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Q NO # 03Artificial Intelligence: its promise and perilsOutline:

## 1. Introduction

## Thesis statement:

Artificial Intelligence (AI) is a growing field which has a lot of benefits and applications. However, owing to complex associated technology, it is not free from few risks which are eliminated by regulating and controlling AI through pragmatic measures.

## 2. Understanding of Artificial Intelligence

## 3. Prospects and Promises of AI

- a) Improve efficiency of government through e-governance
- b) Security of data and information through biometrics
- c) Robotic process of automation
- d) Enhance possibility of remote learning through AI
- e) Healthcare industry using AI to assist patients
- f) Transportation using AI to develop effective navigation systems

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g) Technological transformation of agriculture through AI to increase yields

h) Use of AI in space missions

#### 4. Rising threats and Perils of AI

a) Deployment of autonomous weapons through AI drone

b) Fear of stealing jobs by robots

c) Preponderance in future economy

d) Fear of overpowering human beings

e) Exploitation of information gathered about individuals

f) Simulating bias and discrimination on the basis of gender

g) Maligning image of individuals as well as state institutions

#### 5. Way-forwards to counter risks posed by AI

a) Legislations to regulate use of AI

b) Monitoring and controlling AI by devising state-controlled data centres

c) Cooperation among sub-giant by avoiding greed in AI research

#### 6. Conclusion

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18th century Industrial Revolution changed lives of people through improved working environment. The 21st century Technological Revolution - AI Revolution - has brought comfort and ease in doing business and work. AI has transformed the lives of people through its growing use in every field. It has a large number of benefits which are: security of data, efficiency in governance, use of robots in industry and agriculture, assisting health and education industry, and transforming transportation through using various AI technology. Despite innumerable benefits and promise, AI is not free from risks. The perils of AI are such as deployment and installation of autonomous weapons, fear of job loss, fear of overpowering human beings, preponderance in future economy, exploitation of information, simulating bias and discrimination on the basis of gender and maligning image of individuals as well as state institutions. However, these threats can be countered at large through taking various pragmatic measures including legislation to regulate AI, monitoring AI by

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deriving state-controlled data ventures, and cooperation among technological avoiding greed in AI research and applications. Therefore, AI is a glowing field which has a lot of uses and applications. However, owing to computer associated technology, it is not free from few risks and perils which are eliminated by regulating and controlling AI through pragmatic measures.

AI has the potential to help human lives by creating more meaningful and ease lives devoid of hard labours. The term AI was first coined at Dartmouth College in 1956 by a scientist called Marvin Minsky. The purpose of AI is to aid human capabilities advancing in decision with far-reaching consequences. AI works on Artificial Neural Networks (ANN) which is similar to principle of Human Neural cells by recognising the patterns in speech, data texts or visual images. Thus, AI is an efficient data processing systems at its core, there is a lot of optimisation in every field. AI truly has the promise to transform lives of human beings with a wide range of possible cases.

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To begin with various prospects and promises of AI, one of them is the improvement will be ensured in the governance.

AI can egg on governance through e-governance. The management of large is possible with help of AI. AI will facilitate it. It will gather myriad of data into a data centre which will be helpful in taking decisions at appropriate time. With the installation of AI-backed devices in government organisations, it will help public in dealing them automatically.

For example, appointment for any government organisation is done automatically by AI-based technology which will thus help people to avoid rushing on daily basis.

In addition to AI, use of AI in governance, data and information can be secured through biometrics. Biometric is used to identify of the person through fingerprint mapping, facial expression, voice recognition and retina scanner. That latest technology in AI is used to protect important information and they are also present in android mobile phones. It will

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people to protect their data through the use of fingerprints. For this best use of AI, these multiple authentication is required to identify any thing.

Besides security of data and information, robotic process of automation is at the core of AI. Robots work on AI-based technology which are usually automatic. Although robots do not have biology like humans, yet they are copying humans in their thinking strategies. They can do a lot of jobs as compared to humans and can do the same work automatically with accuracy while supporting various commercial sectors. Therefore with help of AI-based robot technology working environment has been better in industry.

Another promises of AI is in facilitation of healthcare industry. AI helps in health industry several ways. For example, it helps in discovering drugs, diagnosing ailments, and using virtual nursing assists to monitor patients. ~~AI~~ Additionally, surgeries are also been done through AI. Now remote surgeries are also possible with help of AI based technology.

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This fact can be judged from the fact that AI is assisting the management of the current global health crisis through its countless applications for remote medical consultations and contact tracing applications used by the governments around the world.

Along with promises in health care, AI has enhanced the possibility of remote learning. With digitised textbooks and hybrid teaching methods, student-faculty interaction is being done and harnessed through online applications. By expanding access to smart phones for low-income children technology can enable learning for students who cannot attend schools on campus. Thus AI-backed online education has reduced the drop-out rates, particularly for girls in middle schools in Pakistan and other developing countries.

In addition with various social applications of AI, AI also develops effective navigation systems which has transformed the public transportation in mega cities. Many GPS-based driving and riding facilitation applications are used

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in many cities. For example, ride-sharing applications - Uber, Lyft - are widely used. Uber ~~also~~ elevated is an urban aviation ride-sharing product that will whisk people across cities. Dubai is testing the Autonomous Air Taxi which may be the world's first self-flying taxi services. Thus, these are various prospects of AI in transportation.

Despite various prospects and promises of AI, it has also several threats and risks. Many autonomous weapons through using AI drone technology, have been deployed. Drones are stealing the march on the future war. For example, in Nagorno-Karabagh conflict, the Lethal Autonomous Weapons (LAW) won the war. Military spending on AWS and AIU is projected to reach \$66bn and \$18bn respectively by 2025. Thus, these instruments point to a rapid proliferation of these weapons with a concurrent increased military usefulness.



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The rising threats and risks posed by AI can be dealt with many ways. One of them is ~~idea~~ legislating on the use of AI to regulate it. States must ensure regulation of AI. otherwise AI will be so powerful that it can endanger lives of people. For the regulation, steps that have been taken by various major global countries are laudable. For example, In May 2023, Global leaders, in G-7 Summit, launched Hiroshima AI Process, a forum devoted to harmonising AI governance. There is further needs of so-called steps to regulate AI.

In addition to regulation of AI, there is dire need of establishing state-controlled data centres so that data and information of an individual can be protected at local level. If the data can be protected out of state ~~into~~ reach, there are chances of misuse of data. Thus, governments should focus on these so-called measures to protect data from misuse.

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All in all, AI involves transforming some of the capabilities which are traditionally associated with humans to machines in a satisfactory manner. These human capabilities which are mostly promise of AI currently includes decision-making, visual perception, speech recognition, natural language process and communication, and many more. The risks of AI can be dealt by monitoring, controlling, handling and regulating AI properly. It is underlying fact that the promises of AI are greater than of its threats. But the need is to use this highly advanced technology in proper manner so that it will not rule human, but human should rule Artificial Intelligence related technologies.

(Note: owing to late receiving of paper due to website issue, I could not complete, so consider accordingly.)  
(Thank you)