

#### AI TONG SCHOOL

# 2006 SEMESTRAL ASSESSMENT (2) PRIMARY THREE SCIENCE

DURATION: 1hr 30 min

DATE: 31st October 2006

#### **INSTRUCTIONS**

Do not open the booklet until you are told to do so. Follow all instructions.

Answer all questions.

| Name :( )           |       |     |
|---------------------|-------|-----|
| Class: Primary      | MARKS |     |
| Parent's Signature: |       | 100 |
| Date :              |       |     |

## Section A: Multiple-Choice Questions (60 marks) Choose the correct answer and shade its number (1, 2, 3 or 4) in the Optical Answer Sheet (OAS) provided.

1. Kelly listed the following animals according to their outer body covering. Which one of the animals does not match the outer body covering?

|     | Animal     | Outer body covering |
|-----|------------|---------------------|
| (1) | polar bear | hair                |
| (2) | kiwi       | feathers            |
| (3) | lobster    | shell               |
| (4) | frog       | scales              |

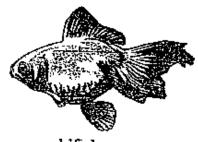
- 2. Tom saw an animal and thought it was an insect. How could he be sure that the animal was an insect? It would have
  - (1) wings
  - (2) three pairs of legs
  - (3) a head and an abdomen only
  - (4) the ability to reproduce by laying eggs
- 3. Aili classified the following things as fruits. Her sister said that she has classified one of them wrongly. Which one was it?

|     | Fruits |
|-----|--------|
| (1) | Papaya |
| (2) | Сагтот |
| (3) | Mango  |
| (4) | Tomato |

4. Ahmad grouped the following animals together. What was his reason for doing so?









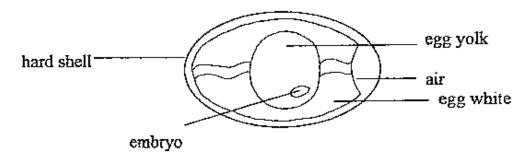


seahorse

| They |  |
|------|--|
|      |  |

- A live in water
- B feed on water plants
- C have fins for swimming
- D breathe through their gills
- (1) A only
- (2) A and B only
- (3) A, C and D only
- (4) A, B, C and D
- 5. In what ways are the life cycles of a chicken and a cockroach similar?
  - A There are three stages.
  - B The young looks like its parents.
  - C The young moults several times.
  - D The eggs are left to hatch on their own.
  - (1) A only
  - (2) A and B only
  - (3) B and C only
  - (4) C and D only

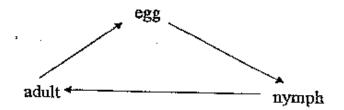
- 6. At which stage of the butterfly's life cycle does it moult?
  - (1) egg
  - (2) larva
  - (3) pupa
  - (4) adult
- 7. Which one of the following plants does not grow from seeds?
  - (1) apple
  - (2) chilli
  - (3) tapioca
  - (4) watermelon
- 8. The diagram below shows a fertilised chicken egg.



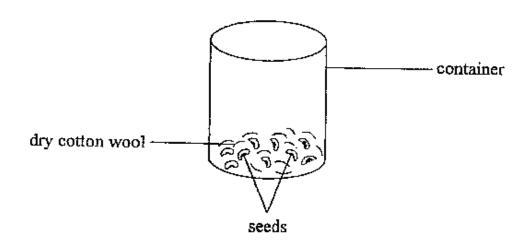
Which part of the egg will develop into a chick under the right conditions?

- (1) етвгуо
- (2) egg yolk
- (3) hard shell
- (4) egg white

9. Which one of the following animals has a life cycle similar to the one shown below?



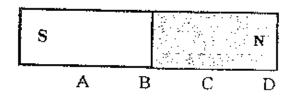
- (i) toad
- (2) moth
- (3) beetle
- (4) dragonfly
- Muthu prepared the set-up as shown below so that the seeds would germinate. He placed the container on a table near the window.



What was wrong with his set-up?

- (1) There was no water.
- (2) There was no sunlight.
- (3) There was not enough air.
- (4) There were too few seeds.

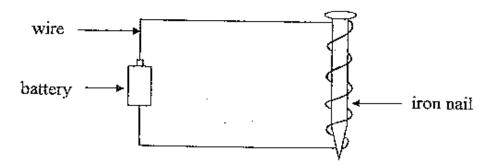
- 11. Which one of the following objects makes use of magnets?
  - (1) water bottle
  - (2) refrigerator
  - (3) basketball
  - (4) battery
- 12. Fatimah brought a magnet close to a spoon. What material would the spoon have to be made of for it to be attracted to the magnet?
  - (1) plastic
  - (2) wood
  - (3) silver
  - (4) steel
- 13. Alan has a bar magnet as shown below. He holds it from one end and brings it close to a pile of needles.



Which part of the magnet will attract the most number of needles?

- (1) A
- (2) B
- (3) C
- (4) D

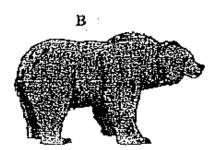
 Dehua prepared a set-up of an electromagnet as shown below. He wanted to increase the strength of the electromagnet.



Which of the following things should he do?

- A Use a longer nail,
- B Use more batteries.
- C Increase the length of the wires.
- D Increase the number of coils of wire around the nail.
- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) B and D only
- 15. Ali observed that B is an organism because it can move on its own and respond to changes. How else can he prove that it is an organism?

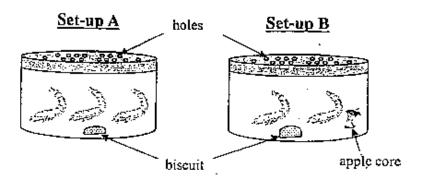




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|----|--|
|    |  |
|    |  |

- (1) is heavy
- (2) takes up space
- (3) can grow bigger
- (4) can float on water

16. Kym wants to find out if an animal needed water to stay alive and develop into adults. She has two set-ups as shown in the diagrams below. Her teacher said that there was a <u>mistake</u> in the set-ups.



| What was the mistake in the experiment? |  |
|---|--|
| There should be                         |  |

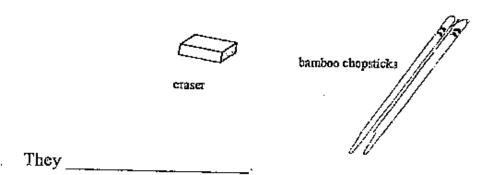
- (1) an apple core in Set-up A
- (2) three animals in Set-up B
- (3) a bigger container for Set-up A
- (4) two containers of water in both set-ups
- 17. Based only on your observation of the diagrams below, how are the two things similar?



Both \_\_\_\_\_

- A feed on plants
- B have three body parts
- C have two pairs of wings
- D are colourful organisms
- (1) Bonly
- (2) B and C only
- (3) A and D only
- (4) A, C and D only

#### 18. What are the common properties of the things shown below?



- A are non-living things
- B can respond to changes
- C are made of only one material
- D are made of things that were once alive
- (1) A only
- (2) B and C only
- (3) A and D only
- (4) A, C and D only
- 19. Kelvin placed two slices of bread each on a dish. He observed the changes to the bread after four days and recorded his results below.

| <u></u> . | Changes to th                | e bread   |
|-----------|------------------------------|-----------|
|           | Slice A                      | Slice B   |
| DAY 1     | no change                    | no change |
| DAY 2     | tiny dots                    | no change |
| DAY 3     | white patches, slight smell  | no change |
| DAY 4     | green patches, smelly        | no change |
| DAY 5     | mushy, black patches, smelly | no change |

What are the reasons for the results shown above?

- A Slice A was moist.
- B Slice B was toasted and dry.
- C Bread mould was growing on Slice A.
- (1) A only
- (2) A and B only
- (3) B and C only
- (4) A, B and C

20. Siti classified 'fungi' in Group Y. Her teacher said she had grouped it correctly.

| Group X  | Group Y     |
|----------|-------------|
| bacteria | puff balls  |
| yeast    | bread mould |

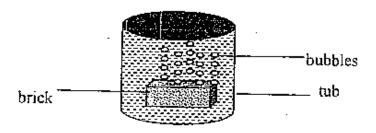
| What is the teacher's reason | ? Fungi |  |
|------------------------------|---------|--|
|                              |         |  |

- (1) is a plant
- (2) can make food
- (3) is a micro-organism
- (4) reproduces by spores
- 21. Some characteristics of an organism are listed below.
- · It is a living thing.
- It reproduces by spores.
- It cannot make its own food.
- It usually grows on dead plants.

What is the organism?

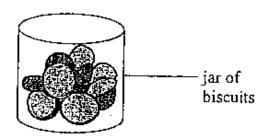
- (1) Moss
- (2) Fern
- (3) Algac
- (4) Mushroom

22. Bob put a brick into a tub of water and saw <u>bubbles</u> coming out of the brick as shown below. He recorded his observations and made some statements about the brick.



Which statement is correct? The brick \_\_\_\_\_

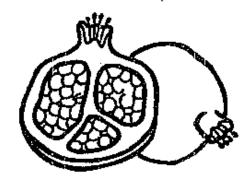
- \_\_\_\_\_
- (1) has air in it
- (2) is made of clay
- (3) does not float in water
- (4) is a non-living thing that was never alive
- 23. Kate could see that the jar below contained some biscuits.



Which property of glass helped her to see the biscuits? It is \_\_\_\_\_\_.

- (1) hard
- (2) breakable
- (3) waterproof
- (4) transparent

- 24. Which one of the following objects is light and makes a soft sound when it is dropped from a height?
  - (1) Feather
  - (2) Basketball
  - (3) Glass beaker
  - (4) Ten-cent coin
- 25. By looking at the picture shown below, what can you tell about the fruit?

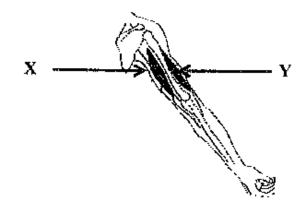


- (1) is very sweet and juicy
- (2) is green in colour
- (3) grows in a bunch
- (4) has many seeds
- 26. John wanted to find out whether a yellow mango or a green mango was sweeter. Which one of the following senses does he need to use?
  - A Taste
  - B Sight
  - C Touch
  - D Hearing
  - (1) A and B only
  - (2) B and C only
  - (3) C and D only
  - (4) A, B and C only
- 27. What is the function of the stem in a plant?
  - (1) Protect the plant from diseases and harm.
  - (2) Hold the plant upright and supports the branches and leaves.
  - (3) Use the carbon dioxide in the air and sunlight to make food.
  - (4) Help the plant to take in oxygen and give out carbon dioxide.

- 28. In which parts of the digestive system is food broken down?
  - A mouth
  - B stomach
  - C large intestine
  - D small intestine
  - (1) A and B only
  - (2) B and C only
  - (3) A, B and D only
  - (4) B, C and D only
- 29. The diagram below shows the right hand arm when it is bent.



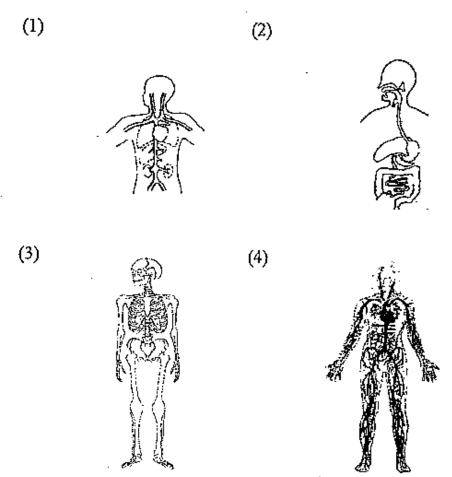
The diagram below shows the right hand arm when it is straightened.



Which one of the following shows the correct behaviour of the muscles when the right arm is straightened?

|     | Muscles X | Muscles Y |
|-----|-----------|-----------|
| (1) | contracts | contracts |
| (2) | relaxes   | relaxes   |
| (3) | contracts | relaxes   |
| (4) | relaxes   | contracts |

30. Which one of the following systems takes in and breaks down food into simpler substances?

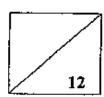


Section B: Completing Sentences (20 marks)
Complete the sentences below with the correct answer from the box.
Use each word ONCE only.

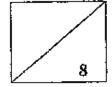
| flying        | growth   | colour    | heating        |
|---------------|----------|-----------|----------------|
| flightless    | moulting | interacts | attract        |
| stroking      | repel    | fabric    | shape          |
| mineral salts | wood     | thread    | carbon dioxide |

4.35

- 34. When a magnet is attracted to an object, we say it \_\_\_\_\_ with the object.
- 35. Like poles of two magnets \_\_\_\_\_ each other.
- 36. \_\_\_\_\_ a magnet will cause it to become weaker,

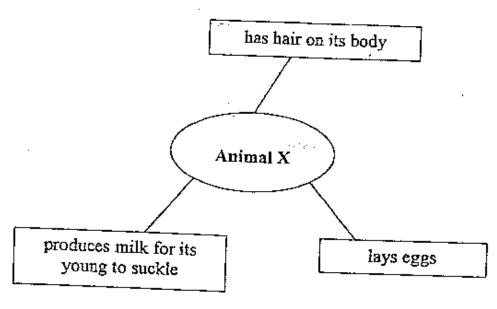


| 37. | Plasticine changes its   | when moulded.       |  |  |
|-----|--|---------------------|--|--|
| 38. | A handkerchief wrinkles up when crumpled be soft                     | cause it is made of |  |  |
| 39. | The handle of a mop is usually made ofits strands are made of cloth. | bu                  |  |  |
| 40. | A plant takes in   | and gives off       |  |  |



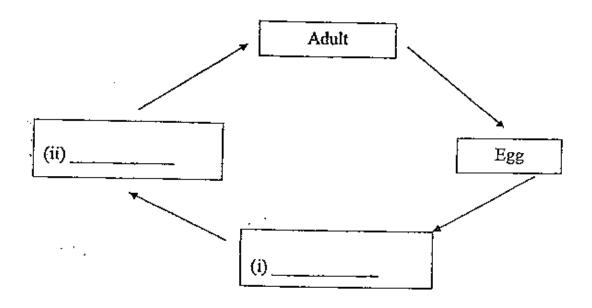
Section C: Open-ended Questions (20 marks)
Read questions 41 to 45 below carefully and write your answers in the spaces

41. The diagram below describes an animal.



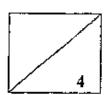
| a) | Which group of animals does Animal X belong to?  | [1  |
|----|--|-----|
| ь) | Name Animal X.   | [1] |
| c) | Name ONE other animal which belongs to the same group as Animal X but does not lay eggs. | [1] |
| d) | How does the animal you named in (c) reproduce?  | [1] |
| _  |  | =   |

42. The diagram below shows the life cycle of a mosquito.



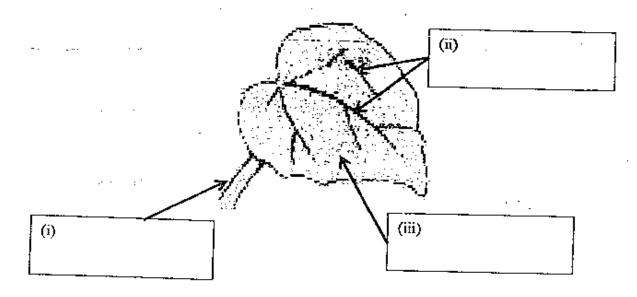
| [2] |
|-----|
|     |

- b) Where do mosquitoes lay their eggs? [1]
- c) At which stage of its life cycle is the mosquito harmful to humans? [1]



|  | <del></del>          |
|--|----------------------|
|  |                      |
|  |                      |
| John wanted to buy a stool made of wood.         |                      |
|  |                      |
| What properties of wood should John check for    | r?                   |
| ( Tick / the correct boxes. )                    |                      |
| It is hard.                                      |                      |
| It is strong.                                    | ·                    |
| It is durable.                                   |                      |
| It is flexible.                                  |                      |
| stead of using wood to make the stool, what othe | r materials can John |
| aterial :  |                      |
| aterial:   |                      |
|  |                      |

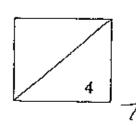
45 a) The diagram below shows a leaf. Label the different parts of the leaf. [3]



b) Name the process by which a leaf makes food.

[1]

### END OF PAPER PLEASE CHECK YOUR WORK CAREFULLY



### Answer Sheets Ai Tong Pri 3 SA2 / 2006 Science

| 1)<br>6)   | 2)<br>7)   | 3)<br>8)   | 4)<br>9)   | 5)<br>10)  |  |
|------------|------------|------------|------------|------------|--|
| 11)<br>16) | 12)<br>17) | 13)<br>18) | 14)<br>19) | 15)<br>20) |  |
| 21)<br>26) | 22)<br>27) | 23)<br>28) | 24)<br>29) | 25)<br>30) |  |

- Q31. Emus have wings but are **flightless** birds.
- Q32. The nymph of a cockroach has a hard body covering that is shed during moulting.
- Q33. The roots of a plant take in water and minerals salts from the soil.
- Q34. When a magnet is attracted to an object, we say it **interacts** with the object.
- Q35. Like poles of two magnets <u>repels</u> each other.
- Q36. Heating a magnet will cause it to become weaker.
- Q37. Plasticine changes its shape when moulded.
- Q38. A handkerchief wrinkles up when crumpled because it is made of soft fabric.
- Q39. The handle of a mop is usually made of **wood** but its stands are made of cloth.
- Q40. A plant takes in <u>carbon dioxide</u> and gives off oxygen during the day when there is sunlight.
- Q41a. Animal X belongs to mammals.
  - b. Spiny anteater.
  - c. Lion
  - d. It reproduces by giving birth to its young.

- (ii) Pupa
- b. Its lay eggs in the pond on stagnant water.

 $\{\hat{\mathbf{w}}_{i,j}\}_{i=1}^{n}$ 

- c. Adult stage of the life cycle.
- Q43a. It does not need air, water and food.
  - b. It cannot reproduce.
- Q44a. It is hard
  It is strong
  It is durable
  - b. Material : Plastic Material : metal

Q45a



- (i) Lcaf stalk
- (ii) Leaf veins
- (iii) Leaf blade
- b. By photosynthesis.