

10 JULY 2023 - MAINS DAILY QUESTIONS & MODEL ANSWERS:

Q1. Women's issues were at the forefront of discussion throughout socioreligious changes. Think about the impact of 19th-century socioreligious reform movements on women's emancipation.

Paper & Topic: GS I → Women Empowerment

- The socio-religious reform movement, influenced by the Renaissance and Enlightenment, gained traction to speak out against the tyranny of women at the start of the 19th century while being ruled by the British. These movements came into being in an effort to combat long-standing customs and practises that mistreated women. The British government undermined Indian sovereignty while supporting the rapidly growing educated class in its efforts to liberate women from the constraints of religious belief.
- **The impact of 19th-century socioreligious reform movements on the emancipation of women:**
 - Raja Ram Mohan Roy and the Brahma Samaj worked hard to make sati illegal. In 1829, the Bengal Sati Regulation Act was passed, making sati illegal. The Vedic values of gender equality in education, the right of women to choose their own husbands, and their involvement in family decision-making were also upheld, in addition to child marriage.
 - The activities of Jyotirao Phule and Satyasodhak Samaj woke up the lives of the scheduled caste females, and many of them began to pursue education and become more visible in society.
 - Widow remarriage: At the insistence of the Brahma Samaj and Ishwar Chandra Vidyasagar, the government established the Hindu Remarriage Act in 1856. Vidyasagar cited scriptures from the Vedas to prove that widow remarriage was acceptable in the Hindu religion.
 - Because of B.M., child marriage has been abolished. Girls under the age of 12 were not allowed to get married by the Malabari law known as the Age of Consent Act (1891). The Sarda Act of 1930 increased the marriage age to 18 for men and 14 for women.
 - The purpose of Prarthana Samaj was to support female education while opposing child marriage and the purdah system. It supported widow remarriage as well. Also condemned by Justice Ranade was polygamy.

- The mission of the Arya Samaj was to advance complete justice, equal opportunity for all, and gender equality in sports. Swami Dayanand made a concerted effort to address the issues in society that impacted women. He granted women the most power in matters of the home.
- Pandita Ramabai was one of several female reformers who helped expand women's rights. She is recognised as the country's first feminist to address other females. She advocated for women's education while speaking out against child marriage and child widowhood.
- **The socio-religious reform movement of the 19th century, however, had little impact on the emancipation of women due to the following reasons:**
 - Urban phenomena: The intellectual movement in India started and thrived mostly in urban areas.
 - Male-dominated: The reform movements, which were predominately led by men, did not place a high premium on gender equality. For instance, well-known Brahmo Samaj member Keshub Chandra Sen participated in child marriage despite fiercely denouncing the practise.
 - The Bible is crucial: At the time, the prevailing colonial belief was that Indian civilization was founded on religion, and that religion was contained in the Bible. This colonial perspective assumed that the native civilization entirely complied with the scriptures' laws. To give one example, the colonial government did not decide to forbid sati until it was evident that the practise was not endorsed by the scriptures.
 - Limited to upper caste: The campaign for women's education was primarily focused on women from higher castes, notwithstanding the discrimination that women from lower castes and classes endured.
 - Women did not receive any new chances outside the home as a result of socio-religious reforms. Both in the workforce and in politics, women were underrepresented.
 - Despite a number of drawbacks, the reform movement of the 19th century made a significant contribution to the emancipation of women. They campaigned for the eradication of superstitions and outmoded customs, the spread of knowledge, and the development of a realistic and modern worldview. All of these actions made it possible for Indian women to play a substantial and active role in the country's battle for independence.

Q2. Describe the main elements of the locally developed KAVACH system, also known as the Automatic Train Protection (ATP) system. What more modifications to the railway sector are necessary to improve its efficiency and security?

Paper and Topic: GS II → Government Policies

- The KAVACH is a homegrown Automatic Train Protection (ATP) system that was developed by the Research Design and Standards Organisation (RDSO) in partnership with the Indian industry. It is composed of RFID technology and electrical devices that have been installed in trains. It was mentioned in the 2022 Union Budget as a part of the Atmanirbhar Bharat initiative.
- **The essential traits of the KAVACH are as follows:**
 - Inside the cabin, a line-side signal display is available for clearer visibility in cloudy conditions and at higher speeds.
 - Continuous updates are made to the movement authorisation, and level crossings automatically whistle.
 - Any emergency message is delivered via two-way communication between the stationmaster and loco-pilot with the help of the Traffic Collision Avoidance System (TCAS). It accomplishes this utilising equipment installed in the locomotive and in transmission towers at stations that have RFID tag connections.
 - Centralised live rail movement monitoring is another feature of the Network Monitor System.
 - The error probability of "Kavach," one of the least expensive technologies with a safety Integrity Level-4 (SIL-4) certification, is 1 in 10,000 years.
- **Additional changes to the railway sector are required to boost efficiency and safety, and these include the following:**
 - Infrastructure modernization: The Indian railway network has not been able to keep up with these changes or expand as swiftly as India needs. For example, the tracks are incompatible with modern trains. Therefore, it is essential for all of the railways' components to modernise their equipment and processes.
 - Increasing safety: The heavy traffic on Indian Railways' main trunk routes is the primary reason for the trains' sluggish speeds and poor safety record. Track, electrical, and signalling infrastructure maintenance and issue diagnosis have deteriorated as a result of this excessive congestion. The Kakodkar committee suggested establishing a legally binding authority for railway safety and allocating Rs 1 lakh crore over five years.
 - Implementing enterprise resource planning systems is necessary for railways to adopt more commercial methods, increase productivity, and increase profitability. Additionally, these systems let railway planners keep track of their available resources, like as staff and train stock, and figure out more efficient methods to employ them.
 - the Bibek Debroy Committee's suggestions:
 - The committee asserts that the Indian Railways' accounting process is "very complicated" as it transitions to commercial accounting. The way Indian Railways compiles and handles financial records and costs associated with its operations needs to be improved.

- Allowing private businesses to operate both freight and passenger trains in order to compete with Indian railways will increase the participation of the private sector. The involvement of the private sector in non-core activities such as manufacturing, building, and providing a variety of infrastructure services for the railway should also be promoted.
- Decentralisation: According to the research, the Divisional Railway Managers (DRMs) should be granted more authority in order to accomplish effective decentralisation, especially with regard to tenders for construction projects, the acquisition of supplies and services, or even commercial tenders that result in revenue.
- lowering the focus on non-core areas: According to the committee, many of Indian Railways' activities are not essential to the organization's main business, rail transportation. These include, among other things, running hospitals and schools, catering, creating and maintaining infrastructure, developing real estate, including homes, and manufacturing locomotives, coaches, and waggons. Indian Railways should focus on its core capabilities if it wants to effectively compete with the private sector.
- Systems like the Automatic Train Protection system (KAVACH) ought to be put into place on all of the country's train routes to help the Indian Railways achieve its aim of zero accidents. Several committees have recommended additional changes that should be implemented in order to improve the efficiency and safety of railroads.

