

GOVERNANCE**Rail Kaushal Vikas Yojana**

Recently, the Ministry of Railways launched Rail Kaushal Vikas Yojana (RKVY) under Pradhan Mantri Kaushal Vikas Yojana (PMKVY).

Key Points**About:**

- This is a skill development programme, where training will be provided to youth with a special focus on jobs that are relevant to the Railways.
- The training will be provided in four trades viz. Electrician, Welder, Machinist and Fitter and other trades will be added by zonal railways and Production units based on regional demands and needs assessment.
- Training will be provided to apprentices under the Apprentice Act 1961.

Objectives:

- To impart training skills to the youth in various trades to bring qualitative improvement.
- To train 50,000 candidates over the next three years.

Eligibility:

- Candidates who are 10th passed and between 18-35 years shall be eligible to apply. Participants in the scheme shall however have no claim to seek employment in Railways on the basis of this training.

Significance:

- The scheme will not only improve the employability of the youth but also upgrade the skills of self-employed and those who are working with contractors through reskilling and up-skilling.

Pradhan Mantri Kaushal Vikas Yojana**About:**

- Launched in 2015, it is a flagship program of the Ministry of Skill Development and Entrepreneurship (MSDE).
 - It aims to mobilize youth to take up skill training with the aim of increasing productivity and aligning the training and certification to the needs of the country.
1. Owing to the success of PMKVY 1.0 wherein more than 19 lakh students were trained as against the target of 24 lakh, the scheme was re-launched as PMKVY 2.0 (2016-2020) with an allocated budget of Rs. 12000 Crores that aimed to train 10 million youth by the year 2020.
 2. And further PMKVY 3.0 was launched in 2021, in a bid to empower India's youth with employable skills by making over 300 skill courses available to them. It envisages training of eight lakh candidates over a scheme period of 2020-2021 with an outlay of Rs. 948.90 crore.

Key Components:

- **Short Term Training:** Training as per National Skills Qualification Framework (NSQF) is provided to those who are either school/college dropouts or unemployed.
- **Recognition of Prior Learning (RPL):** An individual with a certain set of skills or with prior learning experience is assessed and certified under RPL with grade according to the NSQF.
- **Special Projects:** This component ensures training in special areas and premises of government bodies and corporate. It aims to encourage training in vulnerable and marginalized groups of society.
- Training Partners (TPs) are mandated to organize Kaushal and Rozgar Melas every six months, thus providing placement assistance to certified ones.

Other Related Initiatives

1. National Career Service Project.
2. Skills Acquisition and Knowledge Awareness for Livelihood (SANKALP).
3. Skills Strengthening for Industrial Value Enhancement (STRIVE).
4. Kaushalacharya Awards.
5. Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS).
6. Atma Nirbhar Skilled Employee Employer Mapping (ASEEM).
7. Skill Certification.
8. YuWaah Youth Skilling Initiative.

2.Front-of-Pack Labelling

The Food Safety and Standards Authority of India (FSSAI), in 2018, released the Draft Food Safety And Standards (Labelling And Display) Regulation. However, even after so many expert panel recommendations and regulations, India still does not have a clear labelling or Front-of-pack (FoP) Labelling System, which can warn consumers about harmful levels of fat, salt and sugar in processed foods.

Key Points**About Front-of-Pack (FoP) Labelling System:**

- FoP labelling system has long been listed as one of the global best practices to nudge consumers into healthy food choices. It works just the way cigarette packets are labelled with images to discourage consumption.
- As India is experiencing a dietary shift, with people increasingly consuming more processed and ultra-processed foods and a burgeoning market, these factors prompt the need for FoP labelling for India. It will play a handy role in fighting increasing obesity and many non-communicable diseases.
- The World Health Organization (WHO) defines FoP labels as nutrition labelling systems that are presented on the front of food packages in the principal field of vision; and present simple, often graphic information on the nutrient content or nutritional quality of products. To complement the more detailed nutrient declarations provided on the back of food packages.
- The Codex Alimentarius Commission, an international food standards body established jointly by WHO and the Food and Agriculture organization (FAO), mentions that “FoP labelling is designed to assist in interpreting nutrient declarations”.

About the Draft Food Safety And Standards (Labelling And Display) Regulations:

- The rules mandates colour-coded labels on food items.
- The draft regulation has been brought to encourage consumers to make healthier food choices and inform them about what the product actually contains.
- The front of all packaged food items will have to display the total number of calories, saturated and trans fats, salt, and added sugar content as well as the proportion of the daily energy needs fulfilled by the food item.
- FSSAI has also changed the symbol of vegetarian food from a green circle to a green triangle to help color blind people distinguish it from the brown circle denoting non-vegetarian food.
- According to the proposed regulation, if the total amounts of calories, fats, trans-fats, sugar, and sodium per serving exceed the stipulated limits, it would be indicated in red colour.

Issues Pertaining to these Rules:

- **Masking of Positive Nutrients:** Most consumer organisations objected as ‘positive nutrients’ will mask the negative impact of high fat, salt and sugar in the food and the industry will use it to mislead the consumer. FSSAI proposed to also consider ‘positive nutrients’ in the FoP label. It was about giving scores to ‘positive nutrients’ such as proteins, nuts, fruits and vegetables in the name of promoting wholesome foods.
- **Restricted Target Audience:** The labelling format appears to be aimed only at individuals who are literate and nutritionally aware. Further, limited general and nutrition literacy mean understanding of the text-intensive nutrient information is difficult.
- **Objections from Food Industry:** Indian food industries have expressed many concerns over the proposed format, especially using the colour red as it indicates danger and could dissuade consumers from their products.

Way Forward

- **More Focus on Pictorial Representation:** Almost a quarter of the Indian population is illiterate, therefore pictorial representation would allow better engagement and understanding. It might be beneficial for front-of-pack labelling in India to be symbol based, with food images, logos, and health benefits.
- **Need for More R&D:** Mandatory front of pack labelling must be preceded by strong research and in a format that is understandable and acceptable to all.

ECONOMY**G-20 Agriculture Meet 2021**

Recently, India’s Agriculture Minister addressed the G20 Agriculture meeting virtually. It is one of the ministerial meetings organised as part of the G20 Leaders Summit 2021 to be hosted by Italy in October 2021.

Key Points**Highlights of the Meet:**

- Signed a final statement named the “Florence Sustainability Charter”. It will strengthen cooperation between G20 members and developing countries on food and agriculture to share knowledge and help developing the internal production capacities best suited to local needs, thus contributing to the resilience and recovery of agriculture and rural communities.
- Reaffirmed their intention to reach the goal of zero hunger, which is also threatened by the consequences of Covid-19.

- Reaffirmed the commitment to achieve food security in the framework of the three dimensions of sustainability: economic, social and environmental.

India's Stand:

- **Focus on Traditional Food:**
 1. Emphasised on re-introducing traditional food items including millet, other nutritious cereals, fruits and vegetables, fish, dairy and organic products in the diet of the people.
 2. Their production has been phenomenal in India in recent years and India is becoming a destination country for healthy food items.
 3. The United Nations (UN) has accepted India's proposal and declared 2023 as the International Year of Millets and urged the G20 nations to support the celebration of the millet year to promote nutrition and sustainable agriculture.
- **Biofortified Food:**
 1. Biofortified varieties, which are the source of a staple diet rich in micronutrients, are being promoted to remove malnutrition.
 2. About 17 such varieties of different crops have been developed and released for cultivation.
- **Water Resource :** India has also taken steps to increase the optimal use of water resources, create infrastructure for irrigation, conserve soil fertility with balanced use of fertilizers, and provide connectivity from farms to markets.
- **Indian Agri-Sector in Covid :** Indian agriculture has achieved great success after the country's independence, and the sector also remained unaffected even during the Covid pandemic.
- **India Resolved to:**
 1. Continue working together to achieve the Poverty Reduction' and 'Zero Hunger Goal as part of the sustainable development goals.
 2. Cooperate in research and development as well as exchange of best practices to enhance productivity.

Related Indian Initiatives:

- The 'Per Drop-More Crop' scheme for irrigation and 'Paramparagat Krishi Vikas Yojana' for organic farming is being successfully implemented.
- Pradhan Mantri Fasal Bima Yojana is being implemented to provide insurance cover for the farmers.
- To address the malnutrition problem, India is running the world's largest food-based safety net programme, which includes the Public Distribution System and the Mid-Day Meal Scheme.
- The government is also providing an annual income support of Rs 6,000 under the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN).

2. Digital Payment Systems

The central banks of India and Singapore will link their respective fast digital payment systems - Unified Payments Interface (UPI) and PayNow - for "instant, low-cost, cross-border fund transfers". The linkage is targeted to be operationalised by July 2022.

Key Points

About:

- The Unified Payments Interface (UPI)-PayNow linkage is a significant milestone in the development of infrastructure for cross-border payments between India and Singapore, and closely aligns with the G20's financial inclusion priorities of driving faster, cheaper and more transparent cross-border payments. India is a member of G20.
- The linkage builds upon the earlier efforts of NPCI International Private Ltd (NIPL) and Network for Electronic Transfers (NETS, Singapore) to foster cross-border interoperability of payments using cards and QR codes between India and Singapore and will anchor trade, travel and remittance flows between the two countries. NIPL is the subsidiary of NPCI to popularise domestic payments technologies such as UPI and RuPay abroad and co-create payment technologies with other countries.
- The initiative is in line with its vision of reviewing corridors and charges for inbound cross-border remittances outlined in the Payment Systems Vision Document 2019-21.
- From an investing perspective, this will incentivize more retail investors to access global markets. Currently, they pay up to Rs.3,000 in inter-bank charges which are over and above the Liberalised Remittance Scheme (LRS) processing fees by banks. LRS of the Reserve Bank of India (RBI) allows resident individuals to remit a certain amount of money during a financial year to another country for investment and expenditure.

UPI and Other Indian Payment Systems:

- **Unified Payments Interface:**

1. It is an advanced version of Immediate Payment Service (IMPS)- round-the-clock funds transfer service to make cashless payments faster, easier and smoother.
2. UPI is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood.
3. National Payments Corporation of India (NPCI) launched UPI with 21 member banks in 2016.
 - **National Electronic Funds Transfer:**
 1. NEFT is a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme.
 2. There is no limit – either minimum or maximum – on the amount of funds that could be transferred using NEFT.
 3. However, the maximum amount per transaction is limited to Rs.50,000/- for cash-based remittances within India and also for remittances to Nepal under the Indo-Nepal Remittance Facility Scheme.
 - **RuPay Card Scheme:**
 1. The name, derived from the words 'Rupee and 'Payment', emphasises that it is India's very own initiative for Debit and Credit Card payments.
 2. The card can also be used for transactions in Singapore, Bhutan, UAE, Bahrain and Saudi Arabia.

IMPORTANT FACTS FOR PRELIM**Sea Cucumber**

Recently, the Indian Coast Guard (ICG) has seized two tonnes of sea cucumber, a banned marine species, in the Gulf of Mannar and Palk Bay areas in Tamil Nadu.

Key Points**About:**

- Sea cucumbers are marine invertebrates that live on the seafloor found generally in tropical regions. They're named for their unusual oblong shape that resembles a fat cucumber.
- There are about 1,250 species of sea cucumber, all of which belong to the taxonomic class Holothuroidea. This class falls under the Echinodermata phylum, which also includes many other well-known marine invertebrates, such as sea stars, sea urchins and sand dollars.
- They are crucial to maintain the balance of ocean habitats.

Significance:

- They are an integral part of the coral ecosystem as one of the main by-products of the sea cucumbers digestion of sand is calcium carbonate and this is essential for the survival of the coral reefs.
- They act like garbage collectors of the ocean world, and they recycle nutrients, thus playing an important role in keeping coral reefs in good condition.

Threats:

- Illegal Trading and smuggling since the species is high in demand across south-east Asia, mainly China, for food and traditional medicine.

Protection:

- IUCN Red List: Brown Sea Cucumber (Endangered), Blackspotted Sea Cucumber (Least Concern), Blue Sea Cucumber (Data Deficient), etc.
- Wildlife Protection Act, 1972: Schedule I.

Conservation Efforts:

- In 2020, the Lakshadweep Islands administration created the world's first conservation area - 239 sq. km - for sea cucumbers.

Delhi-Mumbai Expressway: World's Longest

Recently, the Union Minister for Road Transport and Highways concluded the two-day review of the work progress on the eight-lane Delhi-Mumbai Expressway. It will be the world's longest highway once completed. It is expected to be completed by March 2023.

Key Points**About:**

- It is a 1380-km eight-lane expressway that can be expanded to a 12-lane expressway depending on the volume of traffic.
- It will start from Haryana's Sohna and will end around Mira Bhayander near Mumbai.

Special Features:

- It will have wayside amenities – resorts, restaurants, food courts, fuel stations, facilities for truckers, logistics parks.

- A helicopter ambulance service for accident victims and a heliport, which will use drone services for business as well.
- The expressway is the first in Asia and only the second in the world to feature animal overpasses to facilitate unrestricted movement of wildlife. It will also include two iconic 8-lane tunnels, one tunneling through Mukundra sanctuary, Rajasthan and the second will pass through the Matheran eco-sensitive zone, Maharashtra.

Significance:

- It will improve connectivity to economic hubs like Jaipur, Kishangarh, Ajmer, Kota, Chittorgarh, Udaipur, Bhopal, Ujjain, Indore, Ahmedabad, Vadodara and Surat.
- It will result in annual fuel savings of more than 320 million litres and reduce CO2 emissions. The project has also created employment for thousands.

DAILY ANSWER WRITING PRACTICE

Qns. Artificial Intelligence (AI) in cybersecurity can provide robust protection and generate rapid responses to cyberthreats. Discuss the advantages of integrating A.I in cybersecurity. (250 words)

Ans:

Introduction

Artificial Intelligence (AI) is the branch of computer science concerned with developing machines that can complete tasks that typically require human intelligence. The cyberattack surface in modern enterprise environments is massive, and it's continuing to grow rapidly. AI systems have immense potential in cybersecurity. It can be trained to generate alerts for threats, identify new types of malware and protect sensitive data for organisations.

Body

Advantages of integrating Artificial Intelligence in cybersecurity

- **Continuous learning**
 1. AI uses machine learning and deep learning to learn a business network's behaviour over time.
 2. By recognizing patterns on the network and clustering them, AI proceeds to detect any deviations or security incidents from the norm before responding to them.
 3. Potential threats with similar traits to those recorded get blocked early enough.
 4. The fact that AI keeps learning makes it difficult for hackers to beat its intelligence.
- **Identifies Unknown Threats**
 1. Unknown threats can cause massive damage to a network. Worse still is the impact they can have before you detect, identify, and prevent them.
 2. As attackers try new tactics from sophisticated social engineering to malware attacks, it is necessary to use modern solutions to prevent them.
 3. AI has proven to be one of the best technologies in mapping and stopping unknown threats from ravaging a company.
- **Handle a Lot of Data**
 1. AI's automated nature allows it to skim through massive chunks of data and traffic.
 2. Technology that uses AI, such as a residential proxy, can help you to transfer data.
 3. It can also detect and identify any threats hidden in the sea of chaotic traffic.
- **Better Vulnerability Management**
 1. AI helps you assess systems quicker than cybersecurity personnel, thereby increasing your problem solving ability manifold.
 2. It identifies weak points in computer systems and business networks and helps businesses focus on important security tasks.
 3. That makes it possible to manage vulnerability and secure business systems in time.
- **Reduces Duplicative Processes**
 1. AI, while mimicking the best of human qualities and leaving out the shortcomings, takes care of duplicative cybersecurity processes that could bore your cybersecurity personnel.
 2. It helps check for basic security threats and prevent them on a regular basis.
 3. It also analyzes your network in depth to see if there are security holes that could be damaging to your network.
- **Accelerates Detection and Response Times**
 1. The best way to detect and respond to threats in time is by integrating AI with cybersecurity.
 2. AI scans your entire system and checks for any possible threats.
- **Securing Authentication**
 1. AI secures authentication anytime a user wants to log into their account.
 2. AI uses various tools such as facial recognition, CAPTCHA, and fingerprint scanners amongst others for identification.

3. The information collected by these features can help to detect if a log-in attempt is genuine or not.

Conclusion

The increasing rate of cyber-attacks has posed a great challenge in the recent times. AI gives the much-needed analysis and threat identification that can be used by security professionals to minimize breach risk and enhance security posture. AI can help discover and prioritize risks, direct incident response, and identify malware attacks before they come into the picture. So, even with the potential downsides, AI will serve to drive cybersecurity forward and help organizations create a more robust security posture.

DAILY QUIZ

Q1. Consider the following statements about the National Financial Reporting Authority (NFRA):

1. It is a non-statutory apex council under the Ministry of Finance.
2. It intends to monitor macro-prudential supervision of the economy.

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**

Q2. Consider the following statements about the National Commission for Minorities (NCM):

1. It is a constitutional body under the Ministry of Social Justice and Empowerment (MoSJE).
2. It was constituted pursuant to the provisions of the National Commission for Backward Classes Act, 1993.

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**

Q3. Consider the following statements:

1. Insolvency and Bankruptcy Code (IBC) 2016 was implemented through an act of Parliament
2. IBC was intended to tackle the bad loan problems that were affecting the banking system.
3. The IBC mandates a 330-day outer limit for conclusion of the corporate insolvency resolution process (CIRP).

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 and 3 only
- c. 1 and 2 only
- d. **1, 2 and 3**

Q4. Which of the following best describes the term "Input Tax Credit" sometimes seen in news?

- a. It is the amount paid back by banks to their customers when they use debit cards for financial transactions for purchasing goods or services.
- b. It is a scheme of RBI for reworking the financial structure of big corporate entities facing genuine difficulties.
- c. It is an important provision in 'The Insolvency and Bankruptcy Code' recently implemented by the Government.
- d. **It is the tax that a business pays on a purchase and that it can use to reduce its tax liability when it makes a sale.**

Q5. The Groundswell report is released by which of the following?

- a. United Nations Water (UN-Water)
- b. World Meteorological Organization (WMO)
- c. United Nations Office for Disaster Risk Reduction (UNDRR)
- d. **World Bank (WB)**