

03 May 2020: UPSC Exam Comprehensive News Analysis

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A. GS 1 Related

Category: SOCIAL ISSUES

1. Ministry wants Aarogya Setu app made disabled-friendly

Context:

- Usage of [Aarogya Setu app](#).

Background:

- Downloading the Aarogya Setu app has been made mandatory for all government staff by the Department of Personnel and Training.
- The Union Home Ministry has also made it mandatory for all employees in the public and private sectors.

Details:

- In the light of the Aarogya Setu app being **not accessible to persons with disabilities (PwD), particularly those with hearing and visual challenges**, the Social Justice Ministry's Department of Empowerment of PwD (DEPwD) has written to the Ministry of Electronics and Information Technology (MeitY) and the app developer, the National Informatics Centre (NIC).
- The inaccessibility of the app amounts to a **violation of the Rights of Persons with Disabilities Act, 2016**.

Suggestions:

- For persons with visual impairment, provision for **audio guide for navigation**, audio description of colour used, need to be incorporated.
- The Aarogya Setu app needs to have a separate section with specific information for persons with hearing impairment with **sign language interpretation**.

B. GS 2 Related

Category: INTERNATIONAL RELATIONS

1. USCIRF report may prompt concerns

Context:

- The **US Commission of International Religious Freedom's (USCIRF)** latest report places India in the **"Countries of Particular Concern"** list.

Background:

- The **Office of International Religious Freedom (IRF)** in the State Department and the USCIRF were created by the American **International Religious Freedom Act of 1998**.

Details:

Indian government's response:

- The Indian government has unequivocally dismissed the USCIRF's latest report, claiming that it had **no locus standi** or official standing in India's domestic matters.
- The government's stand is consistent with its policy on the USCIRF, which it has refused to cooperate with, and has disallowed its officials to visit India since 2009.

Concerns:

- The USCIRF has recommended that India be put on the CPC list by the State Department, which is due to publish its annual report on religious freedom in the coming weeks.
- Such a designation would have a significant effect, as it could bring punitive actions.
- According to International Religious Freedom Act of 1998 of the U.S., the **President is obligated to take one of 15 possible actions**, ranging from a demarche to cancellation of bilateral exchanges, to travel sanctions against specified officials, within 3-6 months.

Conclusion:

- The U.S. State department hasn't always followed the USCIRF's recommendations and has followed its own procedure to designate states. The USCIRF's **recommendations are non-binding on the State Department.**

For more on this issue, refer to:

[CNA dated April 29, 2020](#)

2. No country for migrant workers

Context:

- Issue of migrant workers in other countries.

Concerns:

Migrant workers:

- In the face of lockdowns in many countries there has been a **drastic decline in the wages and employment of migrant workers.** This severely **impacts the financial position** of the migrant workers who live on subsistence wages.
- Many of the migrant workers from the south Asian region working in other parts of the world are having **limited access to healthcare.** There have been **reports of increasing infections** among the stranded migrants.
- Given the uncertainty due to the crisis, the **prospects of future employment appear bleak.** This might force the migrant workers to undertake reverse migration.

Effect on source countries:

- **Global remittances are projected to decline sharply by about 20%** due to the economic crisis induced by [COVID-19](#). This would badly **impact many economies** which are largely dependent on remittances to keep up economic growth momentum.
 - A recent World Bank report notes that the remittances to low- and middle-income countries may fall by 19.7% to \$445 billion, representing a loss of a crucial financing lifeline for many vulnerable households.
 - Remittances to Bangladesh and other South Asian nations are forecast to decline by 22% to \$109 billion in 2020.
- The **growing pressure on the source countries to evacuate their citizens** would pose a challenge.
- The possibility of permanent **reverse migration** would necessitate governmental aid and resources for the migrant workers and would also **strain the labour market.**

Way forward:

- As countries respond to the COVID-19 crisis, there is a strong case for supporting the migrant workforce, which is vital to many economies.
- The government should **support stranded migrants and their access to health, housing, and other social services,** and offer incentives to reduce the cost of remittance services.

For more information on this issue, refer to:

[CNA dated April 12, 2020](#)

C. GS 3 Related

Category: SCIENCE AND TECHNOLOGY

1. NIAB develops portable coronavirus detection kit

Context:

- Development of testing kits.

Background:

- The Health Ministry had set itself the target of being able to produce **RT-PCR and antibody test kits** domestically by the end of May 2020.

Details:

- Researchers from the **National Institute of Animal Biotechnology (NIAB), Hyderabad**, have developed a **biosensor** that can detect the novel coronavirus in saliva samples.
 - Previously, biosensors have been used across the world to **detect toxins, narcotic drugs**, and are also considered as a reliable tool to detect infectious diseases.

Mode of functioning:

- The new portable device named eCovSens consists of a carbon electrode and the coronavirus antibody.
- The antibody is capable of binding with the spike protein found on the outer layer of the virus. **An electrical signal is generated when the antigen and antibody binds.**
- Electrical components in the device further amplify this signal, process it, convert it to digital readings on an LCD display.
- The signal's intensity was found to be proportional to the concentration of the antigen in the sample.

Significance:

- The device can be battery-operated as it uses very low voltage of 1.3V to 3V.
- The device is **portable** and can be taken to the bedside of the patient too.
- The device is stable and when **built in bulk can drastically bring down the cost of testing.**

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: ECONOMY

1. Debt and mutual funds

For information on this issue, refer to:

[CNA dated 29 April, 2020](#)

Category: SCIENCE AND TECHNOLOGY

1. When will a COVID-19 vaccine be ready?

Context:

- The Oxford University has initiated **phase-1 human clinical trial** of its vaccine, **ChAdOx1 nCoV-19**, against the novel coronavirus.

Details:

Vaccine preparation:

- The vaccine, ChAdOx1 nCoV-19, uses the **common cold virus (adenovirus)** that causes infections in chimpanzees.
- The adenovirus has been **genetically altered** so that it does not grow once injected.
- The vaccine **carries the genetic material of the novel coronavirus** that makes the spike protein. This will help the body recognise the virus protein and make antibodies against the spike protein.
- The **antibodies produced will help mount an immune response** and prevent the virus from entering the human cells and causing an infection.

Clinical trials:

- The clinical trial will include the **study of the safety, ability to produce immune response and efficacy of the vaccine.**
- The clinical trials will help assess the dosage and immune response to the vaccine.

Significance:

- The adenovirus construct has been **previously used** by Oxford University researchers to test safety **for both the 2002 Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS)**, which have yielded positive results.
 - The safety of the candidate vaccine has also been tested on six rhesus macaque monkeys without any noticeable side effects. The vaccine also yielded effective immune response even against high levels of virus infection.
- Though the preliminary tests of the vaccine did cause transient side effects such as a fever, head ache or a sore arm, the vaccine is still **considered safe.**
- Oxford University is optimistic of a positive outcome of the candidate vaccine and has planned to get millions of doses of the vaccine before the end of 2020 even as results of the clinical trials are awaited.
- This would allow the Pune-based Serum Institute of India Pvt. Ltd. to start manufacturing the vaccine by end-June and be ready with **millions of doses by the end of 2020.**
- Oxford University would be partnering with AstraZeneca to manufacture and distribute the vaccine as quickly as possible. The vaccine is expected to be **made available on a not for profit basis for the duration of the coronavirus pandemic.**

Category: HEALTH

1. Can antibody tests help tackle COVID-19?

Context:

- The rapid testing kits being used to detect antibodies to the novel coronavirus were found to be providing unreliable results and have been stopped.

RT-PCR test:

- An **RT-PCR test** on a nasal or throat swab involves **extracting RNA or ribonucleic acid**, the genetic material of the virus, and checking if it shares the same genetic sequence as the SARS-CoV-2 virus.

Concerns:

- The current RT-PCR technology requires RNA extracting machines, a specialised laboratory, and trained technicians. The test is a **time consuming process**, involves **large scale logistics**, requires many chemicals and involves **substantial costs**.

Advantages:

- The only way such tests turn negative is if the actual sample does not have the virus or the swab was not properly administered and too little of the virus was gleaned. So, the **chances of faults are limited** if the set guidelines are appropriately followed
- The RT-PCR test is currently the **'gold standard'** in detecting the virus.

Antibody tests:

- Antibody tests, **also called serological tests**, **detect the presence and quantity of antibodies** that are produced by the immune system to battle an infection.
- It is an **indirect test** because it cannot find the virus, but it can determine if the immune system has encountered it.
- Two kinds of antibodies result from an infection: Immunoglobulin M and Immunoglobulin G (IgM and IgG). In response to an infection, the IgM is first produced within a week of infection. Two weeks later, the levels of IgM reduce and are replaced by IgG. The latter is a longer-lasting antibody and, depending on the infectious agent involved, can offer different durations of immunity.

Concerns:

- **Antibodies can show up only between nine to 28 days** after an infection has set in. Thus, an undetected infected person, if not isolated, can spread the disease.
- The antibodies **may be produced in response to a closely-related pathogen** also and not necessarily novel coronavirus.
- Due to a **lack of sufficient research** on the study of the antibodies and the profile of recovered patients, the antibody tests remain imperfect.
- The duration of the antibodies against SARS-nCoV-19 is not documented. The lack of antibodies does not necessarily rule out the previous exposure of the person to coronavirus.

Advantages:

- Antibody tests are **fast and relatively inexpensive**.
- Antibody tests are **portable**, can be administered on-site and can be conducted en masse.

Significance of anti-body testing:

- Antibody tests can be used to **gauge the extent of infection in a community** or a large group of people who may have had exposure to the virus.
 - Studies in India too have shown that for every symptomatic positive, there are two asymptomatic or presymptomatics (those who do not visibly manifest the disease).
- It helps **identify if the virus is present in certain clusters**. This can help government authorities decide on what regions in a lockdown can be opened up if the aim is to get regular life back on track as soon as possible.
- Rapid antibody tests can also play a role in determining the **degree of “herd immunity”** in a population.
 - Herd immunity means that when a sizeable fraction of the population has been infected, the virus ceases its pace of spread.

Way forward:

- The Indian Council of Medical Research (ICMR) has advised States to **use antibody testing for surveillance and use real time RT-PCR (or real-time reverse transcription-polymerase chain reaction) tests for diagnosis**.
- There have been efforts to produce the antibody testing kits domestically.

F. Prelims Facts

1. U.S. offers relief to H-1B holders, green card applicants

- The **US H-1B visa is a non-immigrant visa** that allows US companies to **temporarily employ graduate level workers in specialty occupations** that require theoretical or technical expertise in specialized fields such as in IT, finance, accounting, architecture, engineering, mathematics, science, medicine, etc.
- A specialty occupation requires the application of specialized knowledge and a bachelor's degree or the equivalent of work experience.
- The U.S. can issue a maximum of 65,000 H-1B work visas every year to highly skilled foreign workers.
- **Indians are major benefactors** of the H-1B Visa programme.

2. Documenting the last honey hunting group of Arunachal Pradesh

- The predominantly **Buddhist Sherdukpen community of Arunachal Pradesh** is known for its honey-hunting skill.
- **Honey harvesting** has traditionally been done twice a year. The bees make honey from wild flowers in June-July and primarily from **rhododendron** in October-November.
- The honey collected from the wild has been traditionally used for its **medicinal properties**.

G. Tidbits

1. India Inc. welcomes resumption of economic activity in lockdown 3.0

- Industry leaders have welcomed the government's decision to extend the lockdown and also **allowing selected economic activities in all zones.**
- The decision to exit the nationwide lockdown in a graded manner by giving equal importance to the lives and livelihood of Indian citizens will go a long way in uplifting the business sentiments of the Indian industry, helping the daily wagers, poor and the needy to earn their livelihood and also **revive India's economic growth trajectory.**
- The Chamber of Commerce and Industry and the Confederation of Indian Industry (CII) have urged the government to provide an **increased stimulus relief in the form of a revival package.**

H. UPSC Prelims Practice Questions

Q1. Which of the following countries border Venezuela?

1. Colombia
2. Brazil
3. Ecuador
4. Suriname
5. Guyana
6. French Guiana
7. Panama

Options:

- a. 1, 2 and 5 only
- b. 3, 4, 5 and 7 only
- c. 1, 2 and 6 only
- d. 2, 5 and 7 only

Answer:

Option a

Explanation:



Q2. Which of the following statement/s is/are correct?

1. The US Commission of International Religious Freedom was created by the American International Religious Freedom Act of 1998.
2. The US Commission of International Religious Freedom (USCIRF) recommendations are binding on the U.S. administration.

Options:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer:**Option a****Explanation:**

- The Office of International Religious Freedom (IRF) in the State Department and the US Commission of International Religious Freedom were created by the American International Religious Freedom Act of 1998.
- The U.S. State department hasn't always followed the USCIRF's recommendations and has followed its own procedure to designate states. The USCIRF's recommendations are non-binding on the State Department.

Q3. Which of the following statement/s is/are correct?

1. The Indian diaspora comprises the largest share of the global migrant population.
2. The United Arab Emirates houses the largest number of Indian diaspora.
3. India is the largest recipient of inward remittances in the world.

Options:

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

Answer:**Option c****Explanation:**

- According to the UN's International Migrant Stock 2019 compiled by the UN Department of Economic and Social Affairs Division, the count of the Indian diaspora currently stands at around 17.5 million making it the largest in the world. It now comprises 6.4% of the total global migrant population.
- The United Arab Emirates was the top destination for Indian migrants followed by the US and Saudi Arabia.
- India tops the list of countries with the largest inward remittances as per a new World Bank report.

Q4. Arrange the following tiger reserves from east to west:

1. Namdapha Tiger Reserve
2. Pakke Tiger Reserve
3. Manas Tiger Reserve
4. Buxa Tiger Reserve

Options:

- a. 1, 2, 3, 4
- b. 2, 1, 3, 4
- c. 4, 3, 2, 1
- d. 1, 2, 4, 3

Answer:

Option a

Explanation:



I. UPSC Mains Practice Questions

1. In the light of the current COVID-19 pandemic, discuss the concerns associated with India's Diaspora and its effect on India. Suggest both short and long term measures necessary in this regard. (10 marks, 150 words)
2. Compare and contrast the RT-PCR testing method and the antibody testing method. Discuss the need to use both methods in a complementary manner. (10 marks, 150 words)