## DIGITAL INDIA AWARDS

- The Digital India Awards recognizes the digital presence and e-Governance efforts of various Government institutions across the country.
- Central Government Ministries/ Departments/ Offices/ Institutions, State Government Departments/ Offices/ Institutions, District Administrations and Indian Missions Abroad are eligible to apply for the Digital India Awards.
- The awards instituted in 2009 are one of a kind in India for honoring the efforts of different Government entities in the digital realm.
- Since its inception the Digital India Awards have seen four editions, beginning from 2010, and biennially being conferred in 2012, 2014, & 2016.

## National Portal of India

- The Portal has been developed as a Mission Mode Project (MMP) under the National E-Governance Plan (NEGP) of the Government.
- The portal was launched in November 2005.
- It is designed, developed and hosted by the National Informatics Centre (NIC), a premier ICT organization of the Government of India under the aegis of the Ministry of Electronics & Information Technology.
- The objective behind the Portal is to provide a single window access to the information and services being provided by the Indian Government for citizens and other stakeholders.

## National Informatics Centre

National Informatics Centre (NIC) is a premiere S&T institution of the Government of India, established in 1976, for providing e-Government / e- Governance Solutions adopting best practices, integrated services and global solutions in Government Sector.

## National E-Governance Plan (NEGP)

- The Government approved the National e-Governance Plan (NeGP), comprising of 27 Mission Mode Projects and 8 components in 2006.
- In the year 2011, 4 projects - Health, Education, PDS and Posts were introduced to make the list of 27 MMPs to 31 Mission Mode Projects (MMPs).
- Within NeGP, "mission mode" implies that projects have clearly defined objectives, scopes, and implementation timelines and milestones, as well as measurable outcomes and service levels.
- The 31 mission mode projects (MMPs) are further classified as state, central or integrated

projects. Each state government can also define five MMPs specific to its individual needs.

## BharatNet

- Recently the Digital Communications Commission (DCC), the inter-ministerial panel of the Department of Telecommunications (DoT), has given in-principle nod for monetisation of fibre assets of BharatNet.
- These assets will be offered to the private telcos through auction, lease for 20 years or by outright sale.
- This comes against the backdrop of concerns over poor utilization of digital infrastructure that has been created across more than 100,000 gram panchayats in the country.
- Earlier, the Telecom Regulatory Authority of India (Trai) had also urged the government to sell off these fibre assets to private players.
- BharatNet is a flagship mission to connect 250,000 gram panchayats with broadband being implemented by Bharat Broadband Network Ltd (BBNL), a special purpose vehicle set up under DoT in February 2012.
- National Optical Fibre Network (NOFN) which was launched in October, 2011 was renamed as Bharat Net Project in 2015.

## Dexamethasone

Recently, scientists administering the World Health Organisation's RECOVERY trial have reported that dexamethasone reduced Covid-19 deaths in severe patients.

Dexamethasone is a cheap and widely available steroid drug.

### Highlights of the Research:

- The drug was given either orally or through an IV (intravenous).
- After 28 days, it had reduced deaths by 35% in patients who needed treatment with breathing machines and by 20% in those only needing supplemental oxygen.
- The drug is not helpful for less ill patients and for those who do not need respiratory support.
- According to the estimates, this drug can prevent one death for every eight patients treated while on breathing machines and one for every 25 patients on extra oxygen alone.

### Drug Mechanism:

- Multi-system Inflammatory State is a Covid-19 related illness that causes inflammation of the blood vessels leading to low blood pressure, affecting the entire body as it causes a

build-up of fluid in the lungs and other organs.
- The inflammation can be fatal so steroids and other anti-inflammatory drugs are used to reduce it.
- Dexamethasone is not an anti-viral but works to modulate the immune response of the body when confronted by a viral infection such as Covid-19.

## Benefits:

- The survival benefit is clear and large in severe patients.
- It is highly affordable, easy to make, can be scaled up quickly and only needs a small dosage.
- It is a cheaper option than tocilizumab, an injectable, which is also being tested.

## Concerns:

- The WHO advises that steroids should not be used early in a course of illness because they can slow the time until patients clear the virus.
- Excessive use of steroids can lead to adverse reactions like major mood swings, aggression and irritability, delusions, kidney/liver damage, increased blood pressure, etc.

## India's Reaction:

- Indian doctors have welcomed the research as good news for Covid-19 patients on ventilators.
- The drug is affordable and easily available in India.
- Earlier, the Indian Council for Medical Research (ICMR) revised the protocol for clinical management of Covid-19 and allowed the use of remdesivir, tocilizumab and Convalescent Plasma Therapy (CPT) on certain groups of patients.
- Remdesivir reduced hospital stays for very sick Covid-19 patients but has not been shown to improve recovery itself.

## Other Findings from the Research:

- Earlier, the same study showed that the malaria drug hydroxychloroquine was not working against the coronavirus.
- The study enrolled more than 11,000 patients in England, Scotland, Wales and Northern Ireland who were given either standard of care or that plus one of the treatments mentioned below:
- Dexamethasone.
- HIV combo drug lopinavir-ritonavir.
- Antibiotic azithromycin.

- Anti-inflammatory drug tocilizumab.
- Plasma from people who have recovered from Covid-19 that contains antibodies to fight the virus.

## What is a randomised controlled trial?

It is an experiment that is designed to isolate the influence that a certain intervention or variable has on an outcome or event.

### Why is randomised controlled trial so popular?

- At any point in time, there are multiple factors that work in tandem to influence various social events.
- RCTs allow economists and other social science researchers to isolate the individual impact that a certain factor alone has on the overall event.
- For instance, to measure the impact that hiring more teachers can have on children's learning, researchers must control for the effect that other factors such as intelligence, nutrition, climate, economic and social status etc., which may also influence learning outcomes to various degrees, have on the final event.
- Randomised controlled trials promise to overcome this problem through the use of randomly picked samples.

### Significance:

Many development economists believe that RCTs can help governments to find, in a thoroughly scientific way, the most potent policy measures that could help end poverty rapidly.

### Criticisms of randomised controlled trials:

- As per economist Angus Deaton, who won the economics Nobel Prize in 2015, "Understanding and misunderstanding randomised control trials" that simply choosing samples for an RCT experiment in a random manner does not really make these samples identical in their many characteristics.
- While two randomly chosen samples might turn out to be similar in some cases, he argued, there are greater chances that most samples are not really similar to each other.
- Other economists argue that social science research, including research in the field of development economics, may be inherently unsuited for such controlled research since it

may be humanly impossible to control for multiple factors that may influence social events.

## What is the place of RCTs place in clinical trials?

- As per definition, a randomised controlled trial, or RCT, is a study in which people are allocated at random, entirely by chance, to receive one of several clinical interventions.
- One of these interventions is the standard of comparison or control.
- The control may be standard practice/ treatment options, a placebo (a drug without an active substance, or a 'sugar pill'), or no intervention at all.
- The idea is to measure and compare the outcomes against the control after the participants receive the treatment. Prof. Madhukar Pai, director, McGill Global Health
- Programs, McGill University, Canada, teaching an online course on epidemiology for journalists with Suno India portal, explains that RCTs are based on multiple factors, including type of interventions being evaluated, and number of participants.
- In single blind trials, the participants, or the investigators do not know who is assigned what; in double blind trials, both participants and investigators do not know; and triple and quadruple blind trials, where three or four of the relevant groups are not aware of the treatment assignment.
- A good RCT (for COVID19) should enrol enough numbers, define clinical endpoints, including mortality and morbidity, also whether intubation was needed and days of stay in hospital.
- In well designed RCTs, researchers, after random assignment of participants, assess whether randomisation was done sufficiently to eliminate the influence of confounding factors, and avoid selection bias.
- Researchers follow the groups over days, weeks, years and observe major clinical end points.
- In the end, all other things being equal, it will be possible to measure what benefit a particular group X got, in comparison to Y group.
- It is possible to estimate if there were any differences between the two groups, say, in mortality, and if this was because of strategic effect of the cause, or due to pure chance.
- RCTs remove the impact of chance in cause and effect relationships.
- But ethically, an RCT can only be employed when researchers think/hope that the interventions will offer benefits.
- Participants can be enrolled in a randomised controlled trial that is expected to leave them better off.
- The dexamethasone study where mortality was reduced by a third, is a classic example here.
- The Solidarity and RECOVERY (or Randomised Evaluation of COVid19 thERapY) trials are examples of large scale RCTs done with multiple partners at many locations, bang in the middle of an epidemic.
- They have already been instrumental in setting the standard of care — for instance, hydroxychloroquine was hyped up as a drug but studies conclusively proved no ameliorative

effect in using it.

- The Remdesivir study, on the other hand, showed some improvement in reducing intensive care unit stay, while there was no great impact on mortality.