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Q) Why climate change has become a global issue? Please analyse it in the context of the hidden threats internally the measures taken to curb it at the international level.

Answers:

-Outline

1) Introduction

Thesis Statement:

Change in weather patterns over a long period of time is called climate change.

It is the biggest problem of humanity in the 21st century caused by enhanced greenhouse effect which is result of anthropogenic activities. It is a global problem with devastating impacts for everybody. Although some initiatives have been taken it requires greater cooperation and measures.

2) Understanding global warming which causes climate change

3) Prime movers of climate change

- a) Hype in burning of fossil fuels.
- b) mass industrial production
- c) Large scale deforestation
- d) less tilt over renewable energy
- e) Modern and technologically influenced life style
- f) Rising Population

4) Climate Change: A global issue affecting everyone. Major threats

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- area life style
(f) Rising Population
4) Climate Change: A global issue affecting everyone. Major threats

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4.1) Ramifications at present

- Rising temperature
- Frequent and intensified storms
- Longer and stronger heatwaves
- Altered natural cycles and weather patterns including heavy rainfall and floods
- Melting ice-masses and glaciers.

4.2) Future Annihilations

- Huge level of submersion of islands
- Population displacement (Climate Migration)
- Mass extinction of flora and fauna
- Deaths of resources
- Inter-State and Intra-State Conflicts.

5 International efforts made to deal with the issue

- Rio Conference 1992 Brazil
- United Nations Framework Convention on Climate Change (UNFCCC)
- Kyoto Protocol 1997
- Paris agreement 2018
- The 2019 Climate Action Summit
- Conference of Parties (COP-28)

6 measures needed to ensure environmental harmony

- Pragmatic approach in usage of fossil-fuels
- Innovation in transportation and expansion of public transport
- Fuller exploitation of renewable energy sources
- Maximizing energy efficiency and minimizing energy consumption
- Population control
- Spreading climate awareness
- Regional and international cooperation

7 Conclusion

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Essay

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"The era of global warming has ended"

Essay

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"The era of global warming has ended. The era of global boiling has arrived." So announced United Nations general Antonio Guterres as it was confirmed by the world meteorological organization (WMO) that July 2023 had become the hottest month in the past 120,000 years. This fact signifies how severe the issue of climate change has become in the present era. Basically climate change is the variations in the global patterns climate patterns caused by the global warming (enhanced greenhouse effect). The normal greenhouse effect is the significant natural phenomenon, but enhanced greenhouse is mainly deadly phenomenon caused by the anthropogenic causes mainly. The greater usage of fossil fuels and mass industrial production are most potent reasons. Moreover, large scale deforestation and less tilt over renewable energy are also responsible factors for this anomaly. Some other causes include modern and technologically influenced life-style and the most importantly rising population. Climate change is a global issue because its ramifications know no boundaries. At present, the world is facing impacts like rising temperature, frequent and stronger storms and longer and stronger heatwaves. Furthermore altered natural cycle which brings heavy rainfall and melting

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of ice-masses and glaciers are also the effects of climate change. This is basically not without future threats which will be more deadly like: Submersion of islands, climate migration and mass extinction of flora and fauna. In addition, it will also

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of ice-masses and glaciers are also the effects of climate change. This is basically not without future threats which will be more deadly life: Submersion of islands, climate migration and mass extinction of flora and fauna. In addition, it will also lead to the death of resources which will initiate inter-state and intra-state conflicts. Coming to the measures which have been taken to curb the issue are: Rio Conference, UNFCCC and Kyoto Protocol. Coming to more recent initiatives it includes Paris Agreement, Climate Action Summit and Conference of Parties. Unfortunately, these initiatives are not enough to prevent the world from coming climate crisis. The world needs to take immediate measures in the form of check on the greater usage of fossil fuels, innovation in transportation and usage of public transport. Moreover, fullest exploitation of renewable energy, energy consumption and efficiency, and population control are more steps to ensure better climate. Climate awareness and greater regional and international cooperation are also some keys to success. Change in weather pattern over a long period of time is called Climate Change. It is the biggest problem of humanity in the 21st century caused by enhanced greenhouse effect which is the result of anthropogenic activities.

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It is a global problem with devastating impacts for every body. Although some initiatives have been taken, it requires greater cooperation and more measures to be taken.

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It is a global problem with devastating impacts for everybody. Although some initiatives have been taken, it requires greater cooperation and more measures to be taken.

Climate Change is basically a change in weather patterns over a long period, but to understand this variation it is important to have knowledge about atmospheric concentrations, enhanced greenhouse effect and global warming. Since the atmosphere is composite of 78% nitrogen, 21% oxygen, 0.03% carbon dioxide and six other minor gases in negligible quantities. This constant composition is being disturbed by the increased concentration of carbon dioxide and the presence of unknown gas to atmosphere methane and fluorinated gases. These gases are known as greenhouse gases and the flux in atmospheric concentration is responsible for the widely known enhanced greenhouse effect. Although the normal greenhouse effect is essential for life on the earth, enhanced greenhouse effect is making the life more difficult. Basically, in normal greenhouse effect, the earth absorbs 70% of Sun's radiations and reflect back 30% into upper atmosphere, but in enhanced greenhouse effect the extra concentration of CO_2 and CH_4 traps more radiations than usual and do not allow that extra radiations to reflect back into atmosphere

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as it happens in normal process, but instead of that they scatter these extra radiations towards the earth's surface. In this way they act as the blanket around the earth and

as it happens in normal process, but instead of that they scatter these extra radiations towards the earth's surface. In this way they act as the blanket around the earth and give rise to another issue/process called global warming. Basically Global warming is the increase in the global temperature. The normal greenhouse effect keeps the temperature of the earth at 15°C which is normal for the life on the globe. However, the enhanced greenhouse is rising the temperature to the unbearable level in the form of global warming. Global warming is the starting point of climate change because rising temperature is disturbing the weather patterns of the globe.

Coming to the reasons behind the rising temperature and in turn climate change, according to National Aeronautics and Space Administration these natural causes are still in play today but their influence is too small to explain the rapid warming. So mainly the anthropogenic causes are at the root of this growing crisis.

The first and most important cause is the huge burning of fossil fuels. Fossil fuels are the remains of animals and plants which after deposition got decomposed in thousand years time under high temperature and pressure in the earth's interior parts

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The decomposition takes place in absence of oxygen and water remains to less much of the oxygen and hydrogen they have. Eventually they become rich in carbon which is the greenhouse gas responsible for global warming. In spite of this fact fossil fuels are at present in the modern world. According to Intergovernmental Panel on Climate Change, the concentration

The decomposition takes place in absence of oxygen and make remains to less much of the oxygen and hydrogen they have. Eventually they become rich in carbon which is the greenhouse gas responsible for global warming. In spite of this fact fossil fuels are at precession in this modern world. According to Intergovernmental panel on Climate Change, the concentration of carbon dioxide and methane, an unknown gas in the atmosphere, has increased 40% and 150% respectively since the industrial revolution. In same usage of fossil fuels release the large amount of greenhouse gases which trap the extra radiations and lead towards the climate change.

Secondly, the mass industrial production is also one of the major reasons behind the climate change. Changes in agricultural practices, urbanisation and a new reliance on fossil fuels drove the industrial revolution. This industrialization has significantly added the greenhouse gases in the atmosphere.

Third important cause is the deforestation. Trees are considered as the lungs of the earth, for they consume carbon dioxide from the earth's atmosphere and make the earth with living during the process of photosynthesis. Trees purify air, filter water, prevent erosion and act as buffer against climate change. Unfortunately, the process of deforestation aimed at the cutting of

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trees owing to those purposes: industrialization, urbanization and mining. According to the research of Environmental network half of the world's forests have been destroyed over 10,000 years, the majority in just the last 80 years. It has been observed that the forest cover of Amazon forests, Congo forest

change. Unfortunately, our policy of deforestation aimed at the cutting of

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less owing to these purposes: industrialization, urbanization and mining. According to the research of Environmental network half of the world's forests have been destroyed over 10,000 years, the majority in just the last 80 years. It has been observed that the forest cover of Amazon forests, Congo forest and Indonesian and Malaysian forests has been reducing. So humanity is depriving the earth of vital benefits of trees and there is going to be a dramatic reduction in the forest cover which will lead to huge attrition in the amount of consumption of CO₂ from atmosphere in turn cause global warming.

Fourthly, 80% (approx) of the world's energy is coming from fossil fuels, this shows how less the world is tilted over the usage of renewable energy resources: wind power, solar energy and geothermal power. Basically renewable energy resources are safe to use as they are carbon free and environmental friendly. Although the initial cost of these projects is comparatively high, this should be bears to protect the environment. The overall tilt over renewable energy is very small which implied to resort to fossil fuels causing climate change.

Fifthly, besides aforesaid causes

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the modern and technologically influenced life style is also one sort of this issue. The presence of technology in every sphere of life demands more energy. For

governmental panel on climate change, (IPCC)
Every continent has warmed in the
last half of the century. These are

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hot days then cold and hot days
are even more hotter. Also the
numbers of disasters have been increased
Dec year. In fact, the nature of crisis
is making it global. One can say that
global warming is an existential threat
that directly impacts the major human
settlements across the globe. So the threats
are global in nature. It has many deadly
consequences at present.

Rise in temperature is one of the
major impacts. According to IPCC, the
earth's temperature has raised at
20°C since the Industrial Revolution
and scientists are more than 95%
certain that this temperature anomaly
is going to increase. The future prediction
is that the temperature could be raised
at 4.5°C by the end of this century
if necessary measures are not taken
in due time. So rising temperature as
a result of climate change is one of
the most deadly effects.

Another peril inflicted by the
climate change is the frequent
and intensified storms (hurricanes
and typhoons). Meanwhile, the severity
and number of storms have increased
since mid-century particularly in the
southern parts of North America,
Europe, the Philippines and adjoining
areas of the South China sea. All
these areas are more prone to devast-
ating typhoons and hurricanes than

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ever. Some of the major storms of the
century include: Hurricane Katrina of
August 2015. It was the deadliest.

eves. Some of the major storms of the century include: Hurricane Katrina of August 2005. It was the deadliest in the history of United States it approximately claimed the lives of 1833 people in the New Orleans. Hurricane Florence caused havoc in South and North Carolina States of America in September 2018. It caused about \$17 billion to \$22 billion of damage. Typhoon Mangkhut also devastated the Philippines in September 2018. Unfortunately, the frequency and severity is making these annihilable storms more dangerous owing to the change in climate.

Furthermore, stronger and longer heat waves around the world over the past 50 years, particularly in Europe, Asia, Africa and Australia, are producing direful results. Most severely hit areas are sub-Saharan Africa and the desert of Indo-Pak Subcontinent. Even in Europe heat waves had claimed an estimate of 35000 lives. Korea, Spain and countries of temperate regions are suffering much.

According to the organization for Economic Cooperation and Development, the impact of floods is causing \$40 billion worth damage worldwide annually. Also the death toll has increased due to flooding. Pakistan was also hit hard by the heavy flooding

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in 2005, and 2022 causing damage of about \$35 billion and claiming about thousands lives. Moreover, in China's Yellow River valley some of the world's worst floods have killed millions of people. Furthermore, altered natural weather patterns are

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in 2005, and 2022 causing damage of about \$35 billion and claiming about thousands lives. Moreover, in China's Yellow River valley some of the world's worst floods have killed millions of people. Furthermore, altered natural weather patterns are causing higher than normal rainfall so more floods and more amount of rainfall are also results of climate change causing much damage.

Another deadly threat the world is facing due to the climate change, particularly owing to the rise in temperature, is the shrinking of large ice masses at increased pace and huge in the melting of world's largest glaciers. There is an obvious reduction in Antarctica and Greenland islands. Moreover, Greenland Ice Sheet, the second largest ice mass on the earth, is melting six times faster than 20 years. Also, the extent of sea ice in the Arctic has shrunk since 1979 by between 3.5% to 4.5% per decade. Summer sea ice has even been dwindling more rapidly. According to meteorological organization (WMO), if the global warming is not controlled the Arctic could be ice-free by 2040. Moreover, another prediction is that at the current rate of warming all the glaciers on the

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US Glacier National Park will be gone by 2070. One can say that retreating glaciers are a sign that climate has changed.

Indonesia, all the aforesaid ramifications are composing a gloomy conditions and the future impacts will be a disaster which is also

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US Glacier National Park will be gone by 2070. One can say that retreating glaciers are a sign that climate has changed.

Indonesia, all the aforesaid ramifications are imposing a gruesome conditions and the future impacts will be even more awful which are also stated here:

High level of submergence of islands and low-lying areas of the world is going to happen in near future. The current rise in sea-level will bring biggest impact on the number of islands. Due to uncontrolled global warming it is feared that it can sink the global economy as entire cities like Miami, Karachi etc will sink due to rising sea level and cyclones. Most importantly the Sundarbans National Park, world's largest mangrove forest where four million people live on its cluster of islands, is being threatened by the steadily rising sea-level. A study of Bay of Bengal has confirmed that, sea is rising at the rate of 3.14 mm per year, as against global average of 2mm threatening the deltaic regions of India and Bangladesh. Till today, at least, 15 islands have been affected, but the sea is nibbling at other islands as well.

As the islands are habitats of million peoples, their submergence

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is going to cause the mass migration. The world will be facing the environmental refugee crisis in future. According to the National Geographic research, the

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is going to cause the mass migration. The world will be facing the environmental refugee crisis in future. According to the National Geographic research, the enormous huge migration crisis owing to the rising sea-level and desertification will cause one billion environmental refugees in more than 100 countries.

In addition, the eventual mass extinction of many flora and fauna will be owing to global warming. Basically, the species diversity in ocean ecosystem is at great risk. Those species that will not be able to adapt to higher temperature will die, for example polar bears are drowning because they have to swim longer distance to reach ice floes. It is predicted that two-third of polar bear population will be extinct by the mid century due to melting of the Arctic ice-cap. Furthermore in Bermuda and other places mangrove forests are being lost.

Coming to the next, in future the rising temperature will adversely affect those crops that will not be able to endure excessive heat. It will lead to reduction in the yields of different crops as well. So in this way many resources will run short. Not only agricultural but other resources like water, land, etc.

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So the world is going to face poverty of many resources in near future because of climate change.

The diminishing resources will start the struggle for survival. Many inter-state and intra-state conflicts will arise due to the scarcity and depletion

So the world is going to face poverty of many resources in near future because of climate change.

The diminishing resources will start the struggle for survival. Many inter-state and intra-state conflicts will threaten the peace and stability of the world. Mainly food insecurities will be the main cause of these conflicts.

In particular, all the threats the world is facing now and all future repercussions predicted are making this issue of humanity and as it is global in nature some measures have been taken.

The first ever initiative was taken in the June 1992. A World Summit was held at Rio de Janeiro, a city of Brazil, to discuss the common threat posed to the humanity and ways and means to meet it. Delegates from 100 countries attended the conference. The main cause of warming was identified as the atmosphere pollution produced by rapid industrialization of the rich North. The cost of remedial measures was worked out to be \$ 125 billion which was to be borne by the countries responsible for the pollution. A memorandum of recommendations was drafted. However, the United States was the only country that refused to sign it. The

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Conference failed in its mission.

Moreover, the important framework about the climate change adopted by the United Nations is United Nations Framework Convention on Climate Change (UNFCCC). It is an international environmental

Conference failed in its mission.

Moreover, the important framework about the climate change adopted by the United Nations is United Nations Framework Convention on Climate Change (UNFCCC). It is an international environmental treaty adopted on 9 May 1992. It entered into force on 21st March 1994 after a sufficient countries ratified it. The objective of the Convention is to stabilize greenhouse gas concentration in the atmosphere. The framework sets non-binding limits and contains no enforcement mechanisms.

Another important initiative at international level regarding the climate change is Kyoto Protocol. Basically, it extended UNFCCC. It was adopted in Kyoto City in 1997 and entered into force in February 2005. The protocol applies to the six greenhouse gases notably: Carbon dioxide, Methane, Nitrous oxide, Hydrofluorocarbons and Sulphur hexafluoride. The protocol divides countries into three main groups according to different commitments. The main goal of the Kyoto Protocol is to control emissions of main greenhouse gases by Carbon trading, Clean Development Mechanism, and joint implementation. Subsequently, negotiations were

held in the framework of the yearly UNFCCC climate change conference on measures to be taken in future which resulted in the adoption of the Paris Agreement 2015. The agreement calls for the active support of business and finance

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held in the framework of the yearly UNFCCC climate change conference on measures to be taken in future which resulted in the adoption of the Paris Agreement 2015. The agreement calls for the active support of business and finance mayors, governments, academia and civil society and national governments. It now to keep the global warming well below 2 degree Celsius relative to pre-industrial levels and ideally to 1.5°C Paris agreement was to set up efforts to cut the greenhouse gases emissions every five years. The object was to create global response combating the world's greenhouse gases emissions.

There is another initiative in the form of the United Nations Climate Action Summit 2019. It was held at United Nations headquarters New York on 23 September 2019 on the theme; "A race we can win. A race we must win." The goal of the Summit was to further climate action to reduce greenhouse gas emissions to prevent the mean global temperature from rising by more than 1.5°C above pre-industrial levels. At the close of the Summit, the United Nations Secretary general Antonio Guterres said, "Much more is needed to reach carbon neutrality by 2050 and keep temperature rise to 1.5°C by the end of the century."

The most recent initiative is the

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United Nations climate change conference of conference of the Parties of the UNFCCC (COP28). It was held from 30 November to 13 December at Expo City, Dubai, United Arab Emirates

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United Nations climate change conference of Conference of the Parties of the UNFCCC (COP28). It was held from 30 November to 13 December at Expo City, Dubai United Arab Emirates. The deal at Conference commits all signatory countries to move away from carbon energy sources "in a just, orderly and equitable manner" to mitigate the worst effects of climate change and reach net zero by 2050. The global pact was the first in the history of COP Summits to explicitly mention the need to shift away from every type of fossil fuels.

In spite of all the initiatives the climate change has remain a formidable issue because of the indifference of the big emitters. One of the biggest obstacles in the resolution of this issue is the indifference of big emitters. These are the tycoons mainly includes three countries: China, the US and India. According to the Global material flow Database developed by the UN environment program 51% of carbon emissions is caused by the US, China and India. Unfortunately, the commercial interests of these countries are being more valued than life on the earth.

The aforesaid threats, initiatives and indifference of big emitters are making the climate issue the

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the deadly climate crisis. According to the National Academy of Sciences USA's published report in 2019, since the necessary measures like arresting the trend of emission of greenhouse

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the deadly Climate Crisis. According to the National Academy of Sciences USA's published report in 2019, since the necessary measures like arresting the trend of emission of greenhouse gases are not satisfactory. Therefore, the rise in the mean global temperature will be 5 degree Celsius instead of two degree. So this need to be understood by the world and it should be followed by some solid measures to prevent the world from approaching climate crisis. In the regards some suggestions are these:

Firstly, the slogan should be 'Go zero fossil fuels'. Eliminating the burning of coal, oil and natural gas should be the target of the world. Apparently this is the most daunting challenge; as oil is the lubricant of the global economy. However it is the need of an hour to avoid these fuels. Alternatives should be tried

Secondly, innovation in transport sector is much needed at this critical juncture. Transportation is the second leading source of greenhouse gases. Burning a single gallon of gasoline produces 20 pounds of carbon dioxide. There must be changes in the way the world travel. People should make it to work place, use of mass transit, switching to walking and telecommunication several days a week are

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Some ways to be adopted in this regard. Moreover there should be promotion of public transport by improving it.

More tilt over renewable energy

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Some ways to be adopted in this regard. Moreover, there should be promotion of public transport by improving it.

More tilt over renewable energy resources is another option to be exploited. The renewable energy sources includes: Solar energy, wind power, tidal waves, biofuels, geothermal energy etc. This type of energy is environmental friendly and could prevent the climate change by reducing global warming.

Furthermore, energy consumption should be reduced and energy efficiency should be increased to save the energy. Infrastructure

upgradation can help reduce the amount of energy usage. Energy efficient building means - investing in thicker insulation, temperature regulating, efficient devices etc. can save money and energy. According to EPA, replacing just one incandescent light bulb in every American home would save enough energy to provide electricity to three million American homes.

The current population of the world is about 8.1 billion and according to United Nations it is predicted that it will be 9 billion. With the increase in population usage of resources including energy consumption is increasing. This is

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where the shoe pinches. There must be measures to reduce the population to save the globe.

Climate change is one of the deadly issue of the 21st century. This

United Nations of a problem that it will be a billion by the increase in population usage of resources. including energy consumption is necessary. This is

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where the shoe pinches. There must be measures to reduce the population to save the globe.

Climate change is one of the deadly issue of the 21st century. This message should be spreaded. The slogan should be to fight climate change. Governments, civil society, international organizations, media etc should play their roles to spread awareness about the climate change.

Last but not the least, there is a need of greater cooperation at regional and international level to cope with this issue.

Different programs in renewable energy installation, afforestation, public transport and in different sectors should be done.

Conclusively, climate change is the natural process caused by global warming which is the result of human activities including carbon fuel usage, deforestation, rising population etc. It is the global issue with multitude of repercussions at present and deadly threats for future. So far many initiative have been taken at international level, but success is still a far from conclusion. Moreover, there is a urgent need to take measures to save the globe from the wrath of approaching climate crisis.

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