



INDIAN SCHOOL NIZWA - WORKSHEET

ENGLISH READING PASSAGE

Name: _____

Date: _____

Class: XI Sec: ____

Read the following text:

1. Global warming is the warming up of the Earth due to the trapping of gases like carbon dioxide, carbon monoxide, methane and nitrous oxide, when the atmosphere fails to perform its function of acting as a protective blanket. The incoming solar radiation is partly absorbed by carbon dioxide, though a vastly higher amount of the outgoing radiation is trapped in the atmosphere.

2. Carbon dioxide possesses immense staying properties in the atmosphere. It is being speculated that carbon dioxide concentrations may double in about a century. This increased carbon dioxide level, according to predictions, indicates an increase in temperature ranging from 1.5 - 4 degrees Celsius, or a rise in sea levels by about 50 cms by AD 2100.

3. However, Earth apparently has its own system of checks and balances. Water vapour in the atmosphere is known to absorb radiation more than any other atmospheric component. A doubling of carbon dioxide concentration would increase the capacity of the Earth's surface to absorb infra-red radiation by about 4 watts per square metre, though overall, the levels of absorption would be small.

4. Volcanic eruptions, too, are believed to be responsible for reduction in the carbon dioxide content in the atmosphere. Cooling through volcanic eruptions is believed to release certain gases, which are responsible for decrease in the carbon dioxide content in the atmosphere. Measurement of the incident of carbon dioxide in the atmosphere made in Hawaii indicate that during 1992-93 about two billion tonnes of the gas was found missing from the atmosphere.

5. As far as the impact of ozone depletion is concerned, it seems to be dictated more by political considerations than any other factor. The increased burning of fossil fuels for energy is largely responsible for the increase in temperature through ozone depletion.

6. A tug-of-war has been going on among the industrialized countries and the developing countries on the share of the blame. In fact, the USA, the erstwhile USSR, Brazil and China account for almost half of the net global emissions of harmful gases such as CFCs. While North America generates about 5 tonnes per head of carbon dioxide, Africa, China and India together generate approximately 1 tonne of carbon dioxide per head.

7. However, despite the fact that 1995 was one of the hottest years of the twentieth



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century, heavy snowfalls have been recorded in some parts of the world-notably on the Eastern coast of America and in Jammu and Kashmir. Moreover, during the latter half of the twentieth century, the Arctic climate has not been undergoing any noticeable temperature changes. In fact, till 1975, global temperatures had been undergoing a downward trend. Could the recent spurt in temperatures be a natural cyclical process, or a temporary offshoot of the shifting pressure belts?

8. Given the rising temperatures, growing seasons would be prolonged. Higher temperatures would also lead to an increased evaporation from oceans, thereby intensifying cloudiness, leading to moderate temperatures during the day and warmer nights. Warmer temperatures during the night enhance agricultural productivity. Increased carbon dioxide in the atmosphere will also result in an increase in fertility. Global warming will also have an impact on the El Nino phenomenon-the circulation of weather disturbances around the world as a result of the warming of Pacific Ocean around the tropics.

9. However, a few questions remain in the ongoing debate on global warming. The process of heat transfer in the atmosphere-convection-is a field in which a lot of research needs to be done. Secondly, clouds and vapour are known to be major absorbers of incoming radiation from space. If the cloud cover, as a result of increased evaporation due to rising temperature, were to increase, it would result in more containment. Plants, which both absorb and release carbon dioxide, too have a crucial role to play. Their role, however, has been till now underestimated.

1.1 Answer the following questions, based on the passage above.

i. It is being surmised that carbon dioxide concentrations may _____.

- (a) increase 100% in about a decade
- (b) triple in about a century
- (c) increase slightly in about a century
- (d) increase 100% in about a century

ii. The writer would not agree with given statements based on the passage EXCEPT

- (a) Global warming will have an impact on the El Nino phenomenon.
- (b) 1996 was one of the hottest years of the twentieth century.
- (c) Water vapour in the atmosphere does not absorb radiation.
- (d) Higher temperatures would lead to decreased evaporation from oceans.

iii. Describe the impact of rising temperature on the growing seasons.

iv. Complete the given sentence with an appropriate inference, with respect to the following:
There is a tug-of-war between the industrialized and developing countries in order to _____.

v. Fill in the blanks appropriately by choosing the correct option. The major reason for the increase in temperature through ozone depletion is _____.

- (a) generation of CFCs
- (b) increased rainfall
- (c) increased burning of fossil fuels



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(d) None of these

vi. List the things that effect global warming. Answer in about 40 words.

vii. What is the result of animal discharge in the atmosphere?

viii. What effect would a doubling of carbon dioxide concentration have on the earth's surface? Answer in about 40 words.

ix. Select the option/s that convey/s the opposite of 'massive' from words used in Paragraph 8.

1. Prolonged 2. Intensifying 3. Enhance 4. Moderate 5. Tropics

(a) Only 1

(b) Only 2

(c) Only 4

(d) 3 and 5
