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**SECTION: 6C**

**ASSIGNMENT NO 1**

**RESEARCH PAPER ANALYSIS**

**RESEARCH PAPER ANALYSIS**

**1)** **Environment Pollution and Climate Change Observed and Future Climate Variability**

**2)** **Climate change impacts on wheat production: Reviewing challenges and adaptation strategies**

**Climate Change Impact on Wheat Production:**

* Wheat is a critical crop for global food security, and climate change affects its production in various ways.
* Rising temperatures, changing precipitation patterns, and increased frequency of extreme weather events impact wheat yields, quality, and water requirements.
* Warmer temperatures can lead to earlier wheat maturity, reducing grain quality and yield.
* Droughts and heatwaves can significantly reduce wheat yields, while excessive rainfall can lead to flooding and soil erosion.

**Environmental Pollution and Climate Change:**

* + Environmental pollution, including air, water, and soil pollution, contributes to climate change and exacerbates its impacts.
  + Greenhouse gas emissions from human activities, such as burning fossil fuels, deforestation, and industrial processes, drive global warming.
  + Climate change, in turn, intensifies environmental pollution by altering ecosystems, disrupting natural cycles, and increasing the spread of pollutants.
  + The consequences of environmental pollution and climate change include more frequent natural disasters, declining air and water quality, and loss of biodiversity.

**COMPARISION AND FOCUS POINT ON BOTH PAPERS**

* + Both topics are interconnected and influence each other: climate change impacts wheat production, and environmental pollution contributes to climate change.
  + Rising temperatures and changing precipitation patterns affect wheat yields and quality, while environmental pollution exacerbates these impacts.
  + Addressing environmental pollution and climate change requires a comprehensive approach that includes reducing greenhouse gas emissions, transitioning to renewable energy sources, and implementing sustainable agricultural practices.
  + Strategies to mitigate climate change impacts on wheat production, such as irrigation management and heat-tolerant varieties, can also help reduce environmental pollution.

By understanding the connections between climate change, environmental pollution, and wheat production, we can develop effective solutions to ensure global food security and mitigate the impacts of climate change.