

EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

VisionIAS

AS GOVERNMENT EXPANDS,

LIBERTY CONTRACTS

For hundreds of thousands of years, human beings have lived in small tribes numbering between 30-100 who have survived on a hunter-gatherer lifestyle. The traditional lifestyle would be relatively egalitarian with all men participating in hunts and children being brought up in a communal way by all the adults of the tribe.

The traditional narrative of humanity calls this period 'Pre-History' and begins the tale of (so called) human progress at the region in the Middle East called the Fertile Crescent. In this narrative this is when nearly 8000 years ago farming first started and man moved

from a hunter-gatherer lifestyle to a sedentary farming lifestyle. For modern day humans this is when and where history starts.

Yet we often fail to realise how relatively recent this event was. Human beings have been hunter gatherers for hundred of thousands of years and have been farmers and settlers for only a few thousand.

The implications of this lack of understanding are extremely telling when it comes to the relationship between the Government and Individual liberty. This is because the Government is the natural corollary of the earliest farming communities.

In the farms in the Middle East there would be ~~so~~ harvest occasions when there was plenty and droughts when there would be none. The government and bureaucracy developed to store

the excess and distribute it in times of need. From this crucial role has developed the Modern Day State which regulate the life of every human alive today.

For most humans this level of control and authority of the government seems natural and beneficial. We are willing to be taxed, subject ourselves to onerous laws and ~~at~~ never question the authority of the government to do this. Some consider the State to be a necessary evil while others consider it ~~to~~ to be a source for good but supporters of both positions have no problems in letting go of their liberty ~~to~~ so that the government can function.

However, a good starting point to reconsider the view of the government as a 'Net Good' would be to go back to the earliest governments set up in the earliest farming communities. Archeological evidence

of the skeletons of farmers and that of hunter gatherers when compared have shown that the farmers invariably had a worse life. They had a poorer diet (couldn't get the variety of meat, vegetable, nuts, fruits etc available to a hunter-gatherer); they had to work for longer hours farming than the hunter gatherers did; they suffered from more diseases and died sooner than the latter did. Maybe the narrative of progress of humanity where evolution from hunter gatherers to modern times is shown as the 'right darwinian thing' to have happened needs a rethink. In this newer narrative giving up the liberty of the hunter gatherers forced the farmers to live a poorer quality of life under a despotic government.

The Age of Liberalism

The age of liberalism has set up the form of governments prevalent in the world today. It started in the West

but has now become so prevalent as the dominant discourse throughout the world that even countries like North Korea have to pay lip service to the ideals of liberalism and call themselves the Democratic People's Republic of North Korea.

In this age the relationship of the government and liberty is a confused one. The earliest liberals like Thomas Hobbes and John Locke feared the State and its potential to crush liberty. Yet, they felt that the State is a necessary evil.

Thomas Hobbes and Locke justified this by a thought experiment called 'State of Nature' where they imagined society without a government. While their conception of this 'State of nature' varied both showed that the presence of a state is necessary to safeguard certain crucial liberties like Rights to Life Liberty, Property etc.

Thus, state became a necessary evil. The ideal state was considered to be the smallest possible which could still preserve these essential liberties.

The founding fathers of USA were inspired by this 'Negative Liberalism' philosophy and established a State which would guarantee the Rights to Life, Liberty and the Pursuit of Happiness.

However, the advent of the Industrial Age and the rise of Marxist ideology in the 19th century led to a crisis in the minimal state ideology. As workers suffered horrific working conditions and poverty the rights to liberties seemed hollow. What good is it to have uncaged a bird if it doesn't know how to fly.

This led to the development of 'Positive Liberalism'. This model considered the

concept of Liberty to be the 'Ability to do something worth doing'. The role of the State changed ~~from~~ to a developmental one where it would try and provide a welfare role to the citizens.

Thus, we can see that the role of the government is linked to the definition of Liberty. In modern times ~~most~~ India has adopted the 'Positive Liberty' model most prominently displayed in Part IV of our Constitution i.e. DPSP's. India's Government aims to provide liberty to people to fulfill their desires but via various developmental schemes like Right to Education; National Food Security; runaway Institutions like IIT's etc also the capability to do so.

To consider liberty to merely be absence of impediments to motion (as described by Hobbes) would be too simplistic. The modern day government views its role

The Indian model can be viewed as a harmonious resolution of both, the negative and positive views of liberty. This is in contrast with China where only the developmental role is emphasised. In the Indian constitution the Fundamental Rights such as Freedom of Expression, Due Process of Law (Art 19 and 21), Right to Equality etc are limitations placed upon the State (guaranteeing freedom of citizens) and certain DPSPs like Aiming for Gender equality in wages, Efforts to be made to promote education and healthcare etc. are liberty guaranteed by the State.

The Puttaswamy judgement by the Supreme Court is a textbook example of how the Indian State is able to balance liberty (Right to Privacy) and the developmental goals of Aadhar. Thus, there is no fundamental contradiction between the Government and Liberty as long as the Constitutional provisions are the guiding light for ~~any~~ resolving any temporary contradictions or dispute.

1984 or A Brave New World?

Utopias and dystopias have always fascinated human beings. It is no surprise that the role of government vis-a-vis individual liberty in the future is always a prime feature of these dystopian novels. In this regards 1984 by Orwell and A Brave New World by Huxley provide contrasting but equally compelling visions.

Thus, it is plain that humans will always fear the Government and there will be many new challenges to be faced because the scientific and technological advancements in the future will change the world.

The most compelling challenge will be the advent of the Digital Era and the rise of Artificial Intelligence (AI). This will

provide unimaginable powers to the government to track every aspect of life of the citizens. Indeed certain reports of Chinese Social Credit Schemes are providing a vision of dystopia where people with a low

social credit score are banned from plane travel. The Snowden Expose has also shown how USA's spy agencies were tracking via AI unimaginable amounts of phone, E-mail data in order to find terror threats.

There is a very real fear that the future governments could virtually monitor every aspect of a person's life and thus Liberty would become just a dead letter word gone the way of the Dodo.

However, the solution to this problem lies in the noble virtue of Democracy. It isn't just a form of government but it can become a virtue of a society. A democratic government would be open, transparent, responsive and accountable to the people. It is only true democracy which is representative and deliberative in its decision making process that can retain the hard won harmony between the State and Liberty of the Individual.

For a democratic government technology would be a tool to further help develop capability of its citizens than a tool to help perpetuate the authoritarian regime.

A good comparison could be made between how the Chinese state is using digital tools to suppress dissent via its Social Credit Rating System whereas the Indian State has self imposed restrictions wherein Aadhar is not indiscriminately used to oppress people but as an aid for development.

The one sureshot way to safeguard liberty is by safeguarding our democracy.

Section B

Data is the oil of the 21st century: the raw materials that modern civilisations are increasingly being built on

At a recent press conference Mr Mukesh Ambani, the head of Reliance Jio said that "Data is the new oil". This is a profound truth which is increasingly becoming evident as the 21st century marches on.

To see this clearly we first need to quantify some of the multitude of reasons that the 20th century was the Oil century. This can be seen in the extraordinary ~~influence~~ ^{role} played by this limited natural resource in ~~the~~ fields as varied as transportation, plastics, energy sector, refineries, geopolitics, mining and surveying etc. In every single field of human endeavours in the 20th century you can detect the influence of oil.

As an illustrative example we can consider the geopolitical implications of Oil dependence whereby we can understand the historical events that have played out over the Arabian Peninsula to ensure that the oil supply is uninterrupted.

Is data the new Oil?

There are certain similarities between data and oil. Both of them can be seen as primary products which will then be consumed by a host of secondary sector industries and monetized.

Just like Oil refineries are required to make of oil something commercially and practically useful we need the technological advancements in Artificial Intelligence and Machine Learning as well as hardware evolution whereby computational and storage capability increases to a level where we can process the vast amounts of data generated in today's world.

Without proper storage, processing, categorisation, conversion into meaningful and patterns data is useless. Unless this is done information does not become knowledge.

However, there are many differences in the lens or well. Data is not a limited resource unlike oil and is far harder to safeguard and protect. Thus, there is a need to be wary of privacy and the dangers of 'Data Colonisation'.

Why Data is the Raw Material for Modern Civilisations

~~First we need~~

For an individual almost everything about his life is data. The personal data such as name, date of birth, schooling etc are stored as ID. The physical parameters such as weight, height etc are also data. The activities such as shopping, travelling, dining out, dining in etc too are data. The friends you have, the numbers of

friends they have, the friends you have in common with another friend and so on is also data. It is harder to think about any parameter of an individual's existence that is NOT DATA.

Thus, in the modern civilisation every human being is potentially identifiable as the 'sum total of all datapoints'. This has profound implications across a variety of fields. Some of them are:

Education: Data on education parameters, on the results of standardised tests can create a profile of the learning potential and create a ~~best~~ personalised best approach model for every individual learner.

It can also be used to grade essays and assign marks on parameters such as grammar, ~~or~~ vocabulary, sticking to the context etc. via AI without human intervention. This is already being attempted by GRE test setters.

Health: AI can 'predict' the type of diseases, likelihood of diseases and the other such 'detections' hitherto the province of doctors. They can do this based on Machine Learning where millions of data points in terms of test results of patients are shown to the computer and thus it is informed about the disease that corresponds to those test results. In this fashion the AI can predict the disease given the ~~res~~ results of medical tests.

It is expected that via the Ayushman Bharat stack where data on patients is collected the Medical Sector can utilise this (with apt privacy safeguards) and develop better predictive and learning models.

Policy Making: If data points are properly analysed they can provide a great boost to policy makers for designing as well as virtually testing policy.

Legal Sector:

If appropriate data is given then it can help immensely in investigating crimes as well as convicting criminals. This will be seen in all types of cases ranging from murder (National DNA database for identifying the culprit); civil cases of fraud (financial transaction record); any cases where payment can be traced digitally etc. This will help ensure that criminals are convicted but more importantly that no innocent is falsely sentenced.

Sports:

The foremost continuous breaking of World Records in disciplines such as athletics, swimming, track and field, shotput etc events can be partly attributed to the increasing use of data analytics to improve all aspects of the athlete. These range from diet, sleep patterns, tracking of body during practice to technique improvements ultimately leading to better performances.

Robotics:

The increasing amount of data & training input for robots coupled with AI and ML has made it possible to envisage a future where many blue and white collar jobs will be automated.

The effects of this are already observed in the UK where Amazon has laid off hundreds of employees at its warehouses and replaced them with autonomous robots. Another field ripe for disruption is that of Road transport with the research in Self Driving Cars.

Advertisement:

The proliferation of data about individuals has enabled companies to specifically target them with personalised advertisement. This is the major reason why Google is one of the wealthiest companies in the world.

Culture:

The rise of Dystopian works of fiction in fields such as movies or books display a common theme - "Fear of the Machine". It can be seen

in Terminator where Skynet (A global AI) is fighting humans to 1984 where an authoritarian government attempts to use data and technology against citizens.

As Culture is one of the most revealing parts about any ~~code~~ civilisation, indeed one could argue that the Culture is the 'Raison D'Etre' of a civilisation and the current 'Zeitgeist' (A German word loosely meaning spirit of our times) with ^{its} obsession with AI and Big Data shows us that it truly is the ^{maker} of our ^{modern} civilisation.

The Perils of Data for Civilisation
Oil was a great boon for mankind and it raised the standard of living and quality of life tremendously. However, it contained within itself the great evil of Pollution leading to Global Warming and Climate Change as well.

Data too isn't an unblemished resource.

It has grave potential to be misused and harm people.

Some of the commonplace flaws are that of Banking frauds; Digital impersonations; leaking of sensitive information; medical malpractices or revealing medical information unethically etc.

However, there are graver structural flaws which should not be allowed to ~~sp~~ shape modern civilisation in the new Data Age.

One major flaw is that of data surveillance by corporations as well as government.

This erodes the Right to Privacy of an individual and can be used to coerce him.

This can be seen in the allegations against the Chinese state of them using a 'Social Credit Score' to reward and punish its citizens.

Data Colonialism too is a major issue because developed countries have the technology required to store data as well as the expertise to process it.

Using MNC's and free market ~~tools~~ ideology they can extract data from developing nation and then charge them for the use of this data. This can be used for ~~more~~ other purpose as well as seen by the recent allegation of "Russiagate" scandal where it was thought that Russia used Facebook Data to manipulate voters.

The security of data and data networks becomes of crucial importance. Enemy countries should not be able to hack into critical defense related networks.

The recent global controversy about Huawei where USA alleges that ~~they~~ it will insert backdoors in 5G hardware and thus should not be used is a case in point.

These issues should be tackled with judicious use of policy, data awareness, expertise in AI within the country and better international norms. They should not ~~be used as an~~ be considered so grave a threat that we turn into modern day luddites and turn our backs to the future.

Proper utilisation of data will prove to be as revolutionary for humanity as oil was in the 20th century. In the early 1900s the concept of private cars and bikes for the vast majority of the world was unthinkable and at the end of the century even air travel was ubiquitous. Similarly, there will be a quantum change in the 21st century due to the proper use of data.

India must utilise its natural advantages of a vast population which is rapidly coming online as well as ~~some~~ for many technically proficient workforce to properly harness the various benefits of data. If India plays its cards correctly it can ensure that data will propel India's century of growth.

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