

"AI is a tool. How it gets deployed is our choice."

"Recently, Google's researchers have developed an AI-model capable of detecting early stage lung-cancer from screening tests, better than experienced human radiologists"

"More recently, a man accused of killing his roommate, asked Apple's AI voice-assistant Siri for advice on where to hide the dead body. And ~~Siri~~ Siri came up with options like swamps, mines, reservoirs, etc"

Both of the news excerpts suggest how AI (Artificial Intelligence) is a potential tool capable of transforming our lives. How we use it depends on us.

Artificial intelligence (A.I.) is simply a computer system that replicates or models human behaviours. It uses advanced computing methods and sophisticated algorithms to recognise patterns and train itself through vast amounts of data.

AI is simply a product of human civilization's ardent needs to build machines that are capable of replacing mundane and repetitive tasks of humans. Google CEO compared AI with the "discovery of fire" and the "invention of electricity". In the present age of information, AI has already started transforming our lives - from healthcare, economy, to smart cities and energy.

In the field of healthcare, AI has the potential to diagnose diseases from the electronic health records quickly and accurately. It can minimise or eliminate human errors.

in diagnosis and treatments. Customised medicine developed only for the particular patient's needs can be developed with AI.

It can immensely help in the field of agriculture through the use of precision-farming, weather predictions and tackling pest-infestations in crops by analysing satellite images. Automated supply-chain management, logistics and quality-assurance will not help in agriculture, but the manufacturing sector as well.

Banking and finance has already started using AI in fraud analytics, and improving customer experience through 24/7 chatbots. The field of energy, which is rapidly moving towards renewable forms, would use AI in the form of Smart-meters and intelligent grids.

The education sector would never be the same again. AI would improve quality

Himanshu Gupta (AIR27)
me/himanshugupta27

Himanshu Gupta (AIR27)

t.mehmankhug27

of education through "smart content" and 'interactive learning'. It has immense potential to improve access of education to the remotest possible areas.

The remote areas, however, would not remain "as remote" as earlier. AI has the capability to be used in intelligent transportation systems. Traffic flow optimisation and parking management are also possible through AI. Smart homes, Smart Public places, AI driven service delivery could all make "Smart Cities" and "smart villages" to come up.

Be it self-driven cars, or voice and gesture enabled systems, it is clear that we are at the cusp of an 'AI revolution' that is set to change the way we live our lives. The combined power of Blockchain, Industry 4.0, 3D-printing, Internet of Things (IoT) and 5G communication will

all take AI to grow exponentially in the years to come.

→ A few years ago, Google's AI research team 'Deepmind' developed a robot "AlphaGo" which defeated the 4-times world champion at the Ancient Chinese game "go". This was hailed as a milestone in AI. More recently, the same team developed "AlphaGo zero" which defeated the seemingly invincible "AlphaGo" by 100 - 0. This is the power of AI.

Russian President Vladimir Putin said that whoever would become leader in the AI sphere, would "rule the world". However, the race towards AI should not become blind to the mind-boggling challenges it brings for us.

Increasing automation and efficiency due to AI have started showing the trend of 'job losses'. WEF's "Future of Jobs" report

suggests that 54% of the workforce would need upskilling and reskilling by 2022 in order to sustain their jobs. And more than the jobs, ethical concerns are making us more anxious about AI's future.

One concern is about biaseness and discrimination by AI. ~~because~~ of the systems are trained by biased and narrow database, ~~as~~ their decision-making pattern also becomes biased. In 2016, USA's Automated Facial Recognition System for criminals was found discriminatory towards blacks.

Another ethical concern about AI is about how much can we trust AI on its decision-making abilities, especially in moral dilemmas.

The case of Siri helping the murderer is a fact of the case. Can the AI systems breach

our privacy or control our freedom of expression?

Recent case of Cambridge Analytica deploying AI

tools to influence political choices of people was brought to public criticism.

More than Breaching our rights, perhaps the greatest threat of AI is the existential threat that it poses to ~~the~~ our species. If we keep on improving our intelligent systems, it is said that a time may come when AI becomes smarter than we are. AI will begin to improve itself and this would result in a "superintelligence". — a technological "singularity".

These beliefs of 'singularity' are not only shown in science fiction movies, but various futurists and CEO's also support it. Stephen Hawking, Elon Musk, Bill Gates - all worry about the fact that AI can potentially end all humanity: It would become a new "superior race", — our own "Frankenstein".

Himanshu Gupta (AIR27)

time/himanshu27

Bill Gates says that although there is a reason to be cautious about AIs, but the good can outweigh the bad if managed properly. This poses a choice on us to decide ~~not~~ how to deploy the tool of AI.

Probably another challenge is that we do not know how to react with what emotions to this imminent future. A few people say that the only solution to the challenge is that we implant the superintelligent AI into our own mind-brains!

However, this is not a viable solution. Nobel laureate Joseph Stiglitz talks about two kinds of AI — one that replaces workers and other that helps in doing their jobs better; and we need to follow the latter. We as human beings, have to make sure

that whatever we try to make, it should be for human welfare and human relationships. AI in health and education can be used to help doctors listen more to the patients and teachers interact more with the students.

We should promote more STEM (Science, Technology, Engineering, Mathematics) skills with more creativity, critical thinking and lifelong learning among ourselves. The biasness in AI should be tackled with the help of more diversified data, to train itself.

Recently NITI Ayog has also come up with strategy to make India as an "AI garage" for the emerging and developing economies, approximately 40% of the world. This also shows how we could promote the distribution of benefits arising out of technology to everyone.

Himanshu Gupta (AIR27)

t.mechimanshu27

प्रश्न संख्या
(Question No.)

U.P.S.C.

इस भाग में कुछ
न लिखें
(Don't write anything
in this part)

#AI for All and #Responsible AI should become the buzzwords to ensure ~~a~~ a regulatory oversight at both national and international levels promoting for an AI that is inclusive, protects human rights, and ethical.

It is as though we stand before two doors, and AI is the key to both. We have a choice to make - either to use it to open the gateways for death and doom, or to unlock the door of life and prosperity.

Himanshu Gupta (AIR27)

t.me/himanshug27

A people that values its privileges above its principles, loses both.

An old folktale goes like this:

"Once upon a time, a farmer and his wife had a goose which used to lay one golden egg every day. The pair used to take great care of the goose and sell the egg in the market. They enjoyed a lavish lifestyle. But over a period of time, the pair became lazy, selfish and greedy. They stopped feeding the goose. Hoping to become rich all at once, they killed the goose. But the foolish pair realised that it was just like any other goose from inside."

Breaking away from the principles of love, hard-work, and contentment, the pair deprived themselves of the privilege that they had. "Kill not the goose that lays golden eggs" is an English proverb rooted in the story. It means that anyone, who is entitled to a privilege, tries to value it more than one's principles, eventually gets nothing at all! To understand this better, we need to understand about what are privileges, principles and how are they related.

t.me/himanshug27

Principles o

Privileges are the special entitlements or advantages enjoyed by a person or a group of people, by virtue of their position in society. Privileges are not rights, for rights are available to all human beings. Instead, they are some "special rights" enjoyed by a few, and recognised by the society. This is because the society expects the privileged to adhere to certain principles.

Principles are the foundations of one's beliefs, attitudes and behaviours. Valuing one's principles means valuing one's duties, responsibilities and being consistent with one's thought, speech and action. A principled man is a man of integrity. In the Indian context, a broader term used for principles or duties is "Dharma".

In the Mahabharata, Yudhishthira, the eldest of the five Pandavas, is called "Dharmakar". He stood for the principles

Himanshu Gupta (AIR27)

time/himanshu27

U.P.S.C.

of truthfulness, honesty, loyalty, familism, etc., regardless of the situation. Bheeshma, his grandfather, is known for his "Pratigya"; as an inviolable pledge of celibacy and loyalty to the throne. He could have easily enjoyed his privileges of being the king. But he valued his principles more than privileges. Be it Buddha or Mahavira, both left their privileges of crown prince, to follow & principles of spiritual knowledge and non-violence. These examples are also available in modern times.

Gandhiji's unfettering principles of Ahimsa and Satya, discarding the privileges of a well-to-do lawyer, is a great example. Baba Amte lived his whole life among tribals and wild animals, valuing the principles of compassion and empathy. But what happens when someone neglects her principles at the cost of her privileges?

The simple answer is downfall. There have been several cases of corruption, both in governments and private sector, where the

perpetrators involved used their privileges to gain more of them, and in the process, became blindfolded to their very principles. ~~for its~~ Rajat Gupta, who was once a man of inspiration for youth, ^{was} involved in insider trading case. Be it Satyam scandal of Ramalinga Raju or the 2G scam of A Raja, this not only shows the muddle of privileges over principles at the individual level, but at the organisation level as well.

One such organisation is also the media. Media holds a privileged position in a democracy. It questions the governments and contributes to shaping the public opinion. Today, media has an unprecedented wider reach, and influence, due to arrival of electronic forms like social media. However, it is facing a huge crisis of credibility today. It has largely shunned the high standards of ethical journalism in the mad race for TRPs and profits. It is plagued by sensationalism, fake news, paid news, political biasness, etc.

* As someone rightly said, "Journalists might be feared by individuals today, but not respected by the masses". As the media shunned its principles, it has lost the moral power and privileges of being a real instrument of democracy. This is more so, in the largest democracy of the world - India.

The story of India is the testimony of how principles determine the destiny of its people. The two biggest privileges, we as citizens of India, take as granted are - independence and democracy. However, these privileges were earned through the 'principles' that inspired our independence struggle. Principles of nationalism, giving above all differences of caste, creed, religion, region, and Gandhiji's principles of truth and non-violence, all required great sacrifices. Out of these, emerged the privilege for us to be born in an independent democratic nation.

In this tough and exciting journey since Independence, what has held us together even through the darkest hours of adversities, is the Constitutional principles, given to us by

Himanshu Gupta (AIR27)

Time/HimanshuGupta27

our founding fathers. We have survived through the grim realities of extreme poverty, widespread illiteracy, food insecurity, hostile neighbours, waves of communalism, naxalism, terrorism and even demands of secession. The constitutional principles are the real source and protectors of privileges we ~~are~~ enjoy today. If we just keep enjoying the privileges provided by the constitution, and not live by its principles, it won't be long we lose both.

If we as a people, just keep enjoying our fundamental rights, but not value the principles and fundamental duties ~~to~~ to protect its ideals, safeguard the resources and preserve our culture, then democracy will eventually become meaningless.

If we as people, only want to enjoy privilege of economic growth and public infrastructure, but not value the principle of honestly paying the taxes, the economy will cease to grow at the desired pace.

If we as people, ^{may} want to enjoy privilege of living in safe and secure society based on rule of law, but keep breaking rules when it suits our personal interests, eventually the rule

Himanshu Gupta (AIR27)

t.me/himanshug27

of law will cease to exist at all.

Hence, it is upon us, as a people, to value these principles if we want our future generations to enjoy the privileges we inherited from our forefathers. This is true not only for us as a nation, but also for us as a "global village".

The Upanishadic notion of "Vasudhaiva Kutumbakam" (the world is one family) is more true than ever before, in the era of globalisation. Increasing interconnectedness and technology has given us tremendous power at the click of a button. The total nuclear weapons on earth are sufficient to destroy it many times over. Albert Einstein once said "I know not with what weapons World War III would be fought, but I know that World War IV would be fought with sticks and stones". Not only the threat of nuclear weapons, but other common global threats of climate change, terrorism, cybercrime, global warming, etc. threaten us all.

We, as people of the world, have a shared destiny. And we need common principles to value and live by, if we want to coexist and prosper. These principles exist in the form of UN Charters, International treaties, commonly determined goals like Sustainable Development Goals (SDGs), principles of "mutual coexistence", and "common but differentiated responsibilities", etc. When these principles are discarded for protecting narrow self interests and privileges by a few, the entire world suffers.

For instance, ~~the USA's withdrawal from~~ the Paris Agreement on Climate Change, UNESCO, and UN Global Compact on migration is a huge setback to the world efforts to save the planet. We, as a people, have the privilege of inhabiting the only planet known to support life. We must realise that if we don't value the principles of cooperation today, then we cannot preserve this privilege for our future generations.

Hence, it is high time that the whole world remembers the wise saying "A people who values privileges over principles, soon loses both". Adhering to the principles of one's duty, and doing it honestly and with integrity is the only way one enjoys the privileges from the society like trust, credibility, goodwill. Srimadbhagwad-Gita talks about Nishkamakarma-yoga" or the "action without passion for results". It means one should do one's duty according one's Dharma or principles, without bothering about the results or fruits or the privileges. Developing a high emotional intelligence among the individuals, society, organisations and nations would help to live by one's principles. We have the choice to use the gift our life to make the world a better place. As is wisely said

"You make the world a better place by making yourself a better person".

Vision for India in 2100

The date is 15th August 2100. India is celebrating its golden jubilee of inauguration of its Man's colony. The Prime Minister's speech at the Red Fort echoes at homes of Indians at the Earth and the Moon:

"It was the vision of our forefathers that India not only would emerge as a World Power, but a World leader. Today, we can very well say that their vision has been realised. We have not only been able to sustain ourselves through the odds of time, but also been able to preserve the nature and sustain the world as a whole. Corruption, terrorism, separation, enmity, climate change, cyber threats, poverty and inequalities are the things of the past. It was not only India's tryst with destiny, but also the values of its people, that led it be once again called as "the Golden Bird".

Himanshu Gupta (AIR27)

t.me/himanshug27

प्रश्न संख्या
(Question No.)

U.P.S.C.

न लिखें
(Don't write anything
in this part)

The above scenario may not be an unimaginable fiction in future. Just as the past, when India won independence in 1947, the Western press especially refused to accept that India could emerge as a successful democracy. To them, India was a "land of snakecharmers, where illiteracy cohabited with poverty and hunger". ~~But~~ Who could have imagined that the democracy, ideals and aspirations of the people would continue to flourish still date? So, the idea of India as the "Jagad-guru" (World leader) and "Sarvashrestha" the stroke of the twenty-second century.

It may be utopian to imagine that the constitutional ideals of LIBERTY, EQUALITY, JUSTICE, FRATERNITY, etc. would be fully realised in India. But it is highly realistic that India would be closer than ever to these ideals in space and time.

Himanshu Gupta (AIR27)
Answer 27

It may be utopian to imagine that we would achieve complete absolute equality - among the different genders, among the rich and the poor, among the rural and urban. But it is highly realistic to imagine that not only women, but other genders (LGBTQIA+), are equal in status and opportunity with men. We can imagine quite plausibly that there would be no need of reservations or affirmative action by the state for any caste, class, gender or race. In ^{the} India of 2050, every citizen will be empowered enough and will have the capability to realise their potentialities.

A thriving village economy and a booming urban India would not be antithetical but would complement each other. It would add to the harmony between tradition and modernity. In fact, the concept of 'modernity' itself would be redefined in terms

of the "Indian model" of progress - where there is unity without uniformity, tolerance, religious pluralism and harmony as well as sustainable development.

Indian economy would not only be at the top in terms of GDP or growth, but would also lead in new indices of Gross Happiness Index, Green GDP, etc. With evergreen revolutions in agriculture, technological advancements in manufacturing and services, and unprecedented ideas and innovations in the quaternary sector, India would be a nation to be aspired.

India - From a nation which ~~imports~~ spends billions of dollars in importing crude oil today, India would become a "net energy exporter" not only to the countries of the Earth, but ^{also} the colonies of Moon and Mars. This energy would be completely

renewable and environment friendly - primarily driven from solar energy.

The concepts of 'climate change', 'global warming', "pollution", would become a forgotten past. India would lead the world to a future where there is a complete equilibrium among the 5 P's - People, Planet, Prosperity, Partnership, and Peace.

India would not be a nation that would shine as a lone star in the night sky of dark clouds. As a global responsible leader, it will take the world along to cooperate and collaborate in the human progress. Its ~~hostile~~ neighbours would not be hostile against it, but admire its leadership. The borders would not have fences anymore, allowing free flow of people, ideas and cultures. Reformed international institutions like the United Nations, the WTO, etc. would ensure a

U.P.S.C.

इस पाण में कुछ
न लिखें
(Don't write anything
in this part)

deliberative democracy among all nations — which ~~India~~ would fulfill India's value of "Vasudhaiva Kutumbakam" (the World is one family).

Another traditional value of India says "Tamaso Ma Jyotirgamaya" — As a "knowledge society", the era of darkness will be transformed to enlighten every corner of our nation. Ideas and innovations would be the foundations of India's technological prowess.

Imagining India's technological progress in the year 2100 is beyond thought. Who could have imagined, a hundred years ago, that there would be device which would let you meet a friend miles away, just at the touch of a screen? With radical and exponential technological advancements, we can even say that self-driven cars, augmented

reality, voice and gesture enabled devices, blockchain technology, 5D drives, 3D printing, and many more would become obsolete! We may be able to find cure of several diseases which might increase the life expectancy of humans.

But with all this progress, ^{India} would not forget its past - its culture, its family system. People would not only become physically closer, but also remain socially and mentally close. Family would still remain the first school of a child and her parents would still be her first teachers. Our traditions and cultures - like arts, dances, festivals, and religious practices would remain as our strength, our identity. India's sportsmen would bring laurels to our nation not only in traditional Indian sports, but also in the Olympics and other international events.

time/himanshu 27

Gandhi in his "India of my dreams", envisioned "Ramrajya" in India, where trusteeship would be the economic model, circular administration ~~as~~ village-based local governance and 'Sarvodaya' would be the ~~concept~~ model of social justice. A nation where if everyone does one's duty faithfully, there would be complete harmony. But doesn't it look too utopian and idealistic? If we really somehow achieve this, does it mean there will be no needs of anymore growth? Will all the engines of economic growth stop at 2100? The only thing permanent in this universe is change. If we can envision India at 2100, someone can very well do it for 2200. There is no limit to progress in this eternal time. Presently, India is at the cusp of a demographic bulge, the economy is in a 'sweet spot',

the democratic political structure is stable with an action-oriented leadership. India is the fastest growing major economy in the world. India pitches for ~~sustainable~~ sustainable development through SDGs, INDGs, etc. at the global level. It has already become a leader of the third-world, and its government is inclined towards 'inclusive growth', moving towards a 'New India' by 2022 itself. So what stops us to aim towards these so-called 'utopian' visions? ~~At~~

Michelangelo said "The greatest danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it". Who knows this utopia may not remain as utopia one day? Only time can tell.