TEST 2

8. Even though the Supreme Court has, from time to time, raised the issue of overcrowding in Indian jails measures to decongest jails have been sporadic and half-hearted. Why overcrowding of jails takes place? Suggest innovative solutions.

The overcrowding of prisons in the country is a long-standing problem that is seldom addressed effectively. The issue is once again in the news, with the Supreme Court bemoaning that prisons in Delhi and nine States have an occupancy rate of 150 per cent of their capacity. The average occupancy in all jails in the country was 117.4 per cent, as of December 31, 2014.

What makes the picture bleaker is that there is little change even though the court has passed a series of interim orders to the States on measures to decongest prisons. In particular, the court had on February 5 and May 6 this year spelt out steps that the authorities should take to reduce prison occupancy. Cramped conditions in prison militate against the prisoner's right to good health and dignity. Further, as pointed out by the amicus curiae in this case, an excessive prison population creates problems of hygiene, sanitation, management and discipline. Of equal concern are the available staff strength and the level of training they receive.

Prisons are overcrowded with occupancy ratio of 18% more than the capacity
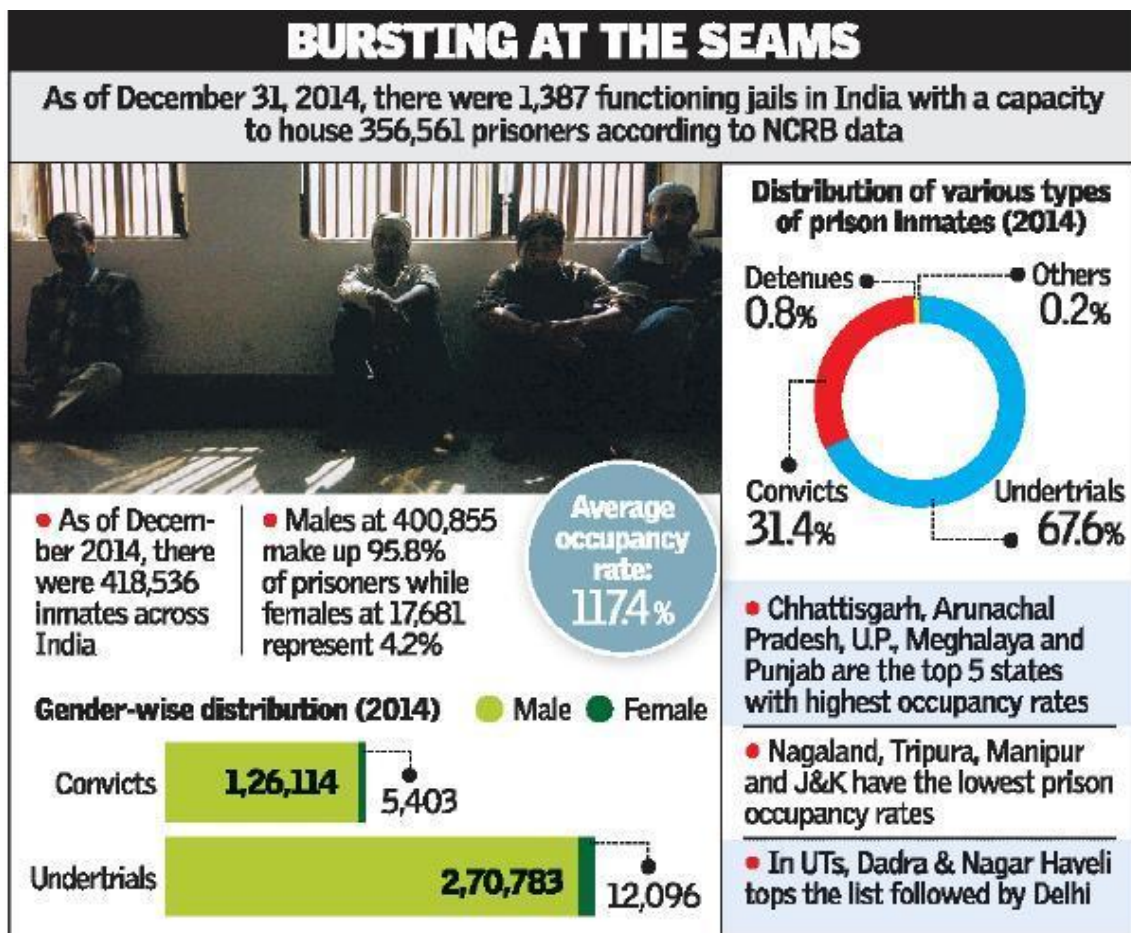
Reasons:
- ✓ More than 2/3rd of the inmates are undertrials
- ✓ delay in the disposal of undertrial cases in the courts
- ✓ inadequate capacity of prisons in India to accommodate all the persons required to be sent to prisons
- ✓ policy of granting Probation, Parole, Remission and Commutation of sentence has not been implemented in letter and spirit
- ✓ undertrial prisoners mostly belong to the weaker section of society so they don't have resources to fight their case in judiciary
- ✓ unnecessary and unjustified arrests made by the Police
- ✓ Very slow justice process due to lack of judges and infrastructure
- ✓ Lack of alternative approach or less use of alternative mediums
- ✓ States with internal security issues for example Chattisgarh with Maoist issues has high prison occupancy. Need special arrangements for them.

Solutions
- ✓ Construction of new prisons and increase the capacity of existing prisons
- ✓ To reduce the number of undertrial prisoners: The following steps should be taken to reduce the number of undertrials: a. By expeditious disposal of undertrial cases by giving

priority to the cases of persons on remand over the cases of accused already on bail; b. By holding Special Courts and Special Lok Adalats in prisons;

- ✓ Utilization of provisions for grant of bail
- ✓ By extending Video- Conferencing facilities for conducting trial in courts
- ✓ Fasten the process of judicial proceeding, delivery of justice
- ✓ It is also suggested to adopt uniform and adequate policy of parole, probation, remission and premature release
- ✓ Dispose of the cases related to undertrials
- ✓ Fill vacancies of judges in all the courts
- ✓ Capacity of prisons should be improved

BURSTING AT THE SEAMS

As of December 31, 2014, there were 1,387 functioning jails in India with a capacity to house 356,561 prisoners according to NCRB data

Distribution of various types of prison inmates (2014)

Detenues 0.8% — Others 0.2%
Convicts 31.4% — Undertrials 67.6%

- As of December 2014, there were 418,536 inmates across India
- Males at 400,855 make up 95.8% of prisoners while females at 17,681 represent 4.2%

Average occupancy rate: 117.4%

- Chhattisgarh, Arunachal Pradesh, U.P., Meghalaya and Punjab are the top 5 states with highest occupancy rates
- Nagaland, Tripura, Manipur and J&K have the lowest prison occupancy rates
- In UTs, Dadra & Nagar Haveli tops the list followed by Delhi

Gender-wise distribution (2014) ● Male ● Female

Convicts 1,26,114 / 5,403
Undertrials 2,70,783 / 12,096

13. **Mention highlights of Citizenship (Amendment Bill) 2016. Analyse key issue involved.**

Highlights of the Bill

- ✓ The Bill amends the Citizenship Act, 1955 to make illegal migrants who are Hindus, Sikhs, Buddhists, Jains, Parsis and Christians from Afghanistan, Bangladesh and Pakistan, eligible for citizenship.
- ✓ Under the Act, one of the requirements for citizenship by naturalisation is that the applicant must have resided in India during the last 12 months, and for 11 of the previous 14 years. The Bill relaxes this 11 year requirement to six years for persons belonging to the same six religions and three countries.
- ✓ The Bill provides that the registration of Overseas Citizen of India (OCI) cardholders may be cancelled if they violate any law.

Key Issues and Analysis

- ✓ The Bill makes illegal migrants eligible for citizenship on the basis of religion. This may violate Article 14 of the Constitution which guarantees right to equality.
- ✓ The Bill allows cancellation of OCI registration for violation of any law. This is a wide ground that may cover a range of violations, including minor offences (eg. parking in a no parking zone).

19. **Assess efficacy of referendum as a tool to solve important economic and political issues in nation states with respect to recent events in different countries.**

What is referendum?

A referendum is an election device in which a law can be either accepted or repealed based on the popular vote of people. In this process, voters can reject or accept a law or statute passed by a legislature by taking a popular vote on the issue.

Rational behind it?

What if a law was passed and you didn't like it? In some states, one legal process available in this instance is the process of referendum. Referendums are a major component of direct democracy, a system in which laws are directly made by the people. Another major component of direct democracy is an initiative.

Referendums differ from initiatives in that they repeal already passed laws, whereas initiatives propose new laws for consideration. In either case, both initiatives and referendums cover the same question: should a law be accepted or rejected?

In the United States, referendums are not allowed at the national level. This is because the Framers of the Constitution regarded direct democracy as a dangerous form of government, too susceptible to the wills of the masses. Referendums are only allowed at the state and local level, and only in some states. Currently, 25 states allow popular referendums, with the states geographically being located in the West. There might not be that many states in the East that allow referendums, because of the distrust of the public's decision making in the original colonies. Likewise, western states embraced referendums as part of the progressive era's reforms to end government corruption.

Recent: Brexit, Colombia peace deal….

Why should not be implemented in economic or political matters such as…

- ✓ Criticised as don't reflect public
- ✓ Public mood can be swayed by anger, emotions affecting result
- ✓ Social media and technology effectively used for propoganda
- ✓ Though such votes are portrayed as popular governance in its purest form, studies have found that they often subvert democracy rather than serve it. They tend to be volatile, turning not just on the merits of the decision but also on unrelated political swings or even, as may have happened in Colombia

- ✓ Voters must make their decisions with relatively little information, forcing them to rely on political messaging — which puts power in the hands of political elites rather than those of voters.
- ✓ Voters face a problem in any referendum: They need to distill difficult policy choices down to a simple yes or no, and predict the outcome of decisions so complex that even experts might spend years struggling to understand them.
- ✓ Voters typically solve this problem by finding what the political scientists Arthur Lupia and Mathew D. McCubbins have termed "short cuts." The voters follow the guidance of trusted authority figures or fit the choice within a familiar narrative.
- ✓ When a referendum is put forward by the government, people often vote in support if they like the leadership and vote in opposition if they dislike it, according to research by Lawrence LeDuc, a political scientist and professor emeritus at the University of Toronto.
- ✓ "A vote that is supposed to be about an important public issue ends up instead being about the popularity or unpopularity of a particular party or leader, the record of the government, or some set of issues or events that are not related to the subject of the referendum," Professor LeDuc wrote in a 2015 paper.

TEST 3- Science and Technology

1. Financial inclusion in India is mainly driven by modern technologies. Throw light on different financial inclusion enabling technologies.

Role of Technology in Financial Inclusion

Among the key constraints cited world over in achieving significant financial inclusion is the cost of servicing small value and unprofitable customer segments or providing credit facilities to those with irregular income history. 2) The combination of IT and mobile telephone along with other IT-enabled services has emerged as a viable solution for greater financial inclusion. 3) Essentially, this combination of technologies minimizes the need for setting up physical branches at all locations with trained persons to man them 4) It allows the servicing banks to improve efficiency and provides for use of multiple channels to work together as an inter-connected system. 5) The rapid growth of technology and communication infrastructure in India is great enabler for establishing rural information infrastructure. 6) Short Message Service (SMS), Unstructured Supplementary Services Delivery (USSD), Wireless Application Protocol (WAP), General packet radio Service (GPRS), phone-based application such as Java 2 Micro Edition (J2ME)/Binary Runtime Environment for Wireless (BREW), Subscriber Identity Module (SIM) based application and Near Field Communication (NFC) are the various technology applications available, which can help improve the level of financial inclusion in the country. The typical technology platform as follows:
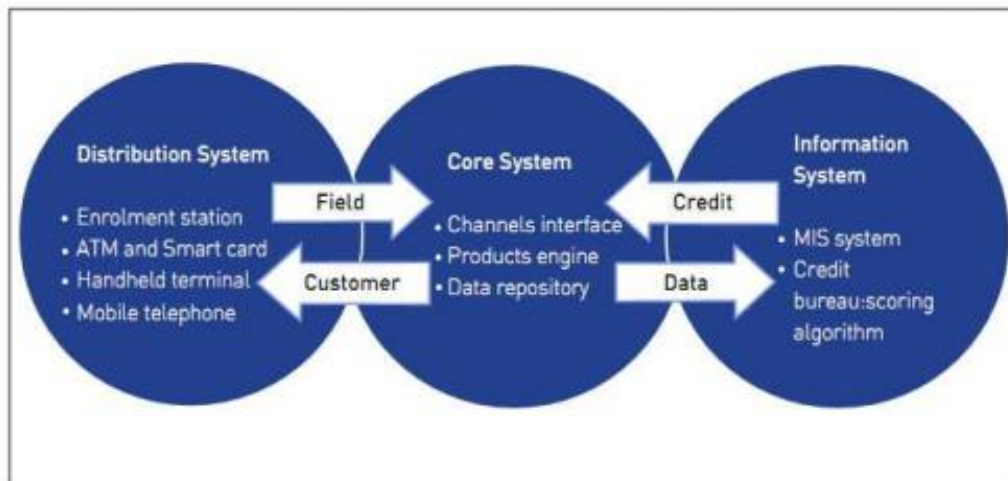
Some of the commonly promoted distribution technologies for financial inclusion in India include the following: IT-enabled Kiosks for Financial inclusion IT-Kiosks are among the most common forms of delivering products for financial inclusion.
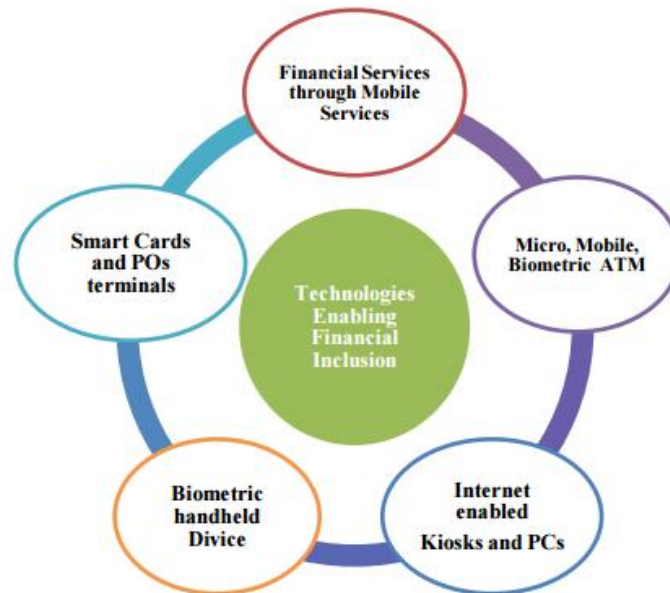
Advantages of Using Advanced Technologies:

- ✓ FI brings banking services through to unbanked population using intelligent devices communicating on General Packet Radio Service (GPRS)
- ✓ Highly cost effective approach using technology and BC model in comparison to the brick and mortar bank branch model
- ✓ Literacy is not a constraint as solution is biometric enabled and supports voice enabled prompts solution provides rich bouquet of services such as bill payments, recharges, insurance, dairy payments, NREGA, EBT, informational services such as Motorola's M-Wallet solution provides enhanced user interface with secured at doorstep of the villager
- ✓ It provides employment to a member of the community serving as a BC agent
- ✓ It brings together the eco-system of Banking, Technology & Value-Added Service (VAS) providers
- ✓ Multiple technology options for a handheld device, mobile phone, web application etc. Technology is interoperable across banks for Unique Identification Authority of India (UIDAI) enrolled customer
- ✓ Platform independent – open source technology
- ✓ Highly scalable and cost effective as deployed on cloud

2. Geo-tagging of works carried out under Mahatma Gandhi National Rural Employment Guarantee Act has been undertaken on a pilot basis. What are different features of geo tagging technology? Throw light on its applications in India?

Geotagging is the process of adding geographical identification metadata to various media such as a geotagged photograph or video, websites, SMS messages. It is a form of geospatial metadata. This data usually consists of latitude and longitude coordinates, though they can also include altitude, bearing, distance, accuracy data, and place names, and perhaps a time stamp. geotagging involves "tagging" a geographical location to something like a status update, a tweet, a photo or something else you post online. It's particularly useful because a lot of people now

share content on their favorite social networks via their smartphones or tablet computers while on the go, so they're not always in one specific location all the time like we used to be back in the day when we could only access the web from a desktop computer.

Geotagging can help users find a wide variety of location-specific information from a device. For instance, someone can find images taken near a given location by entering latitude and longitude coordinates into a suitable image search engine. Geotagging-enabled information services can also potentially be used to find location-based news, websites, or other resources. Geotagging can tell users the location of the content of a given picture or other media or the point of view, and conversely on some media platforms show media relevant to a given location.

The geographical location data used in geotagging will, in almost every case, be derived from the global positioning system, and based on a latitude/longitude-coordinate system that presents each location on the earth from 180° west through 180° east along the Equator and 90° north through 90° south along the prime meridian.

For example in Geotagging of photographs, there are two main options for geotagging photos; capturing GPS information at the time the photo is taken or "attaching" the photograph to a map after the picture is taken. The user must have a camera with built in GPS or a standalone GPS along with a digital camera. more and more cell phones have built-in GPS chips.

With photos stored in JPEG, TIFF and many other file formats, the geotag information, storing camera location and sometimes heading, is typically embedded in the metadata, stored in Exchangeable image file format (Exif) or Extensible Metadata Platform (XMP) format.

Applications in India:
- ✓ Remote sensing data
- ✓ Audio/video files
- ✓ SMS messages
- ✓ Domain Name Server Entries
- ✓ Website pages
- ✓ Geoblogging attaches specific geographic location information to blog entries via geotags.
- ✓ searching and locating articles

3. Mosquito borne viruses are in various states of evolution, fuelled directly by weapons humans have developed against them. Discuss causes of emergence of mosquito borne diseases and India's readiness in dealing with them.

Once limited geographic and host ranges of many vector-borne diseases are expanding, spurred largely by anthropogenic factors. Epidemics of malaria, dengue, and other formerly contained vector-borne diseases are on the rise in the developing world. Global, regional, and local phenomena associated with the emergence and resurgence of these and other vector-borne diseases. Currently Dengue, Chicken Gunya, Malaria, Japanese Encephaletes etc. are resurgent in India.

Causes of emergence

- ✓ Ecological changes which includes Agriculture; dams,changes in water ecosystems; deforestation/reforestation; flood/drought; famine; climate changes. Example: Rift Valley fever(dams, irrigation);
- ✓ Human demographics, behavior which includes Societal events: Population growth and migration (movement from rural areas to cities); war or civil conflict; urban decay; sexual behavior; intravenous drug use; use of high-density facilities; example: Introduction of HIV; spread of dengue; spread of HIV and other sexually transmitted diseases
- ✓ International travel commerce which includes Worldwide movement of goods and people; air travel; Example: introduction of cholera into South America; Spreade of swine flu in India; threat of Ebola in India
- ✓ Technology and industry which includes Globalization of food supplies; changes in food processing and packaging; organ or tissue transplantation; drugs causing immune suppression; widespread use of antibiotics; Example: transfusion-associated hepatitis (hepatitis B, C)
- ✓ Microbial adaptation and change which includes Microbial evolution,response to selection in environment; Example: Antibiotic-resistant bacteria, "antigenic drift" in influenza virus
- ✓ Breakdown in public health measures which includes Curtailment or reduction in prevention programs; inadequate sanitation and vector control measures; Example: Resurgence of tuberculosis in India currently observed; cholera in refugee camps in Africa;

The perennial denial of public health problems by health authorities is a road block for any corrective measures in India. Limited efforts are made to strengthen the reporting system for diseases, which in turn leads to only a small proportion of cases being reported and a rosy picture is painted of the health status of the population. The first serious step to solve any problem is to recognise it; however, denying or ignoring public health issues has become the standard approach.

Rather than restricting to curative and diagnostic services, a systematic and concerted strategy is required that would incorporate all four broad components of the health system – services provision, resource creation, financing, and stewardship/governance. A partial approach is not likely to succeed.

- ✓ Health facilities need to be kept ready for surge capacity at the out-patient and in-patient levels
- ✓ There should be more focus on population services including awareness generation prior to the disease season, mosquito control etc.
- ✓ Availability of sufficient public health staff should be ensured to visit communities to check mosquito breeding sites, conduct fogging and take other preventive measures.
- ✓ Adequate supplies of insecticides, spray machines etc. should be provided.
- ✓ On curative side, clinics and other health facilities should be equipped with trained manpower and regents for conducting tests for dengue virus, and human resources for counseling patients etc.

- ✓ As described above, often either sufficient financing is not available to conduct community outreach efforts for prevention, and whatever is available is not released on time. Sufficient funds need to be allocated for prioritising public health activities, including recruitment and training of the staff.
- ✓ Stewardship and governance
- ✓ Prevention better than cure: The current approach to crisis management in the context of dengue focuses excessively on treatment via clinical care and hospitals; equal if not more attention needs to be given to public health functions for prevention of the disease. Detailed mosquito control plans should be developed prior to the dengue season. There is a need for public awareness generation to prevent mosquito breeding. Local bodies should undertake regular assessments and checks, including punitive measures such as fines for violation of suggested processes. The different government departments should coordinate to ensure sanitation and avoid mosquito breeding. The existing health facilities including district hospitals and medical colleges need to be involved in the process. Community engagement should be ensured through councillors in municipal corporations, MLAs (Member of Legislative Assembly) and MPs (Member of Parliament).

4. Capital intensive technology, especially in India with abundant human resources, has been projected as detrimental to use of 'manpower' as it is argued that it would reduce jobs. Critically examine, with the help of 'Technology Vision 2035', unveiled recently by the government.

Man Vs. Machine debate

Capital intensive refers to a business process or an industry that requires large amounts of money and other financial resources to produce a good or service.

With increasing automation and use of technologies such as IOT,AI it is feared of reducing jobs.

This is not only in traditional industries but also in IT industries. Automation-related investments and activities of the Indian IT industry, especially those of Infosys and Wipro, two of the country's IT majors, have occupied top of mind recall in recent times.

TV2035 identifies following sector for improvement of technology:

- ✓ Education
- ✓ Medical Sciences & Healthcare
- ✓ Food and Agriculture
- ✓ Water
- ✓ Energy
- ✓ Environment
- ✓ Habitat
- ✓ Transportation
- ✓ Infrastructure
- ✓ Manufacturing
- ✓ Materials
- ✓ Information and Communication Technology

With growth in technology in all above spheres there is fear abut loss of jobs in all the above sector.
Phrases such as Robotics Process Automation, and the move from 'Heuristic' to 'Deterministic' automation have also been bandied about befuddling listeners. Anxious parents, of engineering students about to graduate, are eager to know if the jobs will be lost.