

Appendices

Questionnaire For Environmental Awareness

Personal Information / व्यक्तिगत जानकारी

- Name / नाम:
- Name of School / विद्यालय का नाम:
- Class / कक्षा:
- Age Group / आयु वर्ग:

INTRODUCTION

- The present study is a part of dissertation work being conducted by [Your Name], an Integrated B.Ed–M.Ed student of the Regional Institute of Education, Bhopal (NCERT).
- This questionnaire is part of the research tool used to gather information.
- The information collected pertains to your awareness of environmental issues and will be kept strictly confidential. It will be used only for research purposes.

परिचय:

- प्रस्तुत अध्ययन एक शोध प्रबंध कार्य है, जिसे क्षेत्रीय शिक्षा संस्थान, भोपाल (एनसीईआरटी) के एकीकृत बी.एड-एम.एड छात्र/छात्रा [आपका नाम] द्वारा संचालित किया जा रहा है।
- यह प्रश्नावली शोध उपकरण का एक हिस्सा है।
- इस प्रश्नावली के माध्यम से एकत्रित जानकारी आपके पर्यावरणीय जागरूकता से संबंधित है, जिसे गोपनीय रखा जाएगा और केवल शोध के उद्देश्य से ही उपयोग में लाया जाएगा।

INSTRUCTIONS

Please read the following instructions before answering the questionnaire:

1. The main objective of this questionnaire is to understand your level of awareness about the environment.
2. Your responses will remain confidential and will not affect your academic evaluation.
3. Attempt all questions sincerely to help in accurate analysis.
4. Please turn the page and begin answering the questions carefully.

कृपया प्रश्नों के उत्तर देने से पूर्व निम्नलिखित निर्देशों को ध्यानपूर्वक पढ़ें:

1. इस प्रश्नावली का मुख्य उद्देश्य पर्यावरण के प्रति आपकी जागरूकता के स्तर को समझना है।
2. आपके उत्तर गोपनीय रखे जाएंगे और इसका कोई प्रभाव आपकी शैक्षणिक मूल्यांकन पर नहीं पड़ेगा।
3. कृपया सभी प्रश्नों का उत्तर ईमानदारी से दें, जिससे सटीक विश्लेषण किया जा सके।
4. कृपया अगला पृष्ठ पलटें और सावधानीपूर्वक उत्तर देना प्रारंभ करें।

Environmental Awareness test

(Pre Test Question)

Name of Student: -
hour

Maximum Time: 1

Marks: 30

School Name:

Section:

Instruction: All questions are compulsory

Section A- Multiple choice Questions.

Section B- Write true (T) or false (F) against the given statement.

Section A- Multiple choice questions

- (1) Due to green house effect the earth temperature is
(a) Increasing (b) Decreasing (c) Stable (d) None
- (2) The world famous monument 'Taj Mahal' is affected by
(a) Acid Rain (b) Green House effect (c) Water Pollution (d) none of these
- (3) Bhopal gas tragedy is an example of
(a) Air Pollution (b) Soil Pollution (c) Sound Pollution (d) Water Pollution
- (4) Soil erosion can be prevented by
(a) Constructing Dams (b) Stopping Rain (c) Planting Trees (d) Building Houses
- (5) The effect of Sound Pollution health are
(a) Physical (b) Mental (c) Physical & Mental (d) None of these
- (6) Plants should be nurtured & protected because they give out
(a) Chlorophyll (b) O_2 (c) CO_2 (d) Methane
- (7) Which gas is responsible for 'Bhopal gas tragedy'?
(a) Chlorofluorocarbon (b) MIC (c) Cyanide (d) SO_2

(8) Which crop would you like to grow, if the soil is deficient of nitrogen?

(a) Wheat (b) Rice (c) Maize (d) Gram

(9) Which phenomena is used to grow plants & vegetation in cold regions?

(a) Biological fixation (b) Green house effect (c) Atmospheric fixation (d) Nitrification

(10) What step would you follow to reduce the percentage of CO₂ in the atmosphere?

(a) Plantation (c) Use of renewable sources (b) Minimum use of vehicles (d) All of these

(11) When sewage flows into river or the sea, fish and other aquatic animals die because of

(a) Lack of CO₂ (c) Lack of food (b) Lack of oxygen (d) Excess of decomposers

(12) Lung diseases are four times more in urban areas than rural areas, due to the presence of which gas in the atmosphere?

(a) CO₂ (b) SO₂ (c) N₂ (d) O₂

(13) Which among the following does not cause water pollution?

(a) Automobile exhausts (b) Oxygen demanding wastes (c) Plant nutrients (d) Disease causing agents

(14) The excessive use of pesticides and fertilizers can pollute

(a) Air and soil (b) Water and soil (c) Water and air (d) Plants and animals

(15) Which among the following does not cause pollution?

(a) Thermal power plant (b) Hydro electric plant (c) Nuclear power plant (d) Automobiles

(16) The factor that is responsible for environmental pollution

(a) Over exploitation of resources (b) Population Growth (c) Industrialization (d) All of these

(17) Air pollution can be controlled by:

(a) Establishing industries away from habitat areas. (b) Banning vehicles causing pollution. (c) Dumping garbage and other waste materials in pits. (d) All of the above.

Section B- Write True or False Against the Correct Statement

- (i) Carbon dioxide is the poisonous gas' present In the exhaust of automobiles. ()
- (ii) Plants me responsible for maintaining the balance of C02 and 02 in the atmosphere. ()
- (iii) Diminishing forest is raising the risk of flood. ()
- (iv) Plastic and Polythene bags should be thrown away after use. ()
- (v) Paints and colouring agents does not cause any harm to human health.()
- (vi) The chances of high blood pressure ad heart attack are more in people residing in noisy area. ()
- (vii) Use or pesticides and fertilizers does not cause any harm to soil. ()
- (viii) The increased temperature will affect the whole ecosystem by disturbing the life cycle of certain micro and macro organism. ()
- (ix) Acid rain is harmful to plants as it retards their growth, ()
- (x) Infrared radiation is harmful for the living organism. ()
- (xi) Use of Non -Biodegradable substance help to reduce the pollution.()
- (xii) Harvesting of rain water helps in the conservation of ground water.()
- (xiii) Conservation of wild animal, birds and plants species are necessary for maintaining a balanced ecosystem. ()

Post Test Questionnaire

Section A – Multiple Choice Questions (1 mark each)

1. What is the primary cause of global warming?
 - (a) Deforestation
 - (b) Water pollution
 - (c) Excessive rainfall
 - (d) Use of fertilizers
2. Which practice best supports sustainable development?
 - (a) Overgrazing
 - (b) Industrial dumping
 - (c) Reforestation
 - (d) Building highways in forests
3. Which of the following gases is responsible for the greenhouse effect?
 - (a) Oxygen
 - (b) Nitrogen
 - (c) Carbon dioxide
 - (d) Hydrogen
4. Which of the following is *not* a non-renewable resource?
 - (a) Petroleum
 - (b) Coal
 - (c) Solar energy
 - (d) Natural gas
5. The most effective way to manage household waste is:
 - (a) Burning waste in open areas
 - (b) Dumping in rivers
 - (c) Waste segregation and composting
 - (d) Throwing in landfills
6. Biodiversity hotspots are areas that:
 - (a) Are uninhabited by humans
 - (b) Contain many endangered species
 - (c) Are deserts
 - (d) Have high rainfall only

7. Which activity helps reduce your carbon footprint?
 - (a) Driving alone every day
 - (b) Using public transport
 - (c) Leaving lights on unnecessarily
 - (d) Buying plastic-wrapped food
8. What is 'e-waste'?
 - (a) Food waste
 - (b) Agricultural waste
 - (c) Electronic waste
 - (d) Industrial noise
9. Which of these is the most effective water conservation method in agriculture?
 - (a) Flood irrigation
 - (b) Sprinkler irrigation
 - (c) Drip irrigation
 - (d) Overhead tanks
10. Which organization in India monitors environmental protection at the national level?
 - (a) NCERT
 - (b) ISRO
 - (c) CPCB
 - (d) DRDO
11. Why is planting more trees important for the environment?
 - (a) To cut them later
 - (b) To reduce oxygen
 - (c) To clean the air and provide oxygen
 - (d) To increase traffic
12. Which of the following is a renewable energy source?
 - (a) Coal
 - (b) Wind
 - (c) Petrol
 - (d) Diesel
13. What happens when plastic is thrown into rivers?
 - (a) It cleans the water
 - (b) It increases oxygen
 - (c) It pollutes the water and harms fish
 - (d) It makes the water cold

14. What is the best way to manage wet and dry waste?

- (a) Mix them together
- (b) Burn them
- (c) Use separate bins
- (d) Bury them in soil

15. Which activity helps in conserving water?

- (a) Washing cars daily
- (b) Fixing leaking taps
- (c) Leaving the tap open
- (d) Playing with water

16. Which among the following is biodegradable?

- (a) Glass bottle
- (b) Plastic bag
- (c) Banana peel
- (d) Aluminium foil

17. What should be done with old newspapers?

- (a) Throw them in drain
- (b) Recycle them
- (c) Burn them
- (d) Use them as pillows

Section B – True or False (1 mark each)

Write 'T' for True and 'F' for False.

- 1) The ozone layer protects the earth from harmful UV rays. (____)
- 2) Noise pollution has no impact on wildlife. (____)
- 3) Recycled materials can reduce the demand for raw resources. (____)
- 4) Cutting down a single tree does not affect the environment. (____)
- 5) Switching off fans and lights when not in use helps conserve energy. (____)
- 6) Plastic is biodegradable and safe for the soil. (____)
- 7) The Ganga Action Plan was launched to clean river Ganga. (____)
- 8) Urbanization has no effect on natural water bodies. (____)
- 9) Coral reefs are affected by rising ocean temperatures. (____)
- 10) Burning fossil fuels leads to air pollution. (____)
- 11) Forests are not important for maintaining climate. (____)
- 12) Car horns contribute to noise pollution. (____)
- 13) Saving electricity helps reduce pollution. (____)

Supplementary Table 1. Dataset used in this research includes names, before and after treatment scores, and classes and schools of the participants.

Names	Before Treatment	After Treatment	School Name	Class
Gayatri Kushwaha	12	17	KV.NO1 BHOPAL	9th A
Alfia Khan	14	19	KV.NO1 BHOPAL	9th A
Madiha Khan	19	24	KV.NO1 BHOPAL	10th A
Hardik Lowanshi	28	30	KV.NO1 BHOPAL	11th A
Rudraksh Tripathi	18	25	KV.NO1 BHOPAL	9th A
Manas Nimore	27	30	KV.NO1 BHOPAL	9th B
Priyanshu Yadav	10	17	KV.NO1 BHOPAL	9th B
Hassan Azhar	17	24	KV.NO1 BHOPAL	10th B
Dev Kushwaha	20	26	KV.NO1 BHOPAL	9th D
Rrishom Sharma	24	27	KV.NO1 BHOPAL	10th D
Bharat Gawhade	18	22	KV.NO1 BHOPAL	11th D
Mohammad Hamza	19	27	KV.NO1 BHOPAL	9th D
Arshan Ansari	16	21	KV.NO1 BHOPAL	9th D
Indira	19	25	KV.NO1 BHOPAL	10th C
Vanshika Sharma	19	28	KV.NO1 BHOPAL	10th C
Bhoomi Patel	20	27	KV.NO1 BHOPAL	12th B
Sambhavi Tiwari	18	24	KV. BAIRAGARH, BHOPAL	10th A
Tanishka Rajput	18	23	KV. BAIRAGARH, BHOPAL	10thA
Tanishka Rathore	23	27	KV. BAIRAGARH, BHOPAL	11th A
Durgesh Singh	16	19	KV. BAIRAGARH, BHOPAL	11th A
Ananya Sisodiya	11	19	KV. BAIRAGARH, BHOPAL	11th A
Kritika Kaushal	20	25	KV. BAIRAGARH, BHOPAL	11th A
Ishia Shroff	23	24	KV.NO1 BHOPAL	9th C

Anshika Verma	23	26	KV.NO1 BHOPAL	9th C
Alima Parvez	21	27	KV.NO1 BHOPAL	9th C
Anushka	16	20	KV.NO1 BHOPAL	9th C
Sanskriti Malviya	13	17	KV.NO1 BHOPAL	10th D
Shahyu Mohammed	26	29	KV.NO1 BHOPAL	10th D
Haridarshan Negi	24	28	KV.NO1 BHOPAL	10th D
Priyesh Sahu	23	29	KV.NO1 BHOPAL	12th B
Kunal Patel	28	30	KV.NO1 BHOPAL	9th C
Daksh Vishwakarma	26	26	KV. N0.3, BHOPAL	9th A
Jeet Shravan	24	24	KV. N0.3, BHOPAL	9th A
Upendra kumar	17	19	KV. N0.3, BHOPAL	9th A
Ayush Sharma	21	23	KV. N0.3, BHOPAL	9th A
Shivam Agnihetri	22	27	KV. N0.3, BHOPAL	9th B
Aryan Shukla	19	24	KV. N0.3, BHOPAL	9th B
Arman Khan	18	22	KV. N0.3, BHOPAL	9th B
Ayan Zaidi	12	17	KV. N0.3, BHOPAL	9th B
Vaidehi Raghuwanshi	24	24	KV. N0.3, BHOPAL	9th B
Saharsh Soni	25	26	KV. N0.3, BHOPAL	9th D
Shristi Dubey	24	28	KV. N0.3, BHOPAL	9th D
Maruti Rai	24	28	KV. N0.3, BHOPAL	9th C
Ritika Raj	14	17	KV.NO1 BHOPAL	10th A
Poonam Pagare	17	20	KV.NO1 BHOPAL	10th A
Rishika Sanskriti	18	24	KV.NO1 BHOPAL	10th A
Prarthana Unde	17	26	KV.NO1 BHOPAL	10th A
Abhilash Mehra	22	27	NAB	9th
Raja Abdullah	20	23	NAB	9th
Vijay Akhirwar	13	18	NAB	11th

Manoj Tomar	17	19	NAB		11th
Rupesh Lodhi	20	23	NAB		12th
Raj Ahirwar	18	27	NAB		10th
Mahesh Ahirwar	24	28	NAB		10th
Javed Khan	23	28	NAB		10th
Nilesh Meher	21	27	NAB		9th
Nilesh Mavashi	17	26	NAB		9th
Amit Mavashi	26	30	NAB		8th
Padyumna Yogi	23	28	NAB		9th
Rajeev Joshi	22	26	NAB		9th