

POLITY**Public Examinations (Prevention of Unfair Means) Bill, 2024****Why in News?**

- Union minister Jitendra Singh introduced the Public Examinations (Prevention of Unfair Means) Bill, 2024 in the Lok Sabha.
- The bill mandates a maximum jail term of 10 years and a fine of up to Rs 1 crore for malpractices and irregularities in competitive examinations.

News Summary: Public Examinations (Prevention of Unfair Means) Bill, 2024

- The government tabled the Public Examinations (Prevention of Unfair Means) Bill in the Lok Sabha to check malpractices and irregularities in competitive examinations.
- **Background against which the bill has been brought**
- About
 - The bill comes in the backdrop of a cancellation of a series of competitive tests such as:
 - the teacher recruitment exam in Rajasthan,
 - Common Eligibility Test (CET) for Group-D posts in Haryana,
 - recruitment exam for junior clerks in Gujarat and
 - constable recruitment examination in Bihar following question paper leaks.
- Statistics
 - As per various reports, more than 1.5 crore students have been affected by paper leaks from 2016 to 2023.
 - More than 70 cases of question paper leaks have occurred in the same period.
 - At least a dozen recruitment drives have been cancelled owing to paper leaks in the state between 2018 and February 2023.
 - Since 2014, 615 accused have been arrested in connection with 33 cases of government recruitment paper leaks.
- No specific substantive law
 - At present, there is no specific law to deal with unfair means adopted or offences committed by various entities involved in the conduct of public examinations by the central government and its agencies.

Key highlights of the Public Examinations Bill

- Objective: The objective of the Bill is:
 - to bring greater transparency, fairness and credibility to the public examination systems and
 - to reassure the youth that their sincere and genuine efforts will be fairly rewarded and their future is safe.
- Applicability: The bill is applicable to central recruitment and entrance exams conducted by:
 - the Union Public Service Commission (UPSC),
 - Staff Selection Commission (SSC),
 - Railway Recruitment Boards (RRBs),
 - Institute of Banking Personnel Selection (IBPS), and
 - National Testing Agency (NTA).
 - The NTA conducts exams for admission to higher educational institutions, like the Joint Entrance Examination (JEE) for engineering, National Eligibility Cum Entrance Test (NEET) for medical, and Common University Entrance Test (CUET) for undergraduate and post-graduate studies.
 - Apart from these designated public examination authorities, all central ministries and departments, as well as their offices for recruitment, will also come under the purview of the new law.
- Does not target students
 - The Bill provides punishment for persons, organised groups or institutions indulging in unfair means for monetary or wrongful gains.
 - However, candidates appearing for the exams have been left out of its purview.
 - Candidate shall continue to be covered under the extant administrative provisions of the public examination authority concerned.
- Punishments
 - The bill mandates a three-to-five-year prison term for involvement in paper leak cases.

- However, in cases where a link to organised crime is proven it calls for a prison sentence of up to 10 years.
- It imposes a fine of Rs 1 crore and recovering the cost of conducting examinations from firms.
- It says a firm also may be barred from conducting public exams for years in case of a conviction.
- Defines unfair means
 - Section 3 of the Bill defines unfair means.
 - It proposes 20 offences and unfair means including impersonation, manipulation of answer sheets and tampering with documents.
- Nature of offences
 - Section 9 of the bill states that all offences shall be cognizable, non-bailable and non-compoundable.
- Investigation
 - The bill proposes that officers not under the rank of deputy superintendent of police or assistant commissioner of police must head up such matters.
 - The government under the bill also holds the power to send the probe to a Central agency.
 - In essence, this frees up to the police to act on its own and arrest suspects without a warrant.
- High-level national technical committee on public examinations
 - The bill proposes the formation of a high-level national technical committee on public examinations that will make recommendations to make the computerised examination process more secure.
 - The committee shall look into developing protocols for
 - insulating digital platforms,
 - devising ways and means for developing foolproof IT security systems,
 - ensuring electronic surveillance of examination centres and
 - formulating national standards and services for both IT and physical infrastructure to be deployed for conduct of such examinations.
- Model draft for states
 - While the provisions will be binding for central public examination authorities, it will serve as a model draft for states.

ECONOMY

India's Manufacturing Sector: Saw Employment, Profits Improve Despite Pandemic Blows

Why in News?

- The Ministry of Statistics and Programme Implementation (MoSPI) released the Annual Survey of Industries (ASI) for 2020-21 and 2021-22.
- According to the ASI, the Covid-19 pandemic affected the number of factories and fixed investments in the organised manufacturing sector in the country but profits and invested capital recorded an increase.
- The ASI data is the principal source of industrial statistics and data for organised manufacturing (employing 10 or more workers using power and those employing 20 or more workers without using power).

An Introduction to India's Manufacturing Sector

- Manufacturing is emerging as an integral pillar in the country's economic growth, thanks to the performance of key sectors like automotive, engineering, chemicals, pharmaceuticals, and consumer durables.
- With ~17% of the nation's GDP and over 27.3 million workers, the manufacturing sector plays a significant role in the Indian economy.
- India now has the physical and digital infrastructure to raise the share of the manufacturing sector in the economy and make a realistic bid to be an important player in global supply chains.
- Through the implementation of different programmes and policies, the Indian government hopes to have 25% of the economy's output come from manufacturing by 2025 (National Manufacturing Policy).

Potential of the India's Manufacturing Sector

- India's target of achieving the milestone of USD 1 trillion by the year 2028, is promising with key industries such as electronics, industrial machinery, and textiles playing a pivotal role.

- Due to factors like power growth, long-term employment prospects, and skill routes for millions of people, India has a significant potential to engage in international markets.
- Several factors contribute to this potential -
 - Global value chains are well positioned to benefit from India's advantages in terms of raw materials, industrial expertise, and entrepreneurship.
 - They can take advantage of four market opportunities: expanding exports, localising imports, internal demand, and contract manufacturing.
 - Manufacturing sector in India is gradually shifting to a more automated and process driven manufacturing which is expected to increase the efficiency and boost production of the manufacturing industry.

Challenges Faced by the India's Manufacturing Sector

- Lack of infrastructure: The manufacturing sector requires robust infrastructure, including transportation, power, and telecommunications, to function smoothly.
- Lack of skilled labour: India's education system has not been able to keep up with the changing needs of the economy, and there is a shortage of skilled workers in the manufacturing sector.
- Complex regulatory environment: India's regulations are often complex and difficult to navigate, which is a significant deterrent for businesses looking to set up manufacturing units in India.
- Lacking innovation: The lack of innovation has made it difficult for Indian manufacturers to produce goods that are competitive with those produced in other countries.

Navigating the Future of the India's Manufacturing Sector

- Despite the challenges, India's manufacturing industry has started its journey to achieve self-reliance.
 - This is majorly because the manufacturing sector has gone through many changes post-pandemic.
 - For example, huge dependence on raw materials coming from China and other countries has been reduced.
- India is gradually progressing on the road to Industry 4.0 through the Government of India's initiatives like the Make in India, National Manufacturing Policy and the PLI scheme for manufacturing.
- India has ascended to become the world's fifth-largest economy and is expected to become the third-largest economy by 2030.
- India's ambition to become the next big global manufacturing hub will have a significant bearing on its growth over the next few years.

Highlights of the Annual Survey of Industries (ASI)

- Employment in the manufacturing sector: It took a hit during the lockdown-affected year of 2020-21, but then recovered in 2021-22 to levels higher than pre-pandemic.
 - The number of workers employed in the factories reduced to 1.26 crore in 2020-21 from 1.31 crore in 2019-20, but recorded an increase in 2021-22 to 1.36 crore, with a CAGR growth of 2.1% over these two years.
- Fixed capital investments: It took a sharp hit during the pandemic affected years.
 - Gross fixed capital formation, an indicator of investment, declined by 11% in 2021-22 to Rs 3.30 lakh crore from Rs 4.17 lakh crore in the pre-pandemic year of 2019-20.
 - The GFCF picked up marginally in 2021-22, rising about 5% from Rs 3.14 lakh crore in 2020-21.
- Profits in the manufacturing sector: It grew sharply for the pandemic-affected years, rising by 42.3% (CAGR) to Rs 9.51 lakh crore in 2021-22 as against Rs 4.70 lakh crore in 2019-20.
- The Gross Value Added: It has gone up significantly by 26.6% in 2021-22 over 2020-21 riding on a high growth in the industrial output which grew by more than 35% in value terms during this period in current prices.
- Significance of the ASI results: It exhibits the resilience shown by the Indian manufacturing sector and tells the unique turn-around story of the Indian manufacturing sector.

PRELIM FACTS

1. Cygnus X-1

- Astro Sat, India's first, dedicated multi-wavelength astronomy mission, accomplished the difficult task of measuring the X-ray polarisation of the Cygnus X-1 black hole system

About Cygnus X-1:

- It was discovered over four decades ago.
- It is one of the first confirmed black hole systems in our galaxy.
- The black hole in Cygnus X-1 is 20 times heavier than the Sun, and has a companion - a heavy supergiant star (40 times more massive than the Sun) in a binary system.
- It is located at a distance that is about 400 times more than the distance between Earth and Sun.
- Due to the gravitational pull of the black hole, material from the supergiant falls and spirals in towards the black hole.
- This process leads to the formation of a thin accretion disk which is responsible for soft X-rays.

Significance of X-ray Polarisation:

- Normal X-ray measurements only reveal the energy or intensity of the radiations.
- Polarisation characteristics of X-rays, which tells about the orientation of the oscillating electric field, holds clues on the geometry and other properties of the black hole.
- This measurement of high polarization in this source in the 100-380 keV implies that radiation emitted from the source at energies above 100 keV, is likely to have originated at the black hole jet
- Polarization is one of the properties that a photon carries from the celestial objects in the sky.

2. GHAR (Go Home and Re-Unite) Portal

- GHAR - GO Home and Re-Unite Portal have been developed and launched by the National Commission for Protection of Child Rights (NCPCR).

About GHAR Portal:

- It is a portal to digitally monitor and track the restoration and repatriation of children according to the protocols under the Juvenile Justice (Care and Protection of Children) Act, 2015, and Rules thereof.
- It has been developed and launched by the National Commission for Protection of Child Rights (NCPCR).
- The following are the salient features of the portal:
 - Digital tracking and monitoring of children who are in the Juvenile Justice system and have to be repatriated to another Country/State/District.
 - Digital transfer of cases of children to the concerned Juvenile Justice Board/Child Welfare Committee of the State. It will help in the speedy repatriation of children.
 - Where there is a requirement of a translator/interpreter/expert, request will be made to the concerned State Government.
 - Child Welfare Committees and District Child Protection Officers can ensure proper restoration and rehabilitation of children by digitally monitoring the progress of the case.
 - A checklist format will be provided in the forms so that the children who are being hard to repatriate or children who are not getting their entitled compensation or other monetary benefits can be identified.
 - List of Government implemented schemes will be provided, so that at the time of restoration, the Child Welfare Committees can link the child with the schemes to strengthen the family and ensure that the child remains with his/her family.

Key Facts about NCPCR:

- It has been constituted by the Government of India under the Commission for Protection of Child Rights (CPCR) Act, 2005, and is mandated to function for the protection and promotion of child rights.
- It has the following functions:
 - Examine and review existing safeguards for the protection of child rights and recommend measures for their effective implementation.
 - Report annually and at other intervals to the central government on the effectiveness of these safeguards.
 - Investigate violations of child rights and recommend legal proceedings in appropriate cases.
 - Review existing policies, programs, and activities related to child rights and make recommendations for their improvement.
 - Promote research in the field of child rights.

- Raise awareness of child rights and available safeguards through various means, such as publications, media, and seminars.
- Inspect institutions where children are detained or reside, including juvenile homes, and recommend remedial action if necessary.
- Investigate complaints and take suo motu notice of issues related to the deprivation and violation of child rights and the non-implementation of laws protecting and developing children.
- The Commission, while investigating, shall have all the powers of a civil court.
- The Commission is further mandated to monitor the proper and effective implementation of
 - Protection of Children from Sexual Offences (POCSO) Act, 2012.
 - Juvenile Justice (Care and Protection of Children) Act, 2015.
 - Right to Free and Compulsory Education (RTE) Act, 2009.

3. Nano DAP

- Recently, the Finance Minister of India, presenting the interim budget announced the expansion of the application of Nano DAP on various crops in all agro climatic zones.

About Nano DAP:

- It is a unique liquid fertilizer product that contains nanoparticles of Diammonium Phosphate (DAP).
- It is a source of nitrogen and phosphorus – 2 key primary nutrients essential for the growth of crops.
- It contains 8% Nitrogen and 16% Phosphorus by volume.
- Unlike conventional DAP, which comes in granular form, IFFCO's Nano DAP is in liquid form.
- It has an advantage in terms of surface area to volume, as its particle size is less than 100 Nanometre (nm)."

Advantages of NANO DAP:

- Higher Crop Yield: Due to small size and more surface area to volume ratio; seed treatment and foliar application of Nano DAP at critical growth stages enhances nutrient availability to crops. Hence, Crop yield increases due to increase in leaf chlorophyll, photosynthesis, root biomass, number of effective tillers and branches.
- Quality Food: Nutritional quality of harvested food produce was found to be better in terms of protein and nutrient content.
- Reduction in Chemical Fertilizer Usage: Enhanced use efficiency of one bottle (500 ml) of Nano DAP can potentially replace the phosphorus requirement met by conventional DAP by 50%.
- Environment Friendly: Production of Nano DAP is energy and resource friendly. Precision and targeted application of this to crops therefore leads to agriculture sustainability and safety of the environment by reducing soil, air and water pollution.
- It is more pocket-friendly than its conventional counterpart. A 500 ml bottle of Nano DAP, equivalent to a 50-kg bag of conventional DAP
- It is set to significantly reduce this import burden.

What is DAP?

- DAP, or di-ammonium phosphate, is the second most commonly used fertilizers in India after urea.
- It is high in phosphorus (P) that stimulates root establishment and development — without which plants cannot grow to their normal size, or will take too long to mature.

4. Inclusive Education for Disabled at Secondary Stage (IEDSS) Scheme

- The Karnataka government recently suspended five officers for dereliction of duty in the implementation of the Inclusive Education for Disabled at Secondary Stage (IEDSS) scheme.

About Inclusive Education for Disabled at Secondary Stage (IEDSS) scheme:

- IEDSS has been launched from the year 2009-10. This Scheme replaces the earlier scheme of Integrated Education for Disabled Children (IEDC).
- The aim of this scheme is to enable all students with disabilities to pursue four years of secondary education in an inclusive and enabling environment, after completing eight years of elementary schooling.
- It provides assistance for the inclusive education of disabled children in classes IX-XII.

- The scheme covers all children studying at the secondary stage in Government, local body and Government-aided schools, with one or more disabilities as defined under the Persons with Disabilities Act (1995) and the National Trust Act (1999) in the class IX to XII, namely blindness, low vision, leprosy cured, hearing impairment, locomotory disabilities, mental retardation, mental illness, autism, and cerebral palsy, and may eventually cover speech impairment, learning disabilities, etc.
- Girls with the disabilities receive special focus to help them gain access to secondary schools, as also to information and guidance for developing their potential.
- Setting up of Model inclusive schools in every State is envisaged under the scheme.
- Components:
 - Student-oriented components, such as medical and educational assessment, books and stationery, uniforms, transport allowance, reader allowance, stipend for girls, support services, assistive devices, boarding the lodging facility, therapeutic services, teaching learning materials, etc.
 - Other components include appointment of special education teachers, allowances for general teachers for teaching such children, teacher training, orientation of school administrators, establishment of resource room, providing barrier free environment, etc.

Implementing Agency:

- The School Education Department of the State Governments/Union Territory (UT) Administrations are the implementing agencies.
- They may involve NGOs having experience in the field of education of the disabled in the implementation of the scheme.
- Financial Assistance:
 - Central assistance for all items covered in the scheme is on 100 percent basis.
 - The State governments are only required to make provisions for scholarship of Rs. 600/- per disabled child per annum.
- This scheme now subsumed under Rashtriya Madhyamik Shiksha Abhiyan (RMSA) from 2013.

5. Exercise Vayu Shakti-24

- The Indian Air Force will be conducting Exercise Vayu Shakti-24 on 17 February 2024 at the Pokhran Air to Ground Range, near Jaisalmer.

About Exercise Vayu Shakti-24:

- The Indian Air Force is slated to carry out three large scale war games on February 17, namely, Vayu Shakti, Gagan Shakti and Tarang Shakti.
- It will be a riveting demonstration of the offensive and defensive capabilities of the IAF, spanning across day and night.
- The exercise will also showcase joint operations with the Indian Army.

Exercise Vayu Shakti:

- The IAF will first undertake the major "Vayu Shakti" firepower demonstration, which is held once every three years, with 135 fighters, aircraft, helicopters and drones at the Pokhran field firing ranges.

Gagan Shakti:

- The second mega exercise will be 'Gagan Shakti'.
- In this, almost the entire air fleet race would be activated from north to south, and from west to east to test integrated war fighting strategies and tactics with the other two forces and other stakeholders.
- All the potent weapon systems like the Rafale fighter aircraft and the S-400 air defense systems would be participating in the 'Gagan Shakti' exercise.
- The exercise, which is held once in five years, is also going to be the biggest ever of the series with active participation from other two services.

Tarang Shakti:

- The third major exercise, Tarang Shakti, would be the first ever multinational exercise to be held in the country.
- This will see aircraft from friendly air forces like the US, Germany, France, Australia and neighbouring and other friendly countries taking part in it.

ANSWER WRITING

Q. Lack of active involvement of vulnerable sections impacts the effectiveness of welfare schemes in India. Highlight the challenges and suggest measures for enhancing the participation of vulnerable sections in the policy process.

Answer: Welfare schemes are designed to provide social protection, support, and upliftment to disadvantaged and marginalized groups in society. However, without active involvement and participation from these groups, the intended benefits of the schemes may not reach those who need them the most.

Active involvement of vulnerable sections is crucial:

- Enhancing program relevance: Vulnerable sections' participation aligns welfare schemes with realities, addresses their issues, and makes programs more relevant and impactful.
- Promoting ownership and empowerment: Active involvement empowers vulnerable sections to shape policies that directly impact their lives, fostering a sense of ownership and agency.
- Ensuring effective implementation: Involving vulnerable sections in the policy process allows policymakers to gain valuable insights for effective implementation strategies.

Challenges hinder the effectiveness of welfare schemes:

- Limited Awareness: Lack of awareness due to illiteracy, limited information access, language barriers, and absence of awareness campaigns hampers scheme participation.
- Exclusion and Discrimination: Discrimination based on caste, gender, religion, or socio-economic status hampers vulnerable groups' participation, perpetuating inequalities, and undermining welfare schemes.
- Administrative Challenges: Administrative inefficiencies, corruption, and bureaucratic hurdles hinder access to welfare schemes, undermining trust and discouraging active engagement.

Measures to enhance the participation of vulnerable sections in the policy process:

- Inclusive representation: Promote representation of vulnerable sections in decision-making bodies through affirmative action, quotas, or reserved seats at all governance levels.
- Capacity building: Offer training and education to empower vulnerable groups for active policy participation by enhancing their knowledge and advocacy skills.
- Outreach and awareness campaigns: Engage vulnerable sections through targeted campaigns to inform them about policies, consultations, and participation opportunities, utilizing diverse communication channels.
- Collaborative partnerships: Promote collaborations between policymakers, civil society, and communities to foster dialogue and meaningful participation in policy development for vulnerable sections.
- Monitor and evaluate outcomes: Establish monitoring and evaluation systems to assess policies for vulnerable sections, ensuring inclusivity, effectiveness, and identifying gaps for improvement.

Conclusion

By recognizing the challenges, they face and implementing measures to enhance their participation, we can create a more inclusive and responsive policy environment. Empowering vulnerable sections through awareness, capacity building, and inclusive decision-making processes will lead to more impactful and sustainable welfare schemes, ultimately fostering social equity and upliftment for all.

MCQs

1. SAMARTH initiative has been launched for
 (a) Promoting Women Micro, Small & Medium Enterprises (MSME)
 (b) Overseas Acquisition of Strategic Minerals
 (c) Indigenisation of Defence Sector
 (d) Organic Farming certification
2. Consider the following statements:
 1. She participated in the Salt March and Quit India Movement.
 2. She was the first health minister of independent India.
 These statements refer to which of the following personality?
 (a) Sucheta Kripalani
 (b) Usha Mehta
 (c) Kamaladevi Chattopadhyay
 (d) Raj Kumari Amrit Kaur
3. Regarding India- Bhutan Relations, consider the following statements:
 1. Bhutan serves as a buffer state between India and China.
 2. India is Bhutan's top trade partner both as an import source and as an export destination.
 3. Mangdechhu Hydroelectric Project is the first-ever joint venture project between India and Bhutan.
 How many of the above statements are correct?
 (a) Only one
 (b) Only two

- (c) All three
(d) None
4. GRAPES-3 Experiment has been in the news recently, its objective is
(a) To study cosmic rays in the galaxy.
(b) To study asteroid samples from asteroid Apophis.
(c) To study basic laws governing forces among elementary particles.
(d) To study and analyze gravitational waves.
5. Consider the following statements:
1. Fertilizer grade Di-Ammonium Phosphate (DAP) contains 18% Nitrogen and 46% Phosphorus and is manufactured by reacting Ammonia with Phosphoric acid.
2. Indian Farmers Fertiliser Cooperative (IFFCO) launched Nano DAP, containing 8% Nitrogen and 16% Phosphorus by volume.
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
6. Consider the following statements with respect to United Nations Relief and Works Agency (UNRWA):
1. It operates only in the Gaza Strip and West Bank.
2. Its mandate is to facilitate peace negotiations between Israel and Palestine.
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
7. "Humboldt's Enigma" was seen in the news recently, is associated with:
(a) Black Hole exploration
(b) Atmospheric circulation
(c) Biodiversity in the mountain regions
(d) Plate tectonics theory
8. Consider the following statements regarding Amazon rainforest.
1. The Amazon rainforest covers an area twice the size of India.
2. Two-thirds of the Amazon rainforest is located in Brazil.
3. El Niño typically brings more rain and lower the temperature of Amazon rainforest.
How many of the above statements are correct?
(a) Only one
(b) Only two
(c) All three
(d) None
9. Consider the following statements:
Statement-I: A Brain-Computer Interface (BCI) enables direct communication between the brain and external devices without using traditional neuromuscular pathways.
Statement-II: BCIs involve the use of sensors to detect brain activity, which is then translated into commands for interacting with the external world using their thoughts.
Which one of the following is correct in respect of the above statements?
(a) Both Statement-I and Statement-II are correct, and Statement-II is the correct explanation for Statement-I.
(b) Both Statement-I and Statement-II are correct, and Statement-II is not the correct explanation for Statement-I.
(c) Statement-I is correct, but Statement-II is incorrect.
(d) Statement-I is incorrect, but Statement-II is correct.
10. Consider the following statements with reference to the 'Forex Reserves':
1. Trade surpluses, current account balances, and exchange rates are the main components of forex reserves.
2. Foreign exchange reserves help a country manage its exchange rate by influencing the supply and demand for its currency.
3. A higher amount of foreign exchange reserves leads to a lower credit rating.
Which of the statement(s) given above is/are correct?
(a) 1 only
(b) 2 only
(c) 3 only
(d) 1, 2 and 3