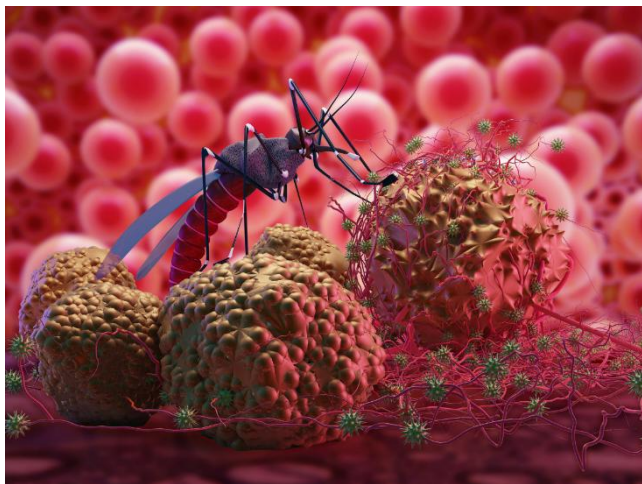
- This innovative outcomes-based financing tool uses private sector capital and expertise, focusing on job placement and retention rather than merely on training and certification.

**Working**

- There are '**risk investors**' usually from the private sector who provide funding to service providers (organisations that deliver skills training and support job placement).
- Then there are **outcome funders who repay the 'risk investors' if the programme has met its employment targets.**
- There is also a third-party evaluator who verifies employment outcomes.

## TERMS IN NEWS

### Malaria



- Malaria is a life-threatening **febrile illness caused by Plasmodium parasites, transmitted through the bites of infected female Anopheles mosquitoes.**
- The disease is **not contagious, but can be spread through infected blood or contaminated needles.**

### Symptoms and Risks

- **Symptoms appear 10–15 days after infection and include fever, chills, and headache.**
- Severe symptoms can include seizures, difficulty breathing, jaundice, dark urine, and death if untreated.
- **Partial immunity** can develop in endemic regions, making diagnosis difficult in some patients.

### Prevention and Treatment

- Prevention includes vector control, use of mosquito nets, repellents (DEET, IR3535, Icaridin), long clothing, and chemoprophylaxis for travellers.
- Early diagnosis and treatment using microscopy or rapid diagnostic tests (RDTs) are critical.

### Malaria in India

- Malaria **remains one of the major public health problems in India.**
- The country carries 1.7% of the global malaria case burden, 1.2% of global malaria deaths.
- Of importance is that **India carries 47% of the global Plasmodium vivax malaria burden**, making the country strategically important for global malaria elimination, particularly in the South-East Asian region.
- Malaria has been made notifiable in 31 states/UTs.
- States of Odisha, Chhattisgarh, Jharkhand, Meghalaya and Madhya Pradesh disproportionately accounted for nearly 45.47 percent of malaria cases.

### Steps taken

- Ministry of Health and Family Welfare launched **National Framework for Malaria Elimination (NFME) in 2016;**
- **National Strategic Plan (NSP) for Malaria Elimination (2016-2030) was launched by the Health Ministry.**

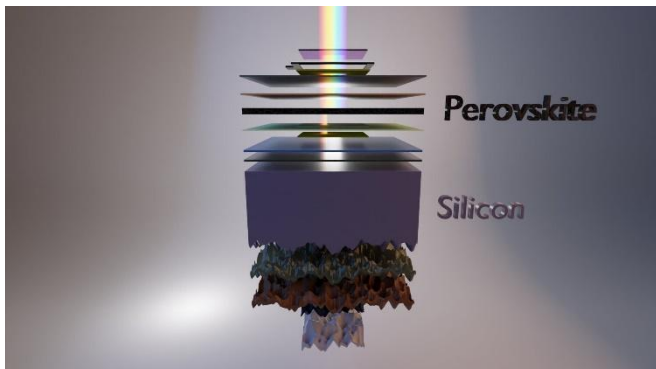
- It has a **vision of a malaria-free country by 2027 and elimination by 2030.**

#### Vaccine

- **R21/Matrix-M malaria vaccines** has been developed by the **University of Oxford and the Serum Institute of India.**
- It has been **recommended for use by the World Health Organization (WHO)** after meeting required safety, quality and effectiveness standards.

#### Tandem Solar Cells

- It **consists of solar cells on top of each other.**
- There are several types of tandem cells that can be grouped mainly depending on materials used.
- Tandem cells are stacks of p-n junctions, each of which is formed from a semiconductor of different bandgap energy.
- Each responds to a different section of the solar spectrum.
- They are able to improve the efficiency of standard solar panels by splitting the light spectrum and optimising the harvesting of energy from each section into electricity.



#### About Perovskite

- **A perovskite is a material that has the same crystal structure as the mineral calcium titanium oxide, the first-discovered perovskite crystal.**
- Generally, perovskite compounds have a chemical formula  $ABX_3$ , where 'A' and 'B' represent cations and X is an anion that bonds to both.
- A large number of different elements can be combined together to form perovskite structures.
- Using this compositional flexibility, scientists can design perovskite crystals to have a wide variety of physical, optical, and electrical characteristics.
- Perovskite crystals are found today in ultrasound machines, memory chips, and now – solar cells.

#### Tsunami



- A tsunami is **a series of waves generated by a large and sudden displacement of the ocean.**
- Tsunamis can have devastating and wide-ranging effects, especially in coastal regions.

- The word tsunami is composed of the Japanese words "tsu" (which means harbor) and "nami" (which means "wave").
- Large earthquakes below or near the ocean floor are the most common cause (**about 80% of all known tsunamis are triggered by earthquakes**), but landslides, volcanic activity, certain types of weather, and meteorites can also cause tsunamis.
  - Not all earthquakes cause tsunamis; they must be strong and shallow (at least 6.5 magnitude and less than 70 km from the Earth's surface), and move the seafloor vertically.
- Tsunamis radiate outward in all directions from their source and can move across entire ocean basins, around islands, and into bays, sounds, and up rivers.
- **Out in the depths of the ocean, tsunami waves do not dramatically increase in height.**
- **But as the waves travel inland, they build up to higher and higher heights as the depth of the ocean decreases.**
- The speed of tsunami waves depends on ocean depth rather than the distance from the source of the wave.
- **Tsunami waves may travel as fast as jet planes over deep waters, only slowing down when reaching shallow waters.**

- Tsunamis can have heights of up to 30 m (98 ft) and reach speeds of 950 km per hour.
  - It is hard to see that a tsunami is approaching. **The most obvious sign is when coastal water retreats just before the waves reach the shore. This is actually the trough of the wave following behind.**

### INS Himgiri

- It is the **third ship of Nilgiri Class (Project 17A)** and the first of the class built at Garden Reach Shipbuilders & Engineers (GRSE),
- It is a reincarnation of the erstwhile INS Himgiri, a Leander-class frigate, that was decommissioned on 06 May 2005 after 30 years of glorious service to the nation.
- It is designed by the Warship Design Bureau (WDB) and overseen by the Warship Overseeing Team (Kolkata).



### Features

- P17A ships are fitted with an advanced weapon and sensor suite compared to the P17 (Shivalik) class.
- These ships are configured with Combined Diesel or Gas (CODOG)

propulsion plants, comprising a diesel engine and gas turbine, that drives a Controllable Pitch Propeller (CPP) on each shaft, and a state-of-the-art Integrated Platform Management System (IPMS).

- The weapon suite comprises supersonic Surface-to-Surface missile system, Medium-Range Surface to Air Missile system, rapid-fire Close-in Weapon Systems.
- **It has indigenous content of 75%, which has involved over 200 MSMEs at GRSE.**
- P17A frigates reflect a generational leap in indigenous ship design, stealth, survivability, and combat capability.
- **Significance:** Delivery of Himgiri showcases the design, ship construction and ★ engineering prowess of the nation, and reflects Indian Navy's unrelenting focus on Aatmanirbharta in both ship design and shipbuilding.

### UN Women



- It is the United Nations (UN) **entity dedicated to gender equality and the empowerment of women.**
- It was created in July 2010 by the UN General Assembly.
- The creation of UN Women came about as part of the UN reform agenda, bringing together resources and mandates for greater impact.

### The main roles of UN Women are:

- To support inter-governmental bodies, such as the Commission on the Status of Women, in their formulation of policies, global standards, and norms.
- To help member states implement these standards, standing ready to provide suitable technical and financial support to those countries that request it, and to forge effective partnerships with civil society.

- To lead and coordinate the UN system's work on gender equality as well as promote accountability, including through regular monitoring of system-wide progress.
- It works globally to make the vision of the Sustainable Development Goals (SDG's) a reality for women and girls and stands behind women's equal participation in all aspects of life.
- Within countries that request its assistance, UN Women works with government and non-governmental partners to help them put in place the policies, laws, services, and resources that women require to move towards equality.
- **Grant-making Funds:** UN Women provides grants to fuel innovative, high-impact programmes by government agencies and civil society groups through two funds—the Fund for Gender Equality and the UN Trust Fund to End Violence against Women.
- **Commission on the Status of Women (CSW):** A global policy-making body, the CSW is a functional commission of the United Nations Economic and Social Council (ECOSOC), dedicated exclusively to gender equality and the advancement of women.
- Aside from the CSW, UN Women offers regular information on women's rights issues to the General Assembly, the ECOSOC, and the Security Council.

- It maintains the UN Secretary-General's database on violence against women, which tracks measures to end violence taken by UN Member States and UN organizations.

## PRACTICE QUESTIONS

Q1: Consider the following statements regarding Skill Impact Bonds.

1. It is an innovative financing tool aimed at improving employment outcomes for young people.
2. There are 'risk investors' usually from the private sector who provide funding to service providers.
3. Then there are outcome funders who repay the 'risk investors' if the programme has met its employment targets.
4. There is also a third-party evaluator who verifies employment outcomes.

How many of the above statements are incorrect?

- A. Only One
- B. Only Three
- C. All of the Above
- D. None of the Above

Q2: Consider the following statements regarding Malaria

1. Malaria is a life-threatening febrile illness caused by Plasmodium parasites, transmitted through the bites of

infected female Anopheles mosquitoes.

2. The disease is not contagious, but can be spread through infected blood or contaminated needles.
3. Currently there is not vaccine available for Malaria

How many of the above statements are correct?

- A. Only One
- B. Only Two
- C. All of the Above
- D. None of the Above

Q3: Consider the following statements regarding Tandem Solar Cells

1. It consists of solar cells on top of each other.
2. They are able to improve the efficiency of standard solar panels by splitting the light spectrum and optimising the harvesting of energy from each section into electricity.

How many of the above statements are incorrect?

- A. Only Statement 1
- B. Only Statement 2
- C. Both the statements
- D. None of the Above

Q4: The term Project 17A is related to which of the following Indigenous Programmes?

- A. Nuclear Submarines
- B. Frigates
- C. Helicopters
- D. Missile Systems

Q5: Consider the following statements regarding Tsunamis

1. A tsunami is a series of waves generated by a large and sudden displacement of the ocean.
2. Out in the depths of the ocean, tsunami waves do not dramatically increase in height.
3. But as the waves travel inland, they build up to higher and higher heights as the depth of the ocean decreases.
4. Tsunami waves may travel as fast as jet planes over deep waters, only slowing down when reaching shallow waters.

How many of the above statements are incorrect?

- A. Only One
- B. Only Three
- C. All of the Above
- D. None of the Above

#### Answers

1. D
2. B
3. D
4. B
5. D