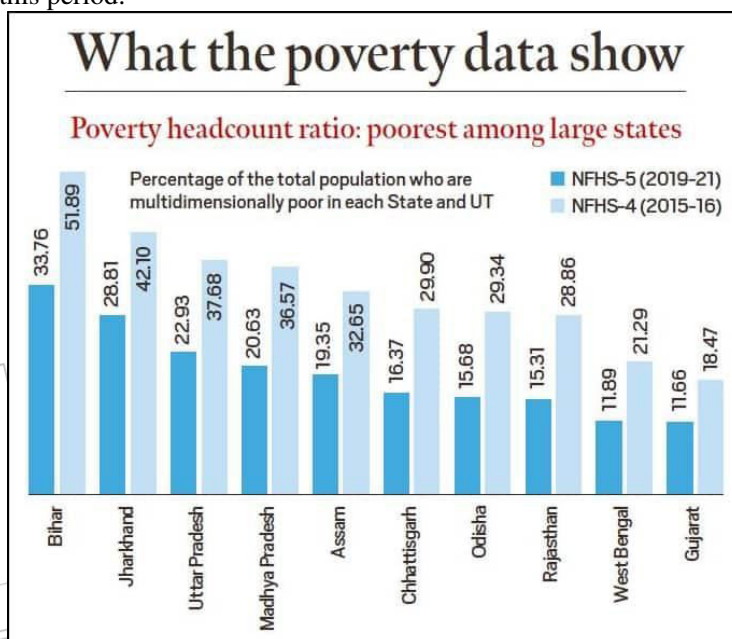## GOVERNMENT POLICIES AND INTERVENTION

The new non-poor

- **Context:** Prime Minister of India said in his Independence Day address that in the first five-year term of his government, 13.5 crore of poor people have broken free from the chains of poverty and entered the new middle class.

Key details:

- The 13.5-crore number cited by the PM appears in the second National Multidimensional Poverty Index report that was published by Niti Aayog recently.
- The 2023 edition of the index uses data from the latest round of the National Family Health Survey (2019-21), and captures changes in multidimensional poverty between the survey periods of NFHS-4 (2015-16) and NFHS-5 (2019-21).
- The poverty headcount ratio, that is, the proportion of multi-dimensionally poor in the country, fell from around 25% to just fewer than 15% between the two rounds of NFHS.
- In absolute terms, this implies that 135 million (or 13.5 crore) Indians escaped multidimensional poverty in this period.

What the poverty data show

Poverty headcount ratio: poorest among large states

Percentage of the total population who are multidimensionally poor in each State and UT

NFHS-5 (2019-21) ■ NFHS-4 (2015-16)

State	NFHS-5 (2019-21)	NFHS-4 (2015-16)
Bihar	33.76	51.89
Jharkhand	28.81	42.10
Uttar Pradesh	22.93	37.68
Madhya Pradesh	20.63	36.57
Assam	19.35	32.65
Chhattisgarh	16.37	29.90
Odisha	15.68	29.34
Rajasthan	15.31	28.86
West Bengal	11.89	21.29
Gujarat	11.66	18.47

About Multidimensional Poverty Index (MPI)

The national MPI measures deprivations across the **three dimensions** of:

Health and nutrition:

Within health, it tracks three variables:

- ✓ Nutrition,
- ✓ Child and adolescent mortality, and
- ✓ Maternal health.

Education:

In education, it tracks two variables:

- ✓ Years of schooling, and
- ✓ School attendance.

Standard of living:

- ✓ In standard of living, it tracks seven variables such as sanitation, drinking water, bank account, etc.
- The index is based on the methodology used by the Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP) to construct the Global MPI.
- OPHI and UNDP are technical partners in the formulation of the national index.
- But India's MPI is not exactly the same as the Global MPI.
- For instance, India's MPI has 12 variables, while the Global MPI has 10.
- The two additional variables in India's MPI are maternal health and bank account.

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MPI Progress Report 2023 (Between NFHS-4 and 5)

Steep decline in Poverty Headcount Ratio

2015-2016: **24.85%**
2019-2021: **14.96%**

Reduction in the incidence of poverty in urban areas

2015-2016: **8.65%**
2019-2021: **5.27%**

Source: National Multidimensional Poverty Index: A Progress Review 2023

UP, BIHAR, MP, ODISHA and RAJASTHAN recorded steepest decline in number of MPI poor

135 mn people escaped multi-dimensional poverty between 2015-16 and 2019-21

How does this reduction in poverty (13.5 crore in the period between the two NFHS rounds) compare with India's past record?

- This is a multidimensional poverty index and, as such, is not comparable to India's traditional and official way of estimating poverty.
- The Global MPI 2023 report states that 415 million people in India moved out of poverty between 2005-06 and 2019-21.
- The Global MPI pegs India's poverty ratio at 16.4% as against 14.96% in Niti Aayog's MPI.
- This difference is on account of the two additional metrics, and some differences in definitions.

How has poverty been estimated in India traditionally?

- From the time of Dadabhai Naoroji's 1901 book Poverty and Un-British Rule in India, poverty has been estimated using a monetary measure.
- The idea has been to arrive at an amount of money that is considered necessary to either eat a subsistence diet (Naoroji's approach) or to achieve a minimum standard of living.
- Since data on income was difficult to collect, India used regular (five-yearly) consumption expenditure surveys (which showed how much people were spending on consumption).
- Based on this data, several expert committees — led by D T Lakdawala (1993), Suresh Tendulkar (2009), and C Rangarajan (2014) — drew a "poverty line".
- The line is the level of consumption expenditure (stated in rupees) that divides those who are poor from those who are not.
- India's last official poverty statistics are from 2011.
- The data have not been updated because the government junked the consumption expenditure survey of 2017-18.
- That survey showed a decline in rural consumption and, as such, pointed to an increase in abject poverty.

Impact on India's middle class

- There is no official definition of the middle class in India.
- It is difficult to say whether those who escape poverty necessarily join the middle class, or to what extent.
- Estimates of India's middle class provided by private research organisations peg the middle class at income levels that are considerably higher than those of the people who are coming out of poverty.
- In a report, 'The rise of India's middle class', People Research on India's Consumer Economy (PRICE) divided all households into four categories:
  - ✓ Destitute,
  - ✓ Aspirers,
  - ✓ Middle Class and
  - ✓ Rich.
- According to PRICE's survey, as of 2021, out of a population of 1,416 million:
  - ✓ 196 million Indians were categorised as 'Destitutes',

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- ✓ 432 million were the 'Middle Class', and
- ✓ 732 million were 'Aspirers'.
- Households which are classified as Middle Class have an annual income in the range of Rs 5 lakh to Rs 30 lakh (at 2020-21 prices).
- Destitute households were those with an annual income less than Rs 1.25 lakh.

INTERNAL SECURITY

Legalization of Cannabis

- **Context**-The German government approved a draft law legalizing the purchase and possession of cannabis for recreational use, allowing adults to possess up to 25 grams of cannabis and grow up to three plants for personal use.

What is Cannabis?

- It is a generic term used to denote the several psychoactive preparations of the plant Cannabis sativa.
- The major psychoactive constituent in cannabis is tetra hydro cannabinol (THC) and compounds structurally similar to THC are referred to as cannabinoids.
- The Mexican term 'marijuana' is frequently used in referring to cannabis leaves or other crude plant material in many countries.
- The use of marijuana is highest in the United States, Canada, Zambia, and Nigeria. The effect of marijuana can last from two hours to six hours.

Side-effects of using Cannabis

- Its immediate effects include impairments in memory and in mental processes, including ones that are critical for driving.
- Long-term use of cannabis may lead to the development of addiction of the substance, persistent cognitive deficits, and of mental health problems like schizophrenia, depression and anxiety.
- Exposure to cannabis in adolescence can alter brain development.

The legality of Cannabis in India

- Marijuana is illegal in India under the Narcotic Drugs and Psychotropic Substances Act, 1985 (NDPS Act).
- It was in 1985 that India, under pressure from the United Nations, adopted the international treaty of Single Convention on Narcotic Drugs (SCND) 1961, placing it alongside drugs like heroin.
- The Indian government allows the sale of bhang although some states like Assam, Gujarat, Maharashtra, and Karnataka have banned the use and sale of bhang (Gujarat later decriminalized it in 2017).
- The sale and production of cannabis resin and flowers are prohibited across the country, while the states hold the power to regulate and impose laws on the sale of cannabis leaves and seeds.
- Exclusions of the Act: Bhang, which is made with the leaves of the plant, is not mentioned in the NDPS Act.
- Special provision: It states that the government 'may allow cultivation of any cannabis plant for industrial purposes only of obtaining fiber or seed or for horticultural purposes'.

Arguments in favor of Legalizing Cannabis

- Plant was most likely brought to India by Aryan migrants between 1000 and 2000 BC. It is treated as a sacred plant in the Vedas, considered a source of joy. The Hindu god Shiva is revered as the Lord of Bhang.
- The central government stated that the present legal framework regulating the usage of cannabis did not violate Articles 14 (right to equality), 19(1) (g) [freedom of trade], 21 (right to life or other fundamental rights guaranteed under the Constitution.
- The legalization of marijuana can help create jobs, battle stress, improve human concentration, resolve medical problems and provide sustainable agricultural incomes, among other things.
- Given India's production capacity of cannabis, the government stands to benefit in terms of tax.

Arguments in against of Legalizing Cannabis

- It May Affect Your Mental Health: Not everyone's experience with marijuana is pleasant. It often can leave you anxious, afraid, panicked, or paranoid. Using marijuana may raise your chances for clinical depression or worsen the symptoms of any mental disorders you already have.
- It May Impair Your Brain: Marijuana can make it harder for you to focus, learn, and remember things. This seems to be a short-term effect that lasts for 24 hours or longer after you stop smoking.

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- Misusing: In Indian context, when prescription drugs are grossly misused, It is hard to ensure disciplined use of cannabis.
- Introduction of yet another psychoactive drug will wreak havoc on a population still struggling with tobacco, alcohol.

Punishment under the NDPS Act, 1985

- The NDPS Act provides for the act of consuming any narcotic drugs and psychotropic substances which is an offence for the purpose of the Act.
- Any person consuming substances such as morphine, cocaine, diacetyl-morphine and any other drug later specified as one by the central government under a notification shall lead to rigorous imprisonment for a term extending up to one year or fine up to twenty thousand rupees, or both.
- Any narcotic drug or a psychotropic substance, other than those included in the list, shall lead to imprisonment up to six months or fine up to ten thousand rupees, or both.

What are the judgments related to it?

- In Arjun Singh vs the State of Haryana, the Chandigarh High Court observed that bhang is not cannabis (hemp) under the provisions given under NDPS Act although it is a cannabis plant. Thus it is not necessarily unlawful to eat cannabis.
- In 2019, the Delhi High Court agreed to listen to the petition made by the Great Legalization Movement India Trust that challenged the ban on cannabis stating that the NDPS Act's restrictions are arbitrary, unscientific, and unreasonable.

Countries legalizing the use of Cannabis

- Far more countries have legalized the drug for medicinal purposes, including most European Union members.
- Germany joined the cannabis legalization revolution, announcing plans to permit the recreational use of the drug, as well as its production.
- Malta became the first EU member to legalize recreational cannabis, allowing adults to carry up to seven grams and grow up to four plants at home.
- Uruguay became the first country in the world to legalize the production, distribution and consumption of cannabis in 2013.

What comes after legalization of Cannabis?

- With legalization comes commercialization, which comes at a cost which we have seen with tobacco and alcohol.
- The morbidity and mortality associated with tobacco and alcohol rank amongst the top 10 in terms of the global disease burden. Despite knowledge of the risks of smoking, cigarettes remain legal and the tobacco industry continues to thrive.

Way Forward

- Legalizing marijuana can help reduce addictive behavior by erasing the stigma around it. However, there is no scientific study yet to conclusively prove that legalizing cannabis leads to a healthier relationship with drugs and substance abuse.

PRELIM FACTS

1.Zarth App

Context: A new application is developed for knowing about the transients.

Key details:

- A team of researchers has developed an app that allows anyone with a smartphone to 'hunt' for transients.
- The app uses the open-source Sky Map and adds data daily from the Zwicky Transient Facility (ZTF)'s robotic telescope at the Palomar Observatory in California.
- Palomar is also home to one of the oldest, largest, and most powerful telescopes in the world: the 200-inch Hale reflector.
- The ZTF scans the entire northern sky every two days and uses the data to make large area sky maps that have important applications in tracking near-earth asteroids and studying supernovae.
- The new app, called ZARTH, short for 'ZTF Augmented Reality Transient Hunter', is built along the lines of the augmented reality mobile game Pokemon Go.
- Once a player catches a transient, ZARTH shares more information about it, earn points, and go on to collect more transients.

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- The app is loaded daily with transients detected in real-time by the ZTF, an incredible 100,000 every night. These include:
  - ✓ Supernovae,
  - ✓ Flaring stars (variable stars that flare up for a short while),
  - ✓ White dwarf binaries (burnt remains of dead stars that orbit one another and often merge and explode in supernovae),
  - ✓ Active galactic nuclei, etc.

2. PM e-Bus Seva Scheme

- **Context:** The union cabinet approved 'PM e-Bus Sewa' for augmenting city bus operation under which 10,000 e-buses will be deployed across cities in the country.

Key details:

- Rs.57,613 crores will be spent on this.
- Around 10,000 new electric buses will be provided across the country.
- Out of Rs.57,613 crores, Rs.20,000 crores will be provided by the Central government.
- The scheme will cover cities with 3 lakhs and above population.
- Under this scheme, city bus operations with 10,000 e-buses on Public Private Partnership (PPP) model will be done.
- This scheme will support bus operations for 10 years.
- Infrastructure will be upgraded in 181 cities under the Green Urban Mobility Initiatives.

Key features:

Reaching the Unreached:

- The scheme will cover cities of three lakh and above population as per census 2011 including all the Capital cities of Union Territories, North Eastern Region and Hill States.
- Under this scheme priority will be given to cities having no organized bus service.

Direct Employment Generation:

- The scheme will generate 45,000 to 55,000 direct jobs through deployment of around 10,000 buses in city bus operation.

The Scheme has two segments:

- Segment A – Augmenting the City bus services:(169 cities)
- The approved bus scheme will augment city bus operations with 10,000 e-buses on Public Private Partnership (PPP) model.
- Associated Infrastructure will provide support for Development/ up-gradation of depot infrastructure; and Creation of behind-the-meter power infrastructure (substation, etc.) for e-buses.

Segment B– Green Urban Mobility Initiatives (GUMI): (181 cities)

- The scheme envisages green initiatives like bus priority, infrastructure, and multimodal interchange facilities, NCMC-based Automated Fare Collection Systems, Charging infrastructure, etc.

Support for Operation:

- Under the scheme, States/Cities shall be responsible for running the bus services and making payments to the bus operators.
- The Central Government will support these bus operations by providing subsidy to the extent specified in the proposed scheme.

Boost to E-Mobility:

- The scheme will promote e-mobility and provide full support for behind-the-meter power infrastructure.
- Cities will also be supported for development of charging infrastructure under Green Urban Mobility Initiatives.
- The support to bus priority infrastructure shall not only accelerate the proliferation of state-of-the-art, energy efficient electric buses but also foster the innovation in the e-mobility sector as well as development of resilient supply chain for electric vehicles.

3. Meri Maati, Mera Desh Campaign

Context

- The Union government has launched the Meri Maati, Mera Desh campaign.

About

The Five elements of the Campaign include:

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- **Dedication of Shilaphalakam (memorial)**: To express heartfelt gratitude to veers (bravehearts) who have made the supreme sacrifice. On the Shila Palakam, names of the Veers are to be inscribed. It includes freedom fighters, defence personnel, CAPF personnel, and State Police.
- Panch Pran Pledge: At memorial, People will take pledge affirming their commitment towards the country.
- Vasudha Vandhan: Each Gram Panchayat/village will plant 75 saplings of indigenous species developing an Amrit Vatika.
- Veeron ka Vandan: Panchayats may hold felicitation ceremonies for honoring the freedom fighters and the families of the deceased freedom fighters.
- Hoisting of the National Flag and singing of Rashtra Gaan may be undertaken at each program.

Other Events
- Youth volunteers and other people would collect Mitti from each Panchayat/Village and bring them to block level. The Mitti Kalash would be carried to Delhi from each block.
- The collected soil will be used to create the Amrit Vatika, a special garden celebrating national integrity and the warriors of the Indian freedom struggle, near Delhi's Kartavya Path.

4.Banteng
- **In News**-According to study, Lumpy Skin Disease Virus (LSDV) was first detected in Cambodia in a banteng .
- It is a type of wild cattle native to Southeast Asia.
- It prefers to roam the open and dry deciduous forests where grassy vegetation is found in abundance.
- It historically occurred from southern China and, probably, northeast India throughout mainland southeast Asia, through Peninsular Malaysia to the islands of Borneo, Java, and probably Bali .
- The most significant known Banteng populations remaining are in Java, Cambodia and perhaps Thailand and Borneo (Sabah, Malaysia).
- The most important threats to banteng are hunting, and habitat degradation and loss.
- IUCN Red List status : Endangered

ANSWER WRITTING

Q. The occurrence of cloudbursts is a significant concern in hilly regions. Examine the challenges posed by cloudbursts and the measures that can be taken to mitigate their adverse effects. (250 Words, 15 Marks)

Introduction:
- A cloudburst, essentially an abrupt and intense rainfall event over a small area, can be devastating, especially in hilly terrains. In India, regions like the Himalayas are particularly susceptible to cloudbursts. The consequent flash floods, landslides, and other associated calamities wreak havoc on human settlements and ecosystems alike.

Challenges Posed by Cloudbursts:

Ecological Impact:
- Landslides: Cloudbursts can cause rapid landslides due to the steep terrain of hilly regions.
- For instance, the Leh cloudburst in 2010 caused massive landslides, impacting both the human population and the environment.
- Ecosystem Disruption: Rapid inflow of water can destroy smaller ecosystems, leading to loss of biodiversity.

Infrastructure Damage:
- Roads and Bridges: Infrastructure like roads, bridges, and buildings can be severely damaged. Many parts of Himachal Pradesh and Uttarakhand have seen such damages recurrently.
- Communication Breakdown: The destruction of roads and other communication networks can isolate regions, hampering relief efforts.

Human Tragedy:
- Loss of Life: Cloudbursts, often unanticipated, can result in significant casualties. For example, the Kedarnath tragedy in 2013.
- Displacement: Many people are forced to evacuate their homes, leading to temporary or sometimes permanent displacement.

Economic Challenges:
- Loss to Agriculture: Sudden flooding can wipe out crops, causing losses to farmers.
- Apple orchards in Shimla, for instance, have been periodically affected.

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Impact on Tourism:
- Regions like Jammu & Kashmir and Himachal rely heavily on tourism. Cloudburst events can tarnish their image as safe tourist destinations.

Measures to Mitigate Adverse Effects:

Early Warning Systems:
- Weather Forecasting: Investing in modern meteorological equipment can help in predicting cloudbursts, allowing timely evacuations.
- Communication Network: Ensuring that even the remotest areas have a robust communication network can expedite the dissemination of warnings.

Infrastructure Resilience:
- Eco-friendly Construction: Promoting construction practices that are in harmony with the local ecology can reduce the impact of cloudbursts.
- Drainage Systems: Efficient drainage systems can ensure that excess water is channeled away, reducing the risk of flooding.

Community Preparedness:
- Training and Drills: Periodic drills and training programs can ensure that local communities are better prepared to respond to emergencies.
- Awareness Programs: Educating the community about the risks and safety measures can be beneficial.

Ecological Conservation:
- Afforestation: Planting trees can help stabilize the soil and reduce the risk of landslides.
- Preserving Wetlands: Wetlands act as natural sponges, absorbing excess water and reducing the risk of flash floods.

Policy Interventions:
- Land Use Policies: Regulations that prevent construction in vulnerable zones can reduce potential damages.
- Research and Collaboration: Collaborating with international agencies to understand best practices and invest in research to devise local solutions.

Conclusion:
- Cloudbursts, while natural, have their devastating impacts amplified due to anthropogenic factors like deforestation, unplanned urbanization, and the degradation of natural water channels. By synergizing technology, policy, and community awareness, India can mitigate the challenges posed by cloudbursts, ensuring both the safety of its people and the preservation of its ecologically rich hilly terrains.

MCQs

1. Consider the following statements.
   1. Marijuana is illegal in India under the Narcotic Drugs and Psychotropic Substances Act, 1985 (NDPS Act).
   2. The Indian government allows the sale of bhang although some states like Assam, Gujarat, Maharashtra, and Karnataka have banned the use and sale of bhang.
   3. The sale and production of cannabis resin and flowers are prohibited across the country, while the states hold the power to regulate and impose laws on the sale of cannabis leaves and seeds.

   How many of the above statements is/are correct.
   a) Only one
   b) Only two
   c) Only three
   d) None

2. Consider the following statements.
   1. The Ministry of Ayush and World Health Organisation (WHO) organised the first global summit on Traditional Medicine in Gandhinagar, Gujarat.
   2. The Siddha system is followed predominantly in Tamil Nadu and Kerala;
   3. The Sowa-Rigpa system is practised mainly in Leh-Ladakh and Himalayan regions such as Sikkim, Arunachal Pradesh, Darjeeling, Lahaul & Spiti.

   How many of the above statements is/are correct.
   a) Only one
   b) Only two
   c) Only three
   d) None

3. Consider the following statements.
   1. Bhashini, the AI-enabled multi-language translation tool will be rolled out in all 22 schedule 8 languages

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2. It is currently available in 10 languages.
Which of the statement given above is / are correct?
a) 1only
b) 2 only
c) **Both 1 and 2**
d) None of the above

4. Match the following pairs:
List I **List II**
1. Panch Pran Pledge: At memorial, People will take pledge affirming their commitment towards the country.
2. Vasudha Vandhan: Each Gram Panchayat/village will plant 75 saplings of indigenous species developing an Amrit Vatika.
3. Veeron ka Vandan: Panchayats may hold felicitation ceremonies for honoring the freedom fighters and the families of the deceased freedom fighters.
How many of the above statements is/are correct.
a) Only one
b) Only two
c) **Only three**
d) None

5. Consider the following statements about Madan Lal Dhingra.
1. Madan Lal Dhingra was hanged to death for killing British official Curzon Wyllie.
2. He became a member of the secretive Abhinav Bharat Mandal founded by Vinayak Savarkar and his brother Ganesh.
Which of the statement given above is / are correct?
a) 1only
b) 2 only
c) **Both 1 and 2**
d) None of the above

6. Which of the following is/are the objectives of recently launched Chandrayaan-3 mission?
1. To demonstrate Safe and Soft Landing on Lunar Surface
2. To demonstrate Rover roving on the moon
3. To conduct in-situ scientific experiments
Select the correct answer using the code given below.
a) 2 and 3 only
b) 1 only
c) **1, 2 & 3**
d) 1 & 3 only

7. With reference to Aditya – L1 Mission, consider the following statements:
1. It is the first Indian space mission to observe the Sun and the solar corona.

2. Visible Emission Line Coronagraph (VELC) is the largest payload to be carried on the Aditya-L1.
3. Out of seven payloads, its four payloads will directly view the Sun.
How many of the statements given above are correct?
a) Only one
b) Only two
c) **All three**
d) None

8. Recently, President Droupadi Murmu launched Vindhyagiri for Indian navy, which one of the following is the best description of 'Vindhyagiri'
a) **Stealth frigates**
b) Nuclear-powered submarine
c) Torpedo launch and recovery vessel
d) Nuclear-powered aircraft carrier

9. Consider the following statements, with respect to National Company Law Appellate Tribunal (NCLAT)
1. It is statutory body which is set up under the Companies Act, 2013.
2. It hears appeals against the orders of National Company Law and Tribunal and Competition Commission of India.
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

10. With reference to Genome sequencing, consider the following statements:
1. It involves rearranging an organism's DNA to create new genetic codes.
2. Metagenomics, a type of genome sequencing technique, rapidly studies the virus's genetic information, without prior knowledge of the infectious agent.
3. Genome sequencing has helped scientists to control the mpox virus.
How many of the statements given above is/are correct?
a) Only one
b) **Only two**
c) All three
d) None