

EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

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All the Best

① Fourth Industrial Revolution : A means to embark on new prosperity or an intrusion in human life?

21st century is the era of technological disruptions. With the advent of newer technologies and rapid advancement, almost every aspect of existence on Earth is being influenced. From households to corporates; individuals to nation states; private sector to public sector, no one has been left untouched of its impact.

In the 18th century, with 1st industrial revolution fuelled by Iron and coal chain reaction, the world saw rapid transformation in economic activities. Production was undertaken on huge scale in factories leading to prosper-ity of western nations such as Great Britain, France, US etc.

The Asian economies did not reap much benefit out of the 1st revolution. With the advent of power technology, information and communication technology, there was another wave of hyperactivity in the world. This led to the 2nd and 3rd Industrial revolution. Nations such as India with their extremely good talent in field of IT, software services, computing benefited hugely from this IT revolution.

Presently, it is the time of artificial intelligence, machine learning, robotics, quantum computing, big data analytics, Internet of things which is impacting the working of entire world.

This wave offers significant opportunities which, ~~can~~ if harnessed can reduce the disparity in the

World Economy. This offers tremendous potential to the underdeveloped and developing countries to showcase their intellectual capabilities. Its impact can be seen across all the sectors and segments.

Societal Impact

At the societal level, it has brought tremendous changes which have improved the quality of life. Using the robotics technology, the routine work of cleaning, sanitation and other menial jobs have been left to robots.

It has left more time with people to engage in leisurely activities thus improving their psychological well being. They can also devote more time towards studies, research & development, innovation. The same has also eradicated the menace of manual scavenging by using machines in place of humans.

In the medical area, it has proved to be a game changer. Now, Computing

technology and artificial intelligence are undertaking the work of diagnosis on a much faster and more efficient manner. The IBM-Watson computer is diagnosing patient of cancer in a fraction of seconds using its algorithm. It reduces the healthcare burden of nation due to reduced deaths due to such diseases.

Education serves the foundation of a human being's growth and development. It enables her to translate her latent capabilities into active strengths. However, the conventional education system focused on a strait jacket solution for children without giving importance to their individual differences.

Artificial Intelligence has brought a dramatic change in this system.

It analyses the abilities of every children and develops a customised learning solution according to the cognitive abilities, speed of the individual concerned.

Hence, it is true to say that the 4th Industrial Revolution is leading to grassroot progress and prosperity.

Taking it forward, the technology has proved to be of significant help in public service delivery. Now, there is use of robots in banks which leads to timely and effective service delivery. Now, the crop losses of farmers are being monitored using unmanned aerial vehicles and software tools helps in immediate loss assessment and timely compensation payment. Hence, this has made the system more robust and people-centric.

Real time monitoring of projects is being done and the data is analysed

holistically using big data analytics. It helps in timely identification of follies and instant corrective action can be taken.

~~Under~~ South Asia is largely a rain-fed area for farming activities. However, the vagaries of monsoon, El-Nino have been difficult to predict causing huge losses to the nation, farming community as a whole. However, with the development of supercomputers, they can be predicted with a large degree of accuracy. This helps in preventing distress and saves from economic losses.

In a similar fashion, various disasters can be accurately predicted in advance and mitigation measures can be taken to prevent loss of life and property. For instance, successful evacuation of people from coastal state of

Odisha was done due to timely prediction of tropical cyclone.

Business and Commerce

The 4th industrial revolution has reformed the way businesses were done. Now, the routine work based on standard operating procedure are being done by robots in place of humans. This has reduced the personnel cost.

It leaves more time for managers to plan strategic dimensions, focus on research and development.

The use of big data analytics has helped the firms in undertaking better targeting and product positioning by analysing the consumer behavior, his needs and consumption patterns. Now, advertising campaign can be designed for micro levels according to consumer niche areas.

It has a spillover effect over polity and economy as well.

Political Impacts:

The use of big data analytics tools helps the political parties in better understanding the needs and demands of citizens. They can prepare their election manifestos accordingly.

It also enables them to analyse their performance at micro level and make strategic changes. It is also being used for voter education, awareness campaign.

The policymakers also used these tools to identify the perception of a particular policy decision among citizens. For instance, during the Union Budget 2018-19, real time monitoring of citizens conversation on social media was done by Information & Broadcasting Ministry. This was further used to dispell the rumours.

Infrastructure Gains

The 4th industrial revolution has impacted the physical, economic and social infrastructure in multiple ways.

On the physical infrastructure front, smart cities are being developed which are connected with smart appliances, internet. There is inter-linkage of various public utilities such as power grid, highways, road network, telecom network, hospitals etc. Any adverse activity such as an accident on road is noticed in real time and prompt action is taken.

On social infra, web applications such as lybrate, practo has enabled people to find doctors within their locality in a few seconds thus, saving their time and money.

Now, Smart Cars, electric Cars, self-driven Cars have been developed which are integrated with highway monitoring system providing information on the traffic levels, speed and emergency response in case of accidents.

FASTags are being used for payment of tolls reducing time lag.

Chatbots are being used to provide 24x7 customer support service.

National Defense

Muntra, unmanned tank, is an astonishing feat of the 4th revolution. It helps eliminate the enemy without the presence of any human being physically in the tank.

Similarly, Smart border fencing relays information about insurgency

and infiltration using sensors which are used to filter any terror attack.

Drones / UAV are being used to monitor hilly and difficult terrain such as Ladakh. This reduces the cost of army as well as the human lives lost due to harsh temperature, bringing real prosperity.

However, this 4th Industrial revolution has brought a lot of fears as well to the mankind.

Threats

The technologies developed are being used as a tool of mass surveillance. They are tracking every single movement of human beings thus intruding in one's privacy and violating the human rights.

It has also led to neo-colonialism wherein the big tech giants who own and control people's information are virtually controlling them.

The recent case of Facebook-Cambridge Analytica wherein the people's information was used to predict their psychological behavior & plant fake news to influence the voting behaviour has challenged the very tenets of free and fair elections in a democracy.

Similarly, these are being used to promote consumerism. It creates a psychological feeling of deprivation among people by ~~per~~ displaying the products which people wish to buy but cannot afford.

The worst fear of 4th Industrial revolution are in form of job

losses. The existing workforce may have to be retrenched due to robots taking jobs. Also, the IT professionals need to reskill themselves in the wake of faster changing technology.

Hence, a multi-pronged approach is needed to deal with this disruption.

Way forward

skilling, upskilling and reskilling is to be done in order to prevent unemployment. Strong data protection laws on the lines of EU General Data protection regulation and white paper of BN Srikrishna Committee needs to be adopted really soon.

Innovation, research and development spending of the government has to be increased. Commercialisation of patents filed by the academia by industry-academia

Connect has to be encouraged.
A spirit of entrepreneurship through
-n increased access to funding
for start-ups has to be promoted.

Conclusion :

4th Industrial revolution offers
tremendous opportunity to India
in the wake of its huge demog-
-raphic dividend in the backdrop
of ageing population in China
and Japan.

A timely action in a coordinated
way will lead to the achieve-
-nt of Prime Minister's vision of
New India by 2022 by leveraging
the 4th Industrial revolution.

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RISE OF POPULISM: A THREAT TO DEMOCRACY

Democracy is a form of government wherein people/citizens are the ultimate masters. It involves their free and fair participation in all aspects of governance from voting/electing the representatives to a critical analysis of the policies, regulation within the purview of constitutional limits.

Populism entails taking measures that are perceived positively by the electorate, which may or may not be beneficial for the nation in long run. It is empirically documented that such measures have more of political connotations rather than welfare or economical aims.

There is a wave of populism being observed the world over past couple of years.

One important case in point is the elections of United States.

During the campaign, a string of measures were announced by the candidates. ~~As~~ As analysed by policy analysts, they did not intend to benefit the Nation but were aimed at wooing the voters by robbing them of their neutral and rational psychological choice.

This populism has widespread implications. It undermines the welfare agenda of a democracy and focus on narrow vested interests. Its outcomes may be beneficial in short run but disastrous in long run.

The recent farm loan waivers have been highly criticised by economists and central bankers. It has proved to be a sub-optimal solution in past. It creates a

moral hazard among the farmers wherein they demand the waivers again & again thus, causing a burden on public exchequer. This leads to compromise on various fronts of infrastructure such as roads, highways, railways; social welfare activities of health, education etc.

This hampers the long term potential and capability of the future generation of policy makers.

Political aspect

Populism is a serious danger to democracy. It gives the ruling dispensation an unfair advantage over the opponents. It has been observed that ruling parties tend to announce such policies and programmes before the elections which gives them is sheer misuse of official authority to stifle

the election mandate.

For instance, the recent decision of Karnataka government to grant minority status to Lingayat community just before elections highlight the point.

Similarly, the recent decision of Chhattisgarh government to give free mobile phones in the wake of next year's assembly elections substantiate the case made.

The populist tendencies adversely affects and denigrates the Constitutional ideals of secularism. It ~~has~~ leads to religious polarisation, communalism, hatred and violence. This is against the basic tenets of peaceful co-existence in a democracy.

Political parties tend to bring communal agenda in their election

manifestoes. They seek patronage from candidates on the basis of caste, creed, religion thus, limiting the viewpoint of voters. For inst-
-ance, Inclusion of construction of Ram temple as a promise in election manifesto when the issue is sub-judice in the apex Court raises suspicion.

Another issue is of bogus claims made in the election manifesto which sound appealing but have little practical. It denigrates the integrity of the entire election process as imagined by our forefathers in the Constituent assembly. Rational and genuine issues become subservient to these false claims.

Causes

There are various causes of these populist tendencies. One is the

illiteracy and unawareness of the citizens. The poor and vulnerable are the worst affected as they feel cheated. This leads to development of anti-pathy against the states. many of such people take up arms against the state such as Naxals.

Another reason is the wide spread poverty and inequality in the society. It is rightly said that 'To a poor man, God will appear hungry in the form of food'. These people tend to think about ways to reduce their immediate misery rather than long term benefits. It highlights failure of state as a democratic institution.

Another reason is the organised voice of vested interests which force the government to undertake

such measures. For instance, after Green Revolution, the farmers have organised themselves into large organisations. They often force the government to announce favorable MSP for certain crops whereas other crops, which desperately need support are left ignored.

There is close proximity of religion with politics in India. It has its roots in historical aspect of British rule. The religious leaders participate in political process to influence a certain community, religion caste. This forces the politicians to oblige that community.

Measures taken:

In the recent time, governments have shown prudence and tried to avoid populist measures if they were bad in long run.

Railway budget used to be a highly populist measure used by successive governments to influence citizens by announcing new trains, ticket discounts when the existing capacity of railways needed overhaul. This has been done away with focusing on fiscal prudence and larger interest of nation.

Similarly, the judiciary has kept their hand on the pulse of the nation. In January 2017, they declared that seeking votes in the name of religion, caste, creed, sex is a corrupt practice under Section 123(3) of the Representation of People's Act, 1951 and can lead to debasement of candidates.

More citizen engagement in the functioning of government through the platforms of MyGov, Mann

hi baat has lead to building of
Citizen-government trust which
enables them to avoid populist
measure.

However, a lot needs to be done on
this front.

Way forward:

Election Commission needs to be
pro-active. They should seek
economic rationale behind the
promises made by political
parties in their election mani-
-festo. They should expand the
scope of SVEEP campaign and
educate the citizens about exer-
-sing their right judiciously.

All the political parties should
come together and build a
consensus to avoid such policies.
It is in their interest as well
as the interest of the nation.

The proposal of simultaneous - two phased elections should be deliberated as it will reduce such populist measures to a large extent.

Parliament should amend the Representation of Peoples Act, 1951 to bestow more powers on Election Commission to take action against erring officials and candidates.

Conclusion:

Democracy is an ideology based on rule of the people, for the people and by the people. Serious will and action is needed to curb such populist measure or else ~~democracy~~ ^{democracy} will become,

Rule : - For the people
- off the people.
- buy the people.

- ① 4th IR: Para ① Intro → 21st Century → Technology changing at blink of eye.
- 1st IR → Iron & steel
2nd IR → Steam
3rd IR → IT
4th IR → AI / Robotics / ML / Quantum Computing / Big data / Analytics / Internet of things.
- What?

How?

- ① Society → Households. ✓ Banking.
✓ Medical area, Education, Computing,
• Cost • Cost-effective. ✓
- ② Data collection → Policy identification.
✓ Policy planning → Improvement / corrective action.
- ③ Political : Data collection, Better campaign.
- ④ Commerce → Better targeting, delivering as per
needs of consumer.
- ⑤ Smart systems Cities, Power grids
Electric vehicles, Self-driving cars, River management
systems.
- ⑥ Defense → UAV's.
- ② Rise of Populism : Threat to
merit ← Dem (Populism).

