

Artificial Intelligence: Its merits and Demerits

Keep practicing on different themes/topics

1. Introduction
 - a. Unfolding the concept of "artificial intelligence"
 - b. Role of artificial intelligence in modernizing the world.
 - c. Thesis Statement.

2. Merits of Artificial Intelligence
 - a. Revolutionizing the field of medicine
 - i. Preventing heart attacks and stroke
 - ii. Self-health monitoring

 - b. Augmenting the economy
 - i. The study published in journal by European Parliament

 - c. Unprecedented growth of small businesses.

 - d. Upgrading the agricultural sector
 - i. Using agricultural robots

ii) Formation of an application, "Plantix"

e. Advancement in transportation ~~ind~~ sector

i) Reducing traffic congestion

ii) Construction of automated trucks and vehicles

f. Revolutionary changes in space industry

g. Reducing the impacts of climate change

h. Artificial intelligence, creating fantasies in the entertainment industry

3. Demerits of Artificial Intelligence

a. Privacy intrusion and exploitation of personal data

b. Increase in ^{cyber-}crimes and terrorism

c. Overpowering human beings

d. Loss of jobs due to replacement of human beings with AI technology

e. AI as a silent killer of human ~~uses~~

4. Conclusion.

Highlight few measures to control it's negative side

Essay:

Stephen Hawking, an English Physist and AI professional once said,
"Intelligence is the ability to adapt to change!"

Intelligence is proven when any person has capability of adaptation, modernization and advancement. From the era of hunting and gathering to the ~~fourth~~ ^{fourth} industrial revolution, human beings have adapted significantly. The era of artificial intelligence has already started. "Artificial Intelligence" also known as machine intelligence or AI, is a scientific technological innovation that uses computers to store data, analyze and respond to machines and robotics for certain commands based on stored data. It has intruded in every field of human ~~playing~~ ^{playing} role from eye opening in the morning till dark nights, giving enormous facilities and

benefit. It has revolutionized every segment of human life. The field of medicine has upgraded with the use of AI from electronic health monitoring to robotic surgery. Advancements in agricultural field are evident with modern technology for sowing and harvesting and soil monitoring, robust economic growth, evolution of small businesses and their progress are due to progress in the field of artificial intelligence (AI). Another merit is apparent in transportation sector, with efficient control of traffic congestion and construction of automatic vehicles. The disastrous impacts of climate change ~~are~~ have possibly reduced to save human lives and lower the economic losses. by the efficient use of ~~AI~~ Artificial intelligence. Additionally entertainment industry has evolved with creation of sci-fi fantasies. Along with the splendid rewards, AI has also brought demerits. The biggest fear is the idea that AI will overrule human beings in future scenarios. It has already ~~exptor~~ made possible invasion into private data

and exploitation of personalized information. Through analysis of data, manipulation of millions of people is ~~made~~ **has become** easier ~~th~~ with use of AI. Increase in cybercrimes, terrorism, gender-based violence are prevalent and common in today's world. AI is slowly replacing human beings with loss of jobs and negative effects on critical thinking of human beings.

To begin with, AI has revolutionized field of medicine as it continuously saves patients. Through continuous health monitoring with the help of electronic gadgets such as **smart watches, wrist bands, walking bands etc** routine monitoring of calories, physical activity, blood pressure is easier. It analyzes the stored data and predicts the chances of heart attack and stroke. AI has helped medical professionals in analyzing reports and earlier diagnosis which plays significant role in efficient treatment and saving ~~lots~~ ^{lives} of humans. Another peek of AI in the field of medicine is **robotic**

suzegey, treatment of brain cancer with robotic frequency radiations without giving incisions in brain, and palliative therapies to ease lives of many patients. Robotic suzegeries are performed with minimal invasion that reduce the sufferings of patients post-operation. Another benefit is computer chasting system and electronic health record used in hospitals to store past medical history, clinical data, previous treatments, reports, vital signs and history of immunization etc. the healthcare professionals work efficiently with the use of AI with maximum professioney and minimal erors. Briefly, the use of AI has revolutionized the approach towards field of medicine.

Secondly, the use of artificial intelligence and its advancement has brought robust global economic growth. AI has flourished businesses by analyzing data, making prediction, creating effective workflow and producing maximum results and profits. A study

published in journal by European parliament, Accenture forecast, that by 2035, the global economy will get doubled with the use of autonomous workforce created by AI. By accomplishing labour work through virtual workforce and research innovations, these will be fostering of economy of the world. The economy of any state depends on the technological advancements ~~that~~ to compete in the modern world. Through utilization of artificial intelligence in an effective way, it has already accelerated economic growth at an unprecedented level.

Thirdly, AI has also proven beneficial for innovation and progress of small businesses. The modern computerized world has produced efficient entrepreneurs, who have ability of running independent businesses. The creation of chatbots, that has initiated communication with customer, producing the trust in products. Feedback mechanisms.

It have been initiated with the use of AI. The automatic feedback by the customers, then improvements made on the basis of customer feedback, has made many small businesses successful. ^{Further,} The AI equipped tools have created **Customer-Relationship management (CRM)**, that gather information through ~~the~~ phone, email and social media platforms. It gathers interests' information of the customer and generate ads and recommendations on the basis of certain interests. In this ways, businesses make remarkable progress. Concluding, AI has brought revolution in business sector with remarkable progress.

Moreover, the benefits of AI in agriculture sector are evident from technological advancements, modern techniques used for harvesting and irrigation system. The modern countries or advanced countries are already using **agricultural robots,**

these robots work at fast rate and in efficient manner as compared to human beings. The amount of work done by agricultural robots is incomparable. Alongwith physical workforce, the fertility, and nutritional value of soil is detected that helps production of maximum agricultural production. A Berlin based tech initiative PEAT, has developed an application "Plantix" that detect potential defects and nutritional value of soil. The proactive management of defects and nutrition produces maximum outputs. Hence, AI utilization in the agricultural field has given unprecedented results with maximum yield per acre.

Additionally, advancement in the transportation sector is also due to AI. Global positioning system (GPS) developed by sending satellites in space. GPS monitors, analyze and show roads, destinations, buildings and current location etc. It is due to AI that

person can travel easily in any part of the world. Likewise, the use of maps, AI also predicts heavy traffics, congestions, blocked roads, alternative pathways. It has significantly reduced traffic congestions through sensors and cameras ~~is~~ embedded on roads. According to McKinsey report, global transportation of 65% is through truck system. The maximum benefits of AI can be reaped through modernization of truck system. Forbes, An American magazine, opines that American logistics are considering the idea of automated truck system and other vehicles for transportation. This will reduce burden of transportation of human beings and run the system effectively. Therefore, merits of artificial intelligence in transportation sector are undeniable.

Furthermore, AI has made significant advancement in space industry as well. AI and robots deployed to monitor environmental

hazards and disaster prediction. The satellites sent with AI robotics are involved in 24/7 observation, detecting environmental hazards, space hazards, and predict space dangers. This helps proactive movement of people from unsafe and risky places. With the use of AI robotics, climate change predictions are ~~and~~ concluded then people construct building, sewages and roads for future safety.

Similarly, AI revolutions reduce the impacts of climate change. Weather forecasting, predictions of heavy monsoon, tornadoes, floods, disasters, ~~heavily~~ contribute significantly in reducing casualties and heavy economic losses. Recently, AI has helped in detection of deforestation, which play major role in climate change. With the use of satellite imagery or aerial imagery deforestation is detected where forests used to stand in past. This helps policymakers in combating the

menace of climate change. Recent incident of disastrous tornado in America could have killed millions of people. Thanks to AI that helped in prediction of tornado. People were moved, houses were evacuated towards safer places. This proves how artificial intelligence has significantly benefited with reduction in impacts of climate change.

In addition to this, the entertainment industry is also benefitting with creation of Sci-Fi Fantasy movies with **Avengers, Transformers, The Star Wars, Terminator, animated movies etc.** Along with movies and dramas, gaming industry has revolutionized with **non-player character (NPC)**, that fights, kills, predict moves of rival, retreat and respond like a human. This is how AI has transformed video games more interesting and challenging.

However, it is stated that with the perks, comes the ~~perils~~ ^{perils}. Similarly, AI has demerits as well. The negative use of AI ~~has~~ is becoming common with intrusion into the privacy, exploitation of personal information. With the help of AI, deep fake videos, doctored clips, pornographic content are created especially targeting girls, politicians, journalists to discourage them from activism. A report by Cambridge Analytica that during US-elections 2016 (Donald Trump) 50 million users of Facebook were exploited by use of their private information. Similarly, during Brexit, people were manipulated with the use of social media. The negative use of AI can produce unexpected results and damages. Defamation acts, spread of fake news through use of social media, cybercrimes and gender-based violence are unavoidable demerits. Hence, AI poses serious challenge to privacy of human and personal identification information.

Another significant demerit of AI is AI-automated terrorism, with the use of automated drones, use of robotics for terrorist attacks, terrorism and extremism has prevailed at first place. Terrorist organizations integrated at international level making it difficult to combat the nefarious acts like delivery of diseases using nano robots, delivery of viruses to softwares, spread of extremism using anonymous sites etc can produce vast damages in short time. The law enforcement agencies and defence organization will have to adjust and develop potential to cope with such disastrous acts.

Likewise, AI has posed major threat of overpowering of human beings. This is evident from the fact that previously when there were no calculators, humans used to solve complex arithmetics and calculations. The calculators have reduced analytical

problem-solving capability of human beings significantly. Slowly, ~~the~~ AI-driven machines and robots are reducing critical thinking and analytical ability of human beings. With the ChatGPT, students and office workers have reduced making efforts in data ~~analy~~ analyzing, and writing practices. In future scenarios, AI will completely overtake human abilities and produce incapacities in human affairs. It seems that all the human jobs will become automated in next 120 years. In this scenario, it is likely that AI will replace human beings.

Similarly, majority of manual work done by human beings is now going to be replaced by ~~the~~ AI-driven robots. In agricultural harvesting, irrigation, construction of roads, data analysis, AI is replacing humans reducing job opportunities. This is already happening in industrial sector and e-commerce industry, the

Intelligence based systems and chatbots have revolutionized these sectors creating mass unemployment. In near future, there is risk of take over at large scale workforce and mass unemployment creating social unrest and disruption of global economy.

Lastly, AI is a silent killer of human careers. Slowly, AI is increasing dependency of humans on machine intelligence with reduction in freedom and survival capacity of human beings. Humans used to write comprehensive essays, complex calculations, translation of multiple languages, etc. In no distant future, AI will completely replace human workforce making the world heaven for robotics and hell for human beings.

Concluding, artificial intelligence has significant merits ~~and~~ but ~~has~~ large scale demerits as well. AI has revolutionized

field of medicine, helping ^{both} healthcare professionals and patients in personalized health monitoring, early diagnosis and efficient treatment. In addition to this, AI has augmented global economy, transformed transportation sector and agricultural sector with huge-scale outcomes and minor problems. With the use of AI, disastrous impacts of climate change are reduced at unprecedented level. Along with remarkable merits, AI has demerits as well. Exploitation of personalized information, disruption of privacy, manipulation of millions of people with the use of social media have produced significant damages. There is an increase in menace of terrorism and cyber-crimes, and gender based violence as well. Similarly, AI is replacing human beings producing mass unemployment, and replacement of workforce. The right use of AI with balanced approach, use of AI robotics in need based approach with utilization of human critical approach can produce better results and profitable outcomes.