



AEQVAM SERVARE REGEM

SASTRI COLLEGE
NATURAL SCIENCES
GRADE 8
MARCH CONTROL TEST 2020



Examiner : G Pillay
Moderator: R C Jivan

Duration: 1 hour
Marks: 60

INSTRUCTIONS

- Answer ALL the questions.
- Number the answers correctly according to the numbering system used in this paper.
- All drawings should be done in pencil and labelled in blue or black.
- Check that this paper has EIGHT (4) pages of print and 6 questions.

Question One

1.1 The reactants for respiration are...

- A. Glucose and oxygen
- B. Carbon dioxide and water
- C. Glucose and energy
- D. Energy and water

1.2 An example of a biotic factor is:

- A. Temperature
- B. Competition
- C. Wind
- D. Soil

1.3 An ecosystem can be ...

- A. Large and small
- B. Large only
- C. Small only
- D. Medium in size only

1.4 An example of a producer is ...

- A. Bear
- B. Grasshopper
- C. Sunflower
- D. Vulture

1.5 An insectivore is a type of ...

- A. Producer
- B. Herbivore
- C. Carnivore
- D. Omnivore

1.6 The result of allowing alien plants to grow is ...

- A. They always make the area look more beautiful.
- B. They have no effect.
- C. They will die from being in an unknown environment.
- D. They compete for resources with indigenous plants.

[6]

Question Two

Match Column A with Column B. Indicate the correct answer by writing down the alphabet of your choice next to the question numbers (2.1 – 2.10).

COLUMN A	COLUMN B
2.1 Producer	A. A particular area where plants and animals interact.
2.2 Predators	B. Organisms that feed on dead decaying material.
2.3 Decomposers	C. How steep an area is.
2.4 Herbivores	D. Animals that feed on other animals that are already dead.
2.5 Scavengers	E. Go into a deep sleep.
2.6 Omnivores	F. Organisms that make their own food.
2.7 Slope	G. Animals that hunt and kill prey for food.
2.8 Hibernation	H. Made up of different populations in the same area.
2.9 Community	I. Animals that eat both plants and animals.
2.10 Ecosystem	J. Animals whose only source of food is plants.
	K. They compete for resources with indigenous plants.
	L. Primary consumer.

[10]

Question Three

The table below shows the number of honey bees on a farm in South Africa over a period of time. Study the table carefully and then answer the questions which follow.

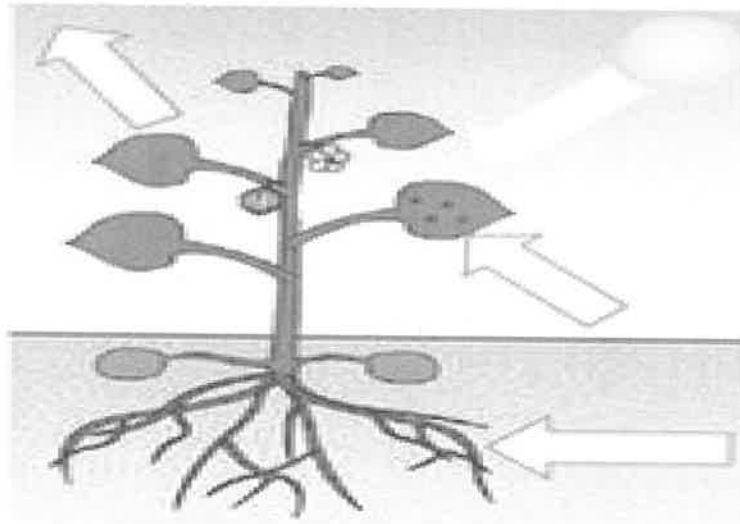
YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BEES (X10,000)	100	96	90	84	48	41	33	26	19	10	5

- 3.1 Construct a line graph which illustrates the data presented in the table. (6)
- 3.2 Suggest a reason for the changing numbers of bees over the time period from 2000 to 2010. (2)
- 3.3 Identify the independent variable. (1)
- 3.4 Give the hypothesis for this investigation. (2)

[11]

Question Four

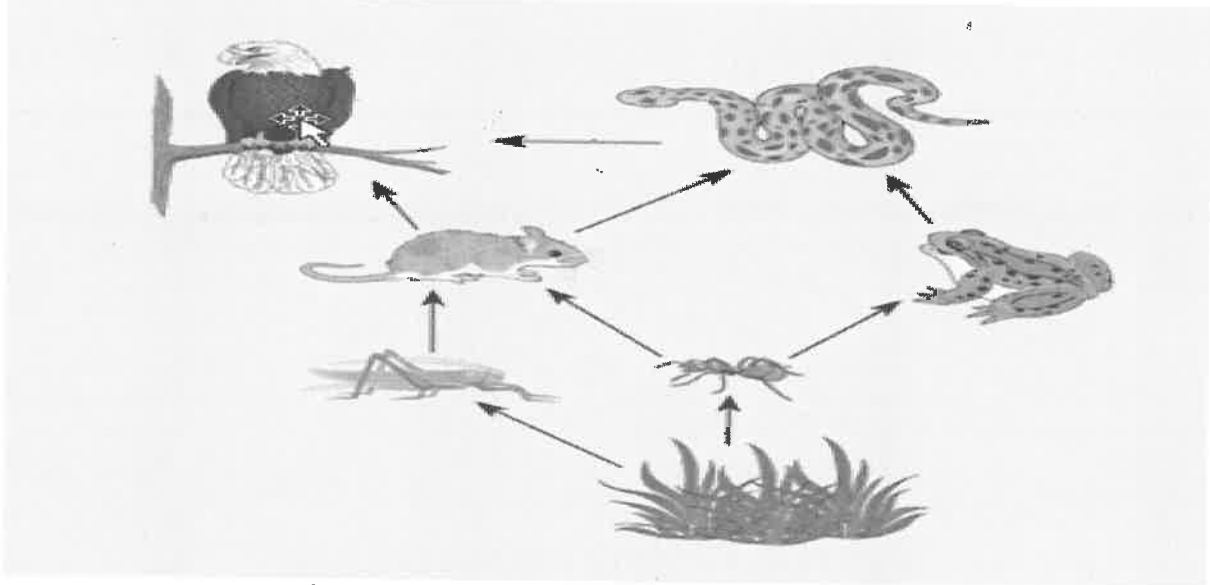
Green (chlorophyll-containing) plants photosynthesise when exposed to light.



- 4.1 Give two other requirements of photosynthesis. (2)
- 4.2 What substances are produced during photosynthesis? (2)
- 4.3 Your friend says that only sunlight is needed for photosynthesis. You think that artificial light will also work. Write out an investigation that you could conduct to test your ideas. (5)
- [9]**

Question Five

5. Study the food web below and answer the questions that follow.



(ONLY USE ORGANISMS FROM THIS FOOD WEB)

- 5.1 Explain what the arrows in the food web represent. (1)
- 5.2 Explain what would occur if the mice population increased. (3)
- 5.3 Name:
- 5.3.1 Two primary consumers (2)
- 5.3.2 Two secondary consumers (2)
- 5.4 Draw a possible energy pyramid to represent this food web. (5)
- 5.5 Explain why you have drawn the energy pyramid in 5.4 in this shape. (2)

[15]

Question Six

- 6.1 Name two Human diseases caused by viruses. (2)
- 6.2 State one difference between a viruses and bacteria. (2)
- 6.3 What role do bacteria play in the human intestines? (2)
- 6.4 List THREE precautions that can be taken to prevent the spread of diseases. (3)

[9]

TOTAL - 60

