International Green Warrior Olympiad (IGWO)

Previous Year Paper

Class 3

Time Allowed: 1 hour **Maximum Marks: 180**

- Additional **10 minutes** will be allotted to fill up information on the OMR Sheet, before the start of the exam.
- Fill in all the mandatory fields clearly on the OMR Sheet.
- There are a total of **50 questions** in this booklet comprising **2 sections** namely the **Green Champ and Green Challenger** consisting of **40 questions (3 mark each) & 10 questions (6 marks each),** respectively.
- There's a **negative marking** of 1/3rd marks for every wrong answer. The use of a calculator is not permitted.
- There is **only ONE correct option** to a given question.
- Use **HB Pencil or Blue / Black ball point pen only** for marking the correct choice of answers on the OMR Sheet.
- Rough work is to be done in the space provided in the test booklet. An extra plain sheet may be provided by the school for the rough work.
- The OMR Sheet is to be handed over to the invigilator at the end of the exam.
- No candidate is allowed to carry any textual material, printed or written, bits of paper, any electronic device, etc. inside the examination hall.
- The use of unfair means may result in the cancellation of the exam. Any such instances may be reported at **+91-98182-94134** or **info@crestolympiads.com**

DO NOT OPEN THIS BOOKLET UNTIL ASKED TO DO SO

FILL IN THE DETAILS

Candidate Name: _____

Class: _____Section: _____

CREST ID:_____

Green Champ (Each Question is 3 Marks)

1. Sarah and her mother were cooking a meal in the kitchen. What is the correct way to maintain proper sanitation in the kitchen?

   a. Wash hands with soap and water before handling food
   b. Use any detergent for cleaning dishes
   c. Store raw and cooked food together in the same container
   d. Leave leftovers on the kitchen counter overnight

2. You accidentally drop a candy wrapper on the street while walking home from school. What should you do?

   a. Leave it there; someone else will pick it up.
   b. Pick it up and dispose it in a nearby trash bin.
   c. Stomp on it to make it smaller.
   d. Forget about it and keep walking.

3. During a drought season, what should people do to conserve water?

   a. Use water as usual; droughts are natural and temporary
   b. Water the garden more frequently to keep plants alive
   c. Reduce water usage by taking shorter showers and fixing leaks
   d. Waste water to avoid saving it for others

4. Sarah was observing the weather outside. She noticed that it was a sunny day, and some puddles on the ground were starting to disappear. What part of the water cycle does this represent?

   a. Condensation
   b. Evaporation
   c. Precipitation
   d. Runoff

5. You live in a village near a forest. There is a river flowing through the forest. What is a potential source of clean water for your village?

a. River water
b. Water from an uncovered well
c. Water from a stagnant pond
d. Water from a polluted stream

6. Kate's mother is watering the plants in the garden. The water soaks into the ground and eventually reaches the groundwater. What is groundwater?

a. Water that is stored in lakes and rivers
b. Water that is stored underground in aquifers
c. Water that is stored in the atmosphere
d. Water that is stored in glaciers and ice sheets

7. In a remote village with no access to the grid, which energy source is most practical for providing electricity to the residents?

a. 

Diesel generators

b. 
Wind turbines

c. 
Solar panels

d. 
Natural gas

8. What can you do at home to conserve energy?

a. 
Turn off the lights when you leave a room.

b. 
Unplug appliances when you are not using them.

c. 
Close the curtains on hot days to keep the house cool.

d. All of the above

9. Which fossil fuel is often used for heating and cooking in residential areas due to its cleaner burning characteristics?

a. Coal
b. Petroleum
c. Natural gas
d. Diesel

10. In which location is tidal energy most effectively harnessed?

a. A calm lake
b. A river with fast-flowing water
c. The open ocean with strong tides
d. A desert with no water bodies

11. Kate is a 16-year-old high school student who is passionate about environmental conservation. One day, she noticed that her family's electricity bill had been skyrocketing due to excessive energy consumption in their home. Kate decided to take matters into her own hands and educate her family about the importance of energy conservation.
Kate noticed that her family's electricity bill was high because:

a. They were using energy-efficient appliances.
b. They were conserving energy effectively.
c. There was excessive energy consumption.
d. They were using renewable energy sources.

12. What are some ways to reduce our reliance on fossil fuels?

1. Use renewable energy sources, such as solar and wind power.
2. Improve energy efficiency in our homes and businesses.
3. Drive less and walk, bike, or take public transportation more often.

a. Only 1
b. Only 2
c. Only 3
d. 1, 2 and 3

13. Emily is a college student who is passionate about promoting sustainable transportation. She believes in reducing carbon emissions and minimising her environmental impact. Emily commutes to her campus using eco-friendly transportation options.
How does Emily commute to her college campus?

a. Biking and using public transportation
b. Driving alone in a gas-guzzling car
c. Renting a limousine everyday
d. Using a motorbike without a helmet

14. Pam is an architect dedicated to using sustainable materials in her construction projects. She believes in the importance of creating structures that are environmentally friendly and have a minimal impact on the planet. Which of the following materials is considered a sustainable option by Pam?

a. Non-recycled plastic
b. Bamboo
c. Styrofoam
d. Conventional hardwood

15. Which of the following strategies aligns with waste reduction?

a. Throwing away containers after a single use
b. Reusing containers instead of throwing them away
c. Purchasing disposable containers regularly
d. Encouraging single-use items

16. What is the environmental benefit of reducing food waste?

a. Decreased greenhouse gas emissions and reduced pressure on landfills
b. Increased pollution and greenhouse gas emissions
c. Expanded landfills and increased waste production
d. Higher costs associated with waste management

17. Which of the following is a consequence of rising global temperatures due to climate change?

a. Decrease in ocean acidity
b. Increase in the frequency of volcanic eruptions
c. Expansion of agricultural lands
d. Melting of polar ice caps and glaciers

18. What natural disaster is intensified by climate change due to warmer ocean temperatures?

1. Volcanic eruptions
2. Tsunamis
3. Hurricanes and typhoons
4. Earthquakes

a. Only 1
b. Only 2
c. Only 3
d. Both 2 and 4

19. Jake is a farmer. He grows rice and other crops on his land. One day, Jake notices that the weather has been changing. There have been more droughts and floods in recent years. This is making it difficult for Jake to grow his crops.
How is climate change affecting Jake's farm?

a. Droughts and floods are making it difficult to grow crops.
b. The weather is becoming less predictable.
c. The soil is becoming less fertile.
d. All of the these

20. How have human activities impacted the greenhouse effect?

1. By releasing additional greenhouse gases into the atmosphere
2. By reducing the levels of greenhouse gases
3. By promoting deforestation and decreasing the concentration of greenhouse gases
4. By increasing the amount of solar radiation reaching the Earth

a. Only 1
b. Only 2
c. Both 2 and 3
d. Both 1 and 4

21. Which of the following is NOT a practical way to help wildlife adapt to climate change?

a. Create wildlife corridors to help animals move to new habitats.
b. Restore degraded habitats to provide food and shelter for wildlife.
c. Reduce pollution to improve air and water quality for wildlife.
d. Introduce new species to an ecosystem to control pests and diseases.

22. Which marine habitat is/are affected by plastic pollution?

1. Coral reefs
2. Open ocean waters
3. Deep-sea trenches
4. Arctic and Antarctic oceans

a. Only 1
b. Only 2
c. Both 2 and 3
d. 1, 2, 3 and 4

23. A massive oil spill occurred in the pristine waters off the coast, causing severe damage to the marine ecosystem. The spill was a result of an accident involving an offshore oil drilling platform, releasing vast amounts of crude oil into the ocean.
What is the consequence of the oil spill in the ocean as described in the story?

a. Improved marine habitats due to oil presence
b. Harm to marine life, including birds, fish, and mammals
c. Accelerated growth of coral reefs
d. Reduction in global temperatures

24. Which of the following you can do to help reduce ocean pollution?

1. Dispose of trash properly.
2. Reduce your use of plastics.
3. Support organisations that are working to clean up the ocean.

a. Only 1
b. Only 2
c. Only 2 and 3
d. 1, 2 and 3

25. What is a major source of plastic pollution in the oceans?

1. Improper waste disposal on beaches
2. Ocean currents carrying plastic waste from land
3. Controlled recycling centres near coastal areas
4. Natural formation of plastic in the ocean

a. Only 1
b. Only 2
c. Only 1 and 2
d. 3 and 4

26. Some observations were made about two different pond communities, A and B. Firstly, there were some aquatic animals found in both communities. It was also observed that there were more fully submerged aquatic plants in Pond A than in Pond B. Which of the following could explain the above observations?

1. There were not as many floating aquatic plants in Pond A than in Pond B.
2. There were more predators in Pond B than in Pond A.
3. The water in Pond B was muddier than in Pond A.

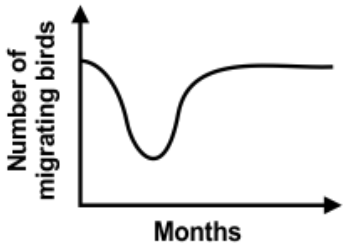
a. 1 Only
b. 2 Only
c. 1 and 3 Only
d. 1, 2 and 3

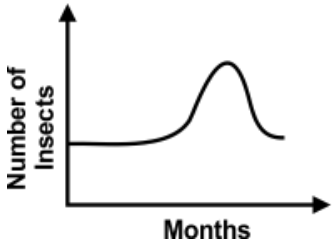
27. Match the following adaptations to the ecosystems in which they are found. Match the following adaptations to the ecosystems in which they are found.

	Column I		Column II
1.	Thick fur to stay warm	A.	Savanna
2.	Thick skin to prevent water loss	B.	Desert
3.	Webbed feet for swimming	C.	Wetland
4.	Long neck to reach high leaves	D.	Arctic tundra

a. 1-A, 2-B, 3-C, 4-D
b. 1-D, 2-B, 3-A, 4-C
c. 1-D, 2-B, 3-C, 4-A
d. 1-B, 2-D, 3-C, 4-A

28. The graph below shows the number of migrating birds in a community within a year. These birds are omnivores which feed on some seeds and insects found in the community. Which graph shows the number of insects within the same community in a year?



a.


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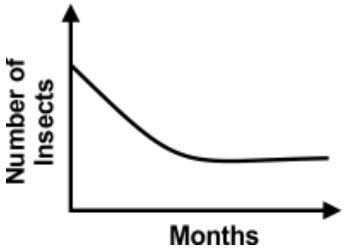
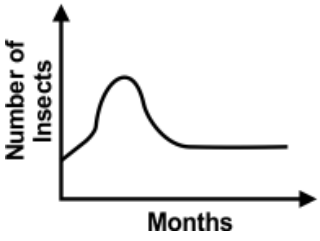


c.


d.


29. The picture below shows some crops on a plantation.
What are the two essential physical characteristics of the environment that will affect the growth of the crops?

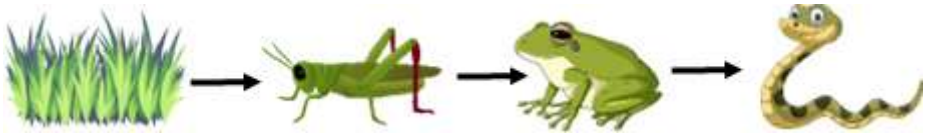
Crops

a. Temperature and soil colour
b. Light and water
c. Food and predators
d. Wind speed and light

30. Lily is a conservationist who is working to protect forests. She is concerned about the impact of deforestation on life on land.
What are some of the threats to life on land posed by deforestation?

a. Loss of habitat for plants and animals
b. Increased soil erosion
c. Changes in the climate
d. All of these

31. A group of students conducted an experiment to understand food webs on land. They observed the interactions between various organisms in a specific ecosystem, focusing on the flow of energy and nutrients.
If a disease affects the population of grasshoppers in the ecosystem, how might this impact the food web observed in the experiment?



a. It could increase the population of snakes due to reduced predation.
b. It could increase the population of frogs due to reduced predation.
c. It could decrease the population of frogs due to reduced food availability.
d. It would have no effect on the food web.

32. Only a small number of wildlife is found in the Arctic region. How will global warming affect the wildlife there?

a. The wildlife will have more water to drink when the ice melts.
b. The animals will lose their habitat when the ice in the Arctic melts.
c. There will be more animals migrating to the Arctic when the weather becomes warmer.
d. The rate of reproduction will increase for the wildlife when the temperature increases.

33. Ovia is a farmer who lives in a small village in Africa. She grows crops to feed her family and to sell at the local market. One year, there is a drought, and Ovia's crops fail. She is unable to feed her family, and they are forced to go hungry.
Based on your understanding of this story, how would you explain food security?

1. Access to safe and nutritious food for everyone.
2. The ability to produce enough food to feed a population.
3. The availability of food at affordable prices.

a. Only 1
b. Only 2
c. Only 2 and 3
d. 1, 2 and 3

34. Leo lives in a region with limited irrigation facilities, how might this scarcity impact food security?

a. Reduced crop yield and potential food shortages
b. Increased crop yield and improved food security
c. Enhanced soil fertility leading to surplus food production
d. No impact on food security

35. Ron made the following statements. Which of the following statement(s) is/are examples of conserving natural resources in sustainable agriculture?

Statement 1: Using crop rotation to maintain soil fertility.
Statement 2: Planting cover crops to reduce soil erosion.
Statement 3: Using integrated pest management to reduce the use of pesticides.

a. Statement 1 is correct but statements 2 and 3 are incorrect.
b. Statement 1 is incorrect but statements 2 and 3 are correct.
c. Statements 1 and 2 are correct but statement 3 is incorrect.
d. Statements 1, 2 and 3 are correct.

36. In an agricultural experiment, researchers manipulate the levels of irrigation water provided to two sets of crop fields. Set A receives adequate water, while Set B is subjected to water scarcity. What is the potential impact on food security?

a. Set A is likely to have higher crop yields, contributing to food security.
b. Set B is expected to have higher crop yields due to water conservation.
c. Both sets will have the same crop yields, ensuring food security.
d. Food security is not affected by the irrigation levels.

37. A farmer in a region with poor soil quality is struggling to grow healthy crops. What can be done to improve agricultural productivity in this area?

a. Use more chemical fertilisers to compensate for poor soil quality
b. Continue current farming practices as they are sufficient
c. Implement soil improvement techniques such as adding organic matter and minerals
d. Abandon farming in this region and focus on other areas with better soil

Direction for questions 38 to 40:

Consider the following paragraph and answer the following questions:

The Johnson family is passionate about adopting the principles of "reduce, reuse, recycle" in their daily lives to minimise waste and contribute to a more sustainable future. They actively practice these principles and set an example for their community.

38. What is the goal of the "reduce" principle for the Johnson family?

a. To discard items without considering their usage
b. To increase the amount of waste generated in their household
c. To buy new items regularly
d. To decrease the amount of waste generated in their household

39. How does the Johnson family practice the "reuse" principle?

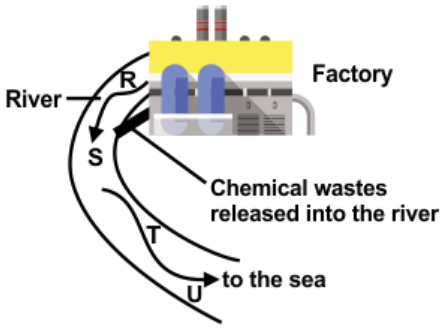
a. By using single-use items and then recycling them
b. By throwing away items after using them once
c. By finding new uses for old items and reducing the need for buying new ones
d. By using items for a short period and then discarding them

40. Which action aligns with the "recycle" principle in waste management?

a. Sending recyclable items to the landfill
b. Repurposing old items for different uses
c. Throwing away items without considering recycling options
d. Separating recyclable materials and sending them to recycling facilities

Green Challenger (Each Question is 6 Marks)

41. Look at the picture shown below carefully.
Some locals wanted to collect water from the river for consumption at home. At which part of the river, R, S, T or U, will the water be safe to consume?



a. R
b. S
c. T
d. U

42. An experiment exposed waterborne algae to pollution from untreated sewage discharge. The algal growth in the polluted water was significantly higher compared to the control group in clean water. What can be deduced from this experiment?
1. Pollution reduces the growth of algae due to increased competition
2. Pollution can lead to eutrophication and excessive algal growth.

3. Pollution has no effect on algal growth
4. Algae thrive in clean water without pollution

a. Only 1
b. Only 2
c. Both 2 and 3
d. 1, 2, 3 and 4

43. Jenny is planning to power her home with a reliable and constant source of energy. She wants a source that does not produce harmful emissions. Which type of energy would best meet her criteria?

a. Wind energy
b. Nuclear energy
c. Petroleum energy
d. Biomass energy

44. Jake and his family are trying to reduce their energy consumption at home. They've implemented various energy-saving measures to contribute to a sustainable environment and lower their utility bills.
Which energy-saving measure did Jake's family implement to conserve energy at home?

a. Installing a new home entertainment system
b. Switching to energy-efficient LED light bulbs
c. Keeping windows and doors open all day
d. Leaving lights and electronics on when not in use

45. Why is rainwater harvesting beneficial for water management in regions prone to water scarcity?
1. It provides an alternative source of water during dry periods.
2. It increases dependency on municipal water supplies.
3. It leads to excessive water wastage.
4. It has a negative impact on the environment.

a. Only 1
b. Only 2
c. Both 2 and 3
d. Both 2 and 4

46. The Jenner family has recently become more conscious of their food choices and the amount of food waste they generate. They've started making sustainable food choices to minimise waste and reduce their environmental footprint.
What sustainable food choice(s) have the Jenners adopted to reduce waste?
1. Buying excessive quantities of perishable items
2. Meal planning to prevent over-purchasing and food spoilage
3. Throwing away leftovers without considering consumption

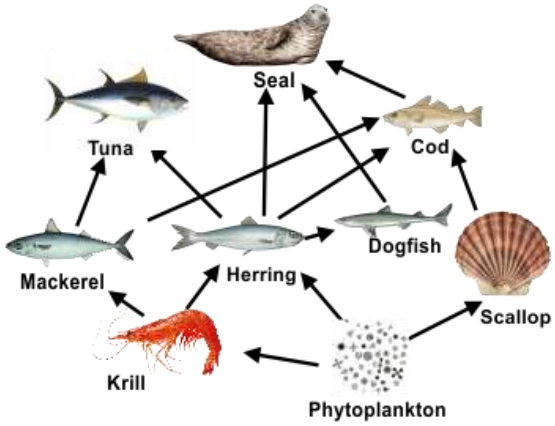
a. Only 1
b. Only 2
c. Both 2 and 3
d. Both 1 and 4

47. Anya lives in a small coastal village. She loves to play on the beach and swim in the ocean. One day, Anya notices that the water is coming closer to her house than usual. She asks her father why the water is rising.
Anya's father explains that climate change is causing sea levels to rise.
Anya is worried about the rising sea levels. She knows that if the water rises too much, her home could be flooded. She decides to do her part to help reduce climate change. She starts recycling and composting, and she tries to walk and bike more often instead of driving.
Why is the sea level rising in Anya's village?

a. Thermal expansion of seawater and melting glaciers
b. Reduced salinity of the oceans
c. Decreased evaporation rate of seawater
d. Increased density of seawater

48. Arya is a marine scientist who is studying the impact of climate change on the marine food web. She notices that the populations of some fish species are declining, while the populations of other fish species are increasing. She also notices that the populations of some phytoplankton species are declining, while the populations of other phytoplankton species are increasing.
What could be the reason for these changes in the marine food web?

1. Climate change is causing the ocean to become warmer, which is affecting the distribution of fish species.
2. Climate change is causing the ocean to become more acidic, which is affecting the distribution of phytoplankton species.
3. Climate change is causing the ocean to become more polluted, which is affecting the distribution of both fish and phytoplankton species.



a. Only 1
b. Only 2
c. Only 2 and 3
d. 1,2 and 3

49. The table below shows the changes in the average population of some animals in a tropical rainforest over a certain period of time.
Which of the following factors could have caused the change in the average population of Animal E from year 2008 to year 2009?
A. There was a long drought.
B. There was a new predator of Animal E.
C. A particular disease struck the population of Animal E.
D. A fire broke out in the forest.

	Years		
Animals	**2008**	**2009**	**2010**
E	1400	630	840
F	550	590	560
G	280	330	350

a. A and C only
b. B and C only
c. A, B and C only
d. A, B, C and D

50. During a food safety seminar, participants are taught about proper thawing methods for frozen foods. Four friends made the following statements about why is it crucial to thaw foods in the refrigerator or under cold running water.
Richard: To prevent the growth of harmful bacteria and ensure safe food consumption
Leo: To save time during food preparation
Jack: To maintain the food's taste and texture
Kevin: To decrease the risk of overcooking the food
Who among them was/were correct?

a. Only Richard
b. Only Leo
c. Both Leo and Richard
d. Both Leo and Kevin

Answer Key

1.	a	2.	b	3.	c	4.	b	5.	a	6.	b	7.	c
8.	d	9.	c	10.	c	11.	c	12.	d	13.	a	14.	b
15.	b	16.	a	17.	d	18.	c	19.	d	20.	a	21.	d
22.	d	23.	b	24.	d	25.	c	26.	c	27.	c	28.	d
29.	b	30.	d	31.	c	32.	b	33.	d	34.	a	35.	d
36.	a	37.	c	38.	d	39.	c	40.	d	41.	a	42.	b
43.	a	44.	b	45.	a	46.	b	47.	a	48.	d	49.	b
50.	a												