READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This test has 50 questions. You have 1 hour 15 minutes to answer them.
2. Each question has three possible answers: (A), (B), (C).
3. Read each question carefully then choose the correct answer.
4. On your answer sheet, find the number that corresponds to the question you intend to answer.
5. Shade the circle which has the same letter, A, B or C, next to the answer you have chosen.

Sample Question
Which part of the flower contains the pollen grains?

(A) Style
(B) Ovary
(C) Anther

The correct answer to this question is “Anther”, so answer space (C) has been shaded.

6. If you want to change your answer, be sure to erase your old answer completely before you fill in your new choice.
7. When you are told to begin, turn the page and work as quickly and as carefully as you can.
8. If you try a question and find that you cannot answer it, leave it and go on to the next one. You can go back to that question later.
9. The answer sheet has more spaces than there are questions on this test. Do NOT shade any of the extra spaces.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

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1. Sam observes dark, low clouds in the sky. He can conclude that the weather will be
   (A) sunny
   (B) rainy
   (C) windy

2. The amount of water vapour which is present in the atmosphere is called
   (A) moisture
   (B) humidity
   (C) temperature

3. Donna observes that the water level in her fish tank has fallen. The change is due to
   (A) evaporation
   (B) conservation
   (C) condensation

4. Which of the following types of soil retains the greatest amount of water?
   (A) Clay
   (B) Sand
   (C) Loam

5. Which of the following materials should be added to a poor soil type to make it better for growing crops?
   (A) Clay
   (B) Sand
   (C) Humus

6. Which of the following is an example of a NON-REVERSIBLE change?
   (A) Burning
   (B) Freezing
   (C) Condensation
7. When water vapour rises into the atmosphere, it condenses. The condensed moisture is known as
   (A) rain
   (B) snow
   (C) clouds

8. The movement of soil particles, by the wind, from an area with no vegetation to another area is called soil
   (A) erosion
   (B) engineering
   (C) landscaping

9. The rocks found in a volcanic region are MOST likely
   (A) igneous
   (B) metamorphic
   (C) sedimentary

10. After a bush fire, replanting trees on a hillside will
    (A) increase flooding
    (B) prevent soil erosion
    (C) encourage soil erosion

11. The sun does NOT provide the earth with
    (A) light
    (B) heat
    (C) oxygen

12. George wanted to get a closer look at the moon. He used a
    (A) telescope
    (B) periscope
    (C) microscope
13. Which of the following statements describes the movement of the sun, earth and moon?

(A) The sun and the moon revolve around the earth.
(B) The sun revolves around the moon; the moon revolves around the earth.
(C) The moon revolves around the earth; the earth revolves around the sun.

14. Three things that produce light are

(A) sun, stars, fire
(B) sun, mirror, tin
(C) sun, moon, stars

15. In which of the following conditions will tomato seeds germinate fastest?

(A) Dry cotton wool in a container in a refrigerator
(B) Dry cotton wool in a container in a cupboard
(C) Wet cotton wool in a container in a cupboard

16. Seeds found in fleshy fruits are usually dispersed by

(A) wind
(B) water
(C) animals

17. Which structure of the flower represents the stamen?

(A) L
(B) M
(C) N
Question 18 refers to the diagrams below.

Snake  Earthworm  Frog

18. Which animal does NOT have a skeleton inside its body?

(A) Frog  (B) Snake  (C) Earthworm

19. Which part of the flower protects it when it is in the bud?

(A) Petal  (B) Sepal  (C) Stamen

Questions 20–22 refer to the diagram of an open pea pod shown below.

20. Structure Z is used to

(A) protect the flower  (B) attract birds and bees  (C) grow into a new plant

21. From which part of the flower does Structure Y develop?

(A) Petal  (B) Ovary  (C) Anther

22. The pea is MOST likely dispersed by

(A) fire  (B) water  (C) explosive action
Questions 23–24 refer to the diagram of a plant.

23. The MAIN function of the structure labelled II is to
   (A) make food
   (B) absorb water
   (C) attract insects

24. Which labelled structures represent the shoot system of the plant?
   (A) I, III, IV
   (B) I, II, III
   (C) II, III, IV

25. Which of the following statements about the roots of plants is FALSE?
   (A) Some roots are good to eat.
   (B) Mango trees have tap roots.
   (C) Plants store water and oxygen in their roots.
26. Which order below correctly describes the life cycle of a butterfly?

(A) Egg → pupa → larva → adult
(B) Egg → larva → pupa → adult
(C) Pupa → larva → egg → adult

27. Ana liked an unusual plant and wanted to get a plant identical to the one she liked. What is the BEST method of propagating this plant?

(A) Use cuttings
(B) Make grafts
(C) Use budding

28. Which of the following systems is responsible for taking gases out of the body?

(A) Circulatory
(B) Respiratory
(C) Reproductive

29. Which of the following words does NOT relate to volcanoes?

(A) Lava
(B) Crater
(C) Cirrus

30. The MAIN organs of the nervous system are the

(A) brain, heart, intestine
(B) brain, spinal cord, nerves
(C) spinal cord, arteries, veins
Questions 31–32 refer to the diagram of a food chain below.

Aquatic plants → Tadpoles → Water beetles → Large fish

31. Which organism in the food chain is a producer?

(A) Large fish
(B) Water beetles
(C) Aquatic plants

32. If all the tadpoles die, which organisms in the food chain will be directly affected?

(A) Large fish and water beetles
(B) Aquatic plants and water beetles
(C) Aquatic plants and water beetles

Questions 33–35 refer to the graph below which shows the percentage of gases given off by vehicles which pollute the air in three towns, P, Q and R.

33. In Towns P and R a large number of persons are MOST likely to suffer from

(A) sore throat
(B) back pain
(C) breathing difficulties

34. The amount of pollution which is present in Town R may be decreased by persons riding

(A) bicycles
(B) trains
(C) motorcycles
35. Which town has the LEAST amount of pollution?

(A) P  
(B) Q  
(C) R

**Question 36** refers to the table below which shows three ways in which Mrs. James plans to dispose of waste materials.

<table>
<thead>
<tr>
<th>Method</th>
<th>Material</th>
<th>Disposal Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tree leaves, vegetable peels</td>
<td>Composting</td>
</tr>
<tr>
<td>2</td>
<td>Plastic bags, vegetable peels</td>
<td>Recycling</td>
</tr>
<tr>
<td>3</td>
<td>Tree leaves, plastic bags</td>
<td>Landfill</td>
</tr>
</tbody>
</table>

36. Which disposal method is MOST appropriate for the materials given?

(A) 1  
(B) 2  
(C) 3

**Questions 37–38** refer to the table below which shows the effects of different materials used in a closed electrical circuit.

<table>
<thead>
<tr>
<th>Material</th>
<th>Bulb lights up</th>
<th>Bulb does not light up</th>
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<tbody>
<tr>
<td>Cotton</td>
<td>√</td>
<td></td>
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<tr>
<td>Plastic</td>
<td></td>
<td>√</td>
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<tr>
<td>Copper wire</td>
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<tr>
<td>Steel</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Wood</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

37. Which of the following materials are conductors?

(A) Cotton and plastic  
(B) Copper wire and steel  
(C) Cotton, plastic and wood

38. Which of the following materials may be used to prevent electrical shock?

(A) Plastic  
(B) Steel  
(C) Copper wire
39. Which of the following statements about magnets is FALSE?

(A) Every magnet has two poles.
(B) A south pole attracts a north pole.
(C) The magnetic force is weakest at the poles.

Questions 40–41 refer to the diagram below, which shows a boy using a lever to move a heavy stone.

40. What should the boy do to lift the stone off the ground?

(A) Lift the iron bar at R.
(B) Push down the iron bar at R.
(C) Remove the wedge-shaped object at Q.

41. The point Q is called the

(A) effort
(B) anchor
(C) fulcrum

42. Which of the following tools can BEST be used to place a 20-litre drum on a truck?

(A) A spade
(B) A crowbar
(C) An inclined plane

43. Which of the following is the unit of force?

(A) Joule
(B) Newton
(C) Degree
44. A covered pot half-filled with water, was placed over a fire. After a few minutes, the cover was removed and droplets of water were seen on the inside of the cover. The BEST explanation for the droplets is that

(A) water bubbled onto the cover
(B) steam condensed on the cover
(C) the water rose to the level of the cover

45. Which of the following sequences represents a good safety practice when using an electric kettle?

(A) Fill kettle → dry hands → plug in kettle
(B) Plug in kettle → fill kettle → dry hands
(C) Dry hand → plug in kettle → fill kettle

Question 46 refers to the following diagram which shows a ruler and a piece of string.

![Ruler and string diagram]

46. The length of the string, in cm, is

(A) 4
(B) 5
(C) 7
Questions 47–49 refer to the diagrams below.

47. Five grams of sugar were added to each beaker and stirred at the same rate.
   In which beaker will the sugar dissolve the fastest?
   (A) Beaker 1  
   (B) Beaker 2  
   (C) Beaker 3

48. A thermometer was later placed in each of the beakers; the temperature readings are shown below.

   ![Thermometers](image)

   Thermometer 1  
   Thermometer 2  
   Thermometer 3

   Which of the thermometers above would indicate the temperature in Beaker 2?
   (A) 1  
   (B) 2  
   (C) 3

49. The mass of sugar which was added to the beakers was MOST likely measured using a

   (A) ruler  
   (B) balance  
   (C) thermometer
Equal amounts of sand, sugar and salt are added to three separate containers with water at 100°C. Each mixture is stirred for two minutes then allowed to stand.

Which of the following predictions is accurate?

(A) All three substances will dissolve at the same rate.
(B) The sugar and salt will dissolve but the sand will not.
(C) The sugar and sand will both dissolve but the salt will not.

END OF TEST

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.
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<th>Topic</th>
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