

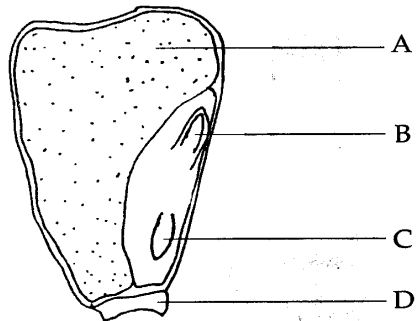
Name _____ Grade _____ Date _____

Bahamas Academy of Seventh-day Adventists
Biology Take-Home Test – Grade 10

**Instructions: Print a copy of this test, complete and return to teacher by
June 6, 2007**

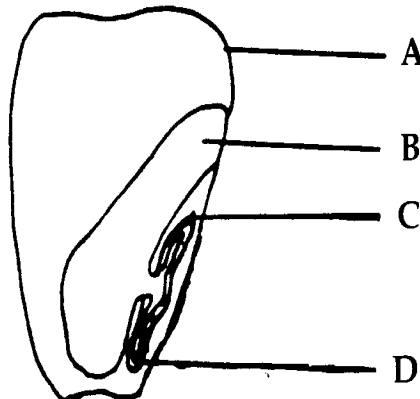
Circle the LETTER of the best response.

1. Which list represents the correct sequence of events in the life cycle of Zea mays?
 - A. pollination → germination → fertilization → fruit and seed formation
 - B. pollination → fertilization → fruit and seed formation → germination
 - C. germination → fertilization → fruit and seed formation → pollination
 - D. germination → fruit and seed formation → fertilization → pollination
2. The diagram shows a longitudinal section of a maize grain. Which part has stored energy used for growth during germination?



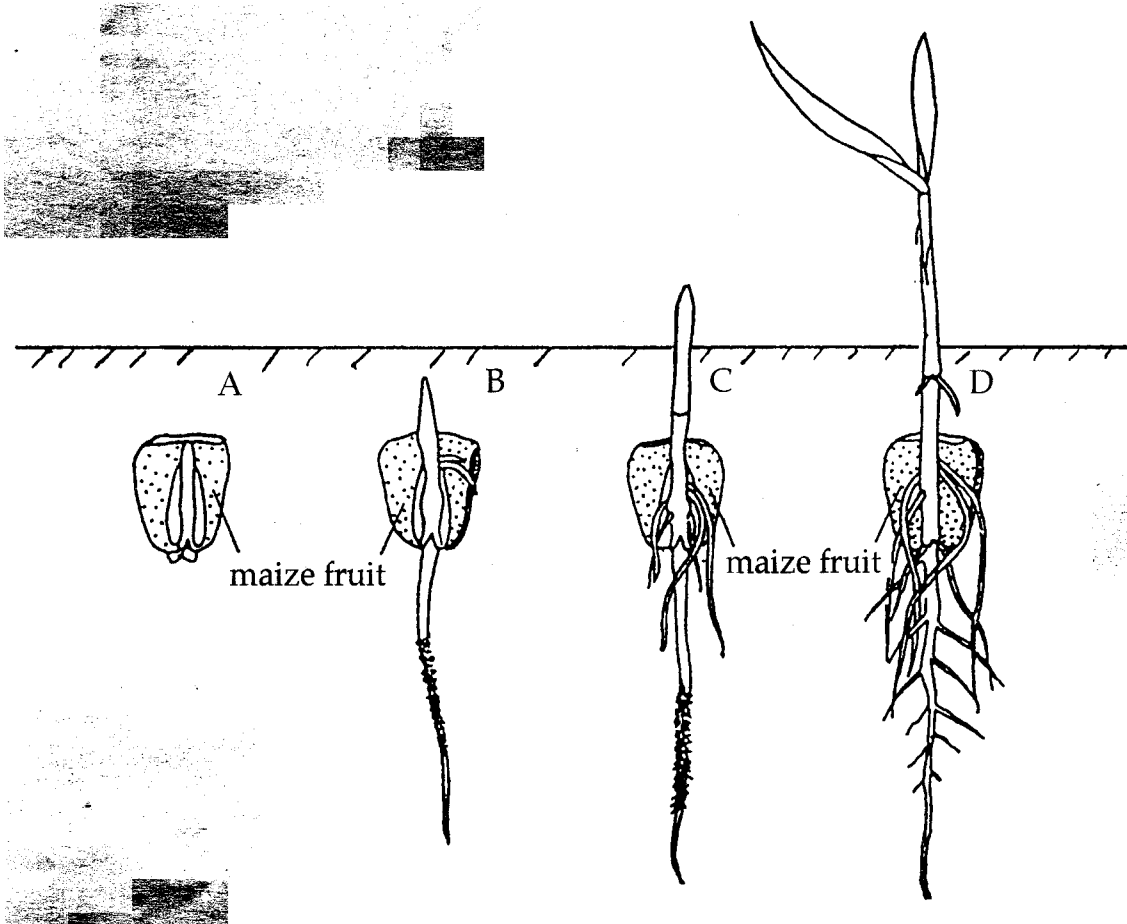
The drawing shows a section through a maize grain. Answer questions 3 and 4 based on the diagram.

3. Which part protects the young stem as it moves upwards through the soil during germination?

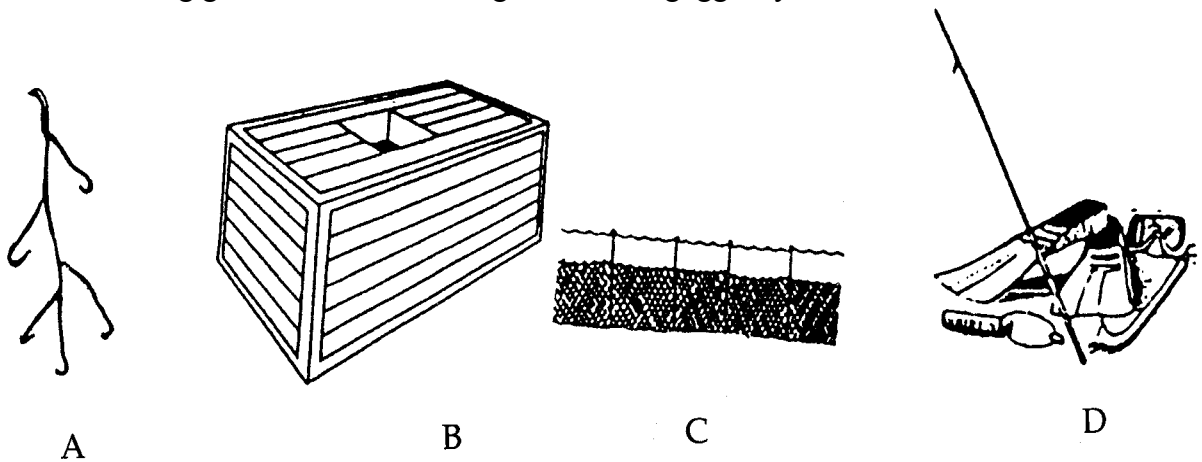


4. Which labeled part A, B, C or D identifies it as a fruit?

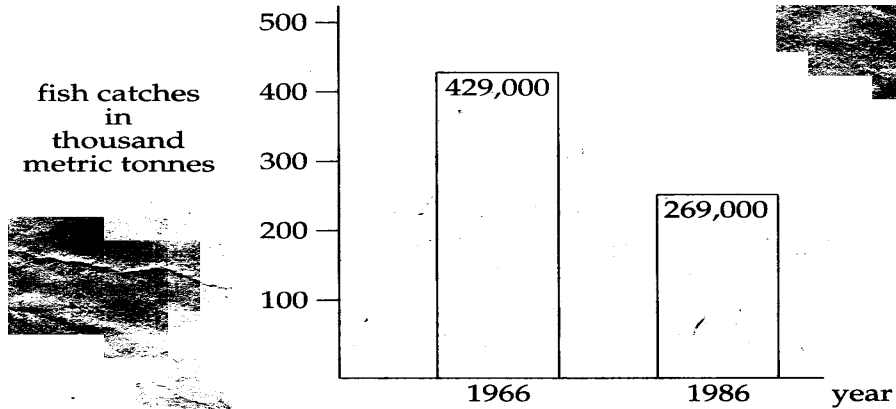
5. The diagram shows some of the stages of the maize life cycle. At which stage is least food found in the maize fruit?



6. Which agent is responsible for pollinating maize plants?
 A. birds B. insects C. water D. wind
7. Which fishing gear is best for catching a school of goggle eyes?



8. The graph compares coral reef catches of 1966 and 1986.



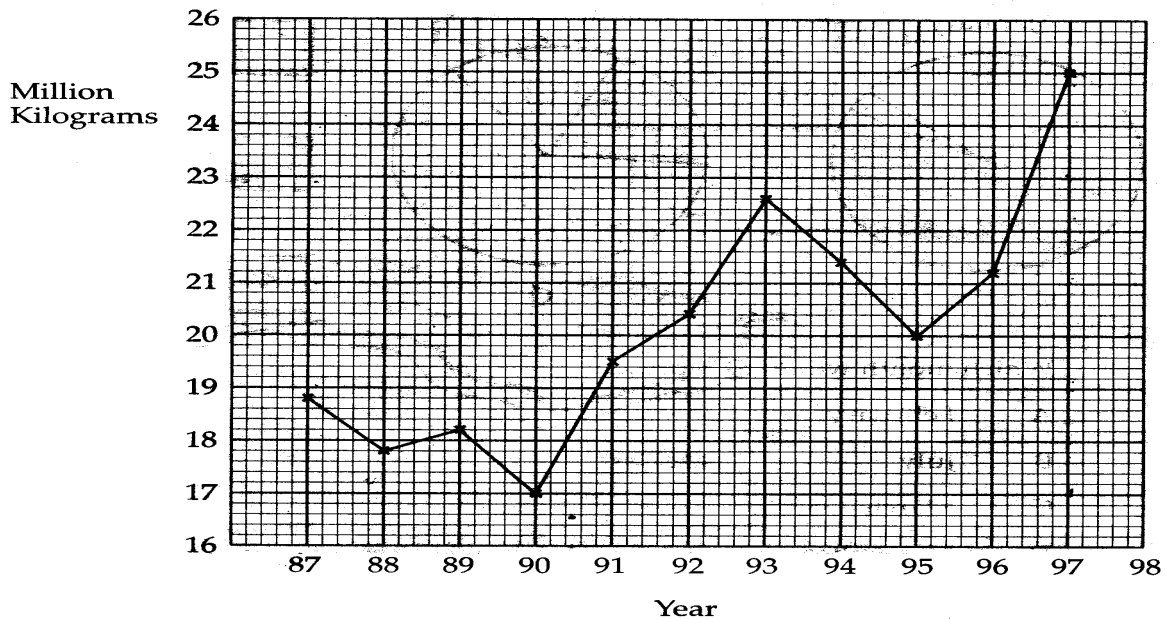
Calculate the percentage decrease between 1966 and 1986

- A. 50% B. 43% C. 37% D. 23%

9. In the fishing industry of the Bahamas, which type of gear is most commonly used to capture the spiny lobster?

- A. Hawaiian sling B. spear gun C. wire trap D. wooden trap

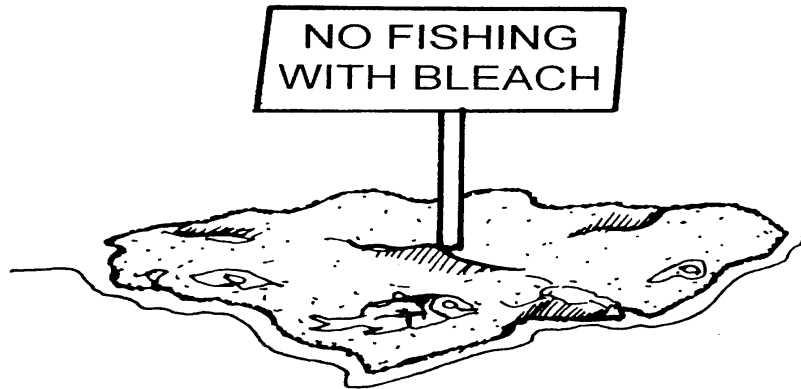
10. The graph represents the annual total weight of fisheries product landed in the Bahamas over a ten-year period.



What is the difference in the recorded fisheries product landing between the best and the worst years in the ten-year period shown?

- A. 5.5 million kilograms C. 8.1 million kilograms
 B. 6.5 million kilograms D. 9.1 million kilograms

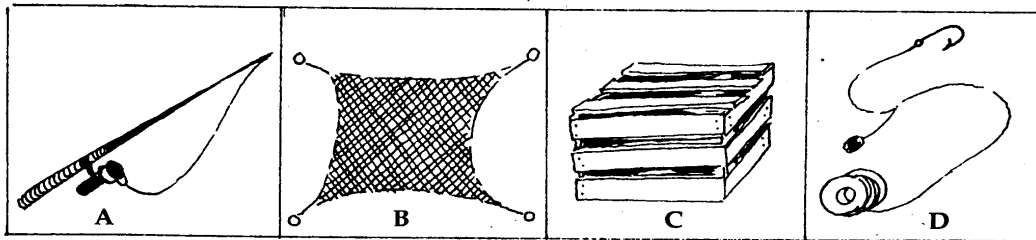
11. The diagram shows a sign promoting conservation.



What is likely to be conserved?

- A. beach B. coral reefs C. rocky shores D. sea walls

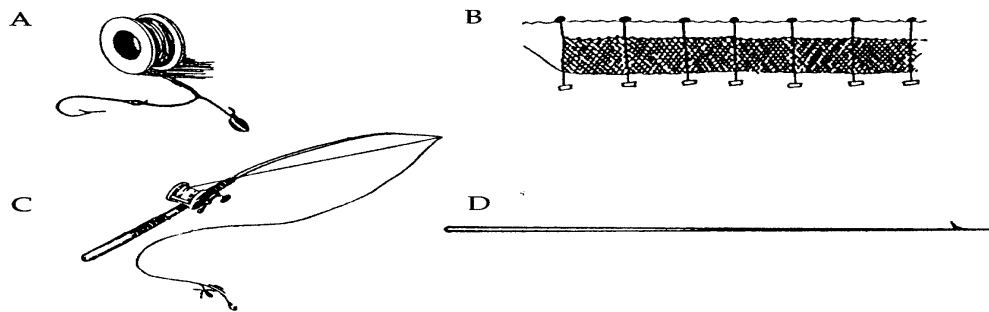
12. Which fishing gear is most appropriate for capturing lobsters?



13. Limiting the amount of organisms that can be caught at a specific time of year is

- A. conservation B. diversification C. homeostasis D. variation

14. Which equipment is most adequate for capturing large quantities of fish in the open sea?



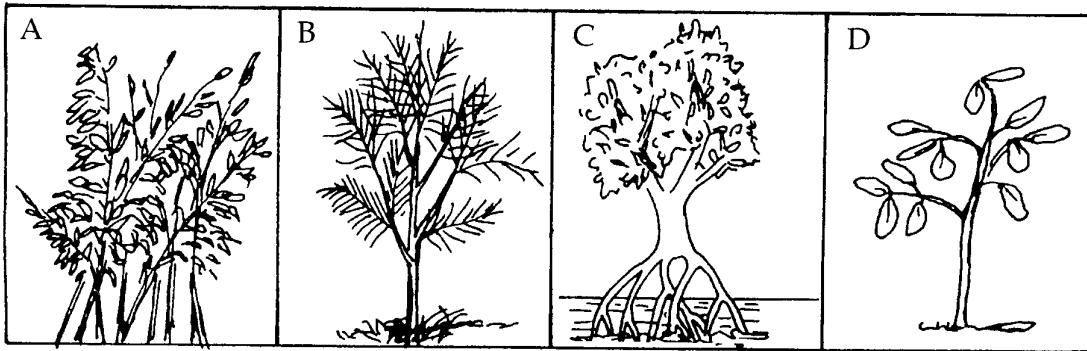
15. Which fishing gear is best suited to capture groupers from a coral reef?

- A. harpoon and rope C. Hawaiian sling and spear
B. hook and line D. net

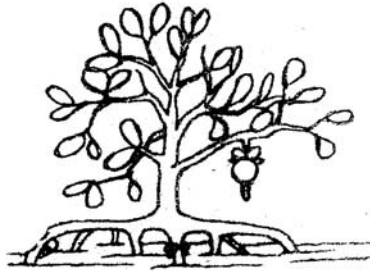
16. Which fishing method may be used in the Bahamas with a permit from the government?

- A. bleach B. explosives C. long line D. SCUBA

17. Which plant shown aids in the conservation of coastlines?



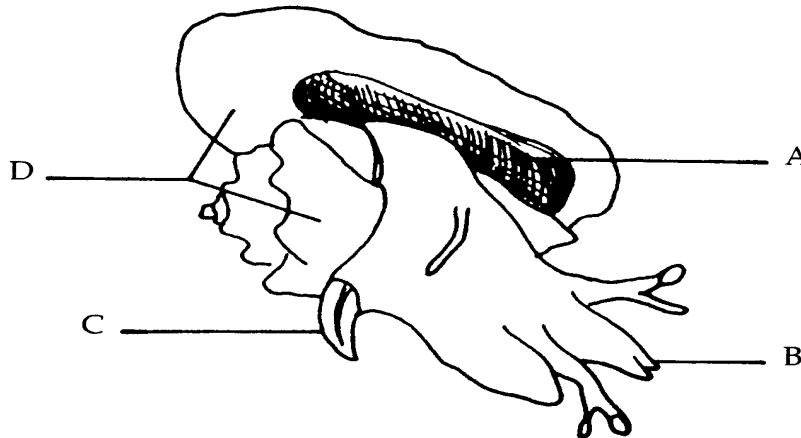
18. The diagram shows a red mangrove plant



How are the roots an adaptation to living in the mangrove swamp?

- A. absorb oxygen from the mud
 B. allow germination to take place
 C. extract oxygen from the air
 D. stabilize the plant in the mud

19. The diagram shows a Queen Conch. Which part is indirectly responsible for its protection?



20. Decreased crop production could result from the over-use of

- A. fertilizers B. fungicides C. herbicides D. insecticides

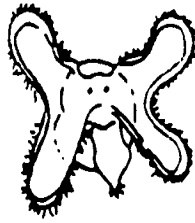
21. What term is used to describe materials that are broken down by natural means?

- A. biodegradable B. decomposers C. non-biodegradable D. renewable

22. Which is the youngest stage of development in the conch's life cycle?



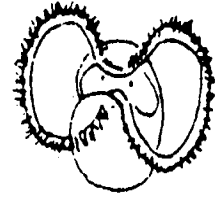
A



B



C



D

23. Which substance is a pollutant in the air?

A. hydrogen

B. oxygen

C. smoke

D. water vapour

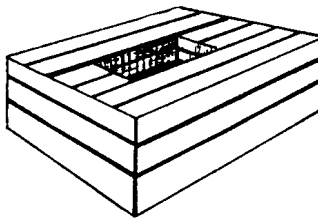
Answer these questions in the spaces provided.

24. How has modern technology such as powerful vehicles, pesticides and herbicides helped with food production? (2 marks)

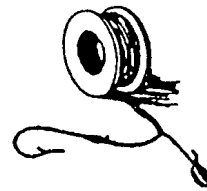
25. The diagrams show different types of fishing gear.



P



Q



R

(a) Name each type of gear

P _____ Q _____ R _____ (3)

(b) Write down the **letter** of the most common type of fishing gear found in the Bahamas. _____ (1)

(c) (i) Poachers are people who capture fish by illicit or unfair means.
Write down the **letter** of the gear which would be most convenient for poachers? _____(1)

(ii) Explain your answer.

(d) Which fishing gear is most destructive? _____(1)

(e) Give TWO reasons for your answer.

1.

2. _____(2)

(f) (i) Name ONE of the main fishing areas in the Bahamas. _____(1)

(ii) What is over fishing?

(iii) How can you tell if there has been over fishing in an area? _____(1)

(g) Q is used to capture lobsters. However, lobsters may only be captured legally during a season.

Explain how this restriction attempts to prevent the extinction of lobsters.

26. Free response question / *Answer on folder sheets.* _____(2)

(a) List TWO legal methods used to capture lobsters in the Bahamas and give ONE advantage of each method. _____(4)

(b) What are the disadvantages of using
(i) a net and _____(3)
(ii) a hook and line _____(3)
to capture fish near a coral reef?

(c) (i) Explain how ONE illegal method of fishing in the Bahamas may result in the over fishing of marine animals. _____(4)

(ii) Discuss how discharging untreated sewage into the sea may affect humans. _____(6)