

55/1
Science
Paper 1
July
2006
1 hour



Set 2

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PENILAIAN MENENGAH RENDAH 2006

Learning To Score

SCIENCE

Paper 1

1 hour

DO NOT OPEN THE QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO

1. This question paper consists of 40 questions.
2. Answer **all** questions.
3. Answer each question by blackening the correct space on the answer sheet.
4. Blacken only one space for each question.
5. If you wish to change your answer, erase the blackened mark that you have made. Then blacken the space for your new answer.
6. The diagrams in the questions provided are not drawn to scale unless stated.
7. You may use a **non-programmable** scientific calculator.

This question paper consists 19 printed pages.

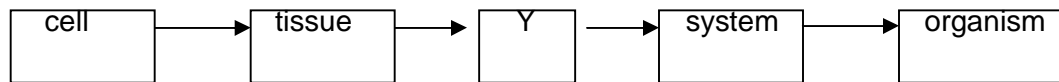
Answer **all** questions

- 1 The figure shows an apparatus that is found in the laboratory.



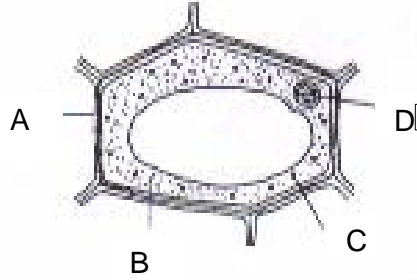
What is this apparatus used for?

- A To heat chemicals
 - B To hold chemicals
 - C To store chemicals
 - D To display chemicals
- 2 The figure shows the cell organisation in an organism. What is Y?



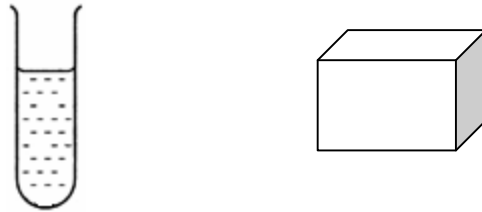
- A pancreas
- B ear drum
- C optic nerve
- D blood platelet

3 The figure shows the structures in a plant cell.



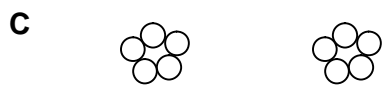
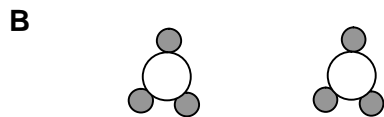
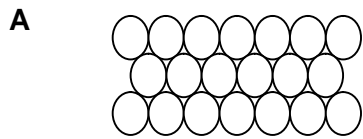
In which of the structures labelled **A**, **B**, **C** and **D**, does photosynthesis take place?

4 The similarity between liquid and solid is

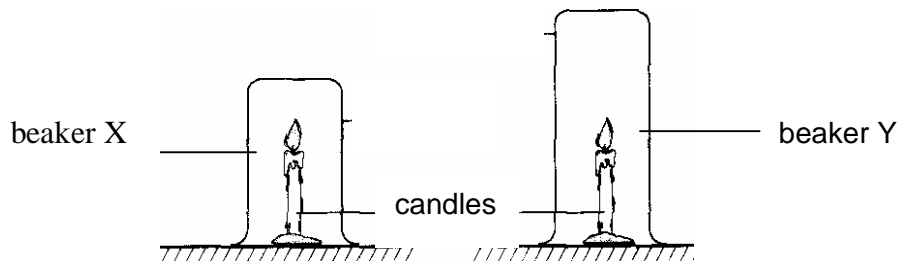


- A both have mass
- B both have shape
- C both have length
- D both can move freely

5 Which of the following substance is a compound?



6 Two similar candles were lighted and two beakers were inverted on them simultaneously as shown in the figure . The candle in beaker X will extinguish before the candle in beaker Y.



What inference can be made from this observation ?

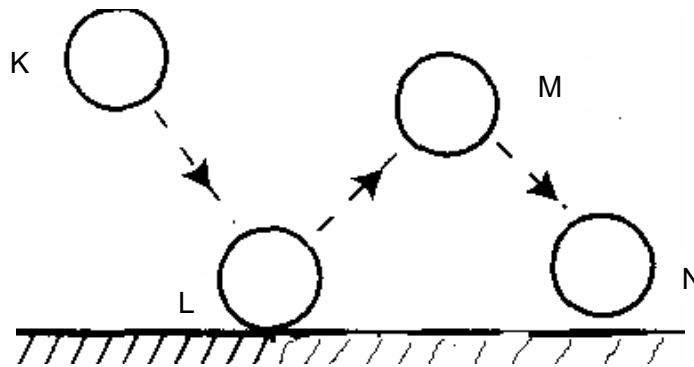
- A** The air pressure in beaker Y is higher than that in beaker X
- B** The content of oxygen in beaker X is lower than that in beaker Y
- C** The content of water vapour in beaker X is less than that in beaker Y
- D** The content of carbon dioxide in beaker Y is more than that in beaker X.

7 We must preserve and conserve the air in our environment so that

- I transpiration can occur
- II the environment is free from pollution
- III photosynthesis and respiration can take place

- A I and II only
- B I and III only
- C II and III only
- D I, II and III

8 The figure shows a ball being released from K to the floor and its subsequent movement.



Which of the following is true?

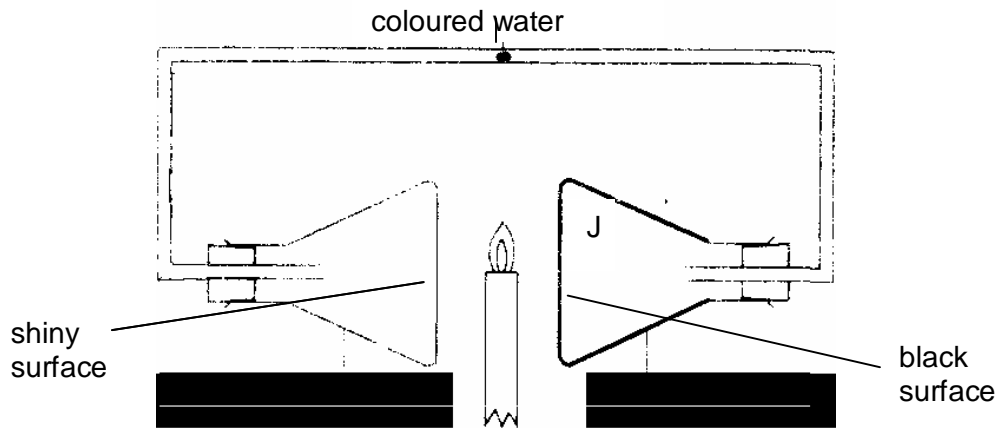
- A The ball has no energy at L
- B The ball has maximum potential energy at M
- C The ball has decreasing kinetic energy from M to N
- D The ball has increasing potential energy from L to M

9 Which steps help to overcome the problem of decreasing energy resources?

- I Use public transport
- II Use fluorescent light
- III Use more fossil fuels

- A I only
- B I and II only
- C II and III only
- D I, II and III

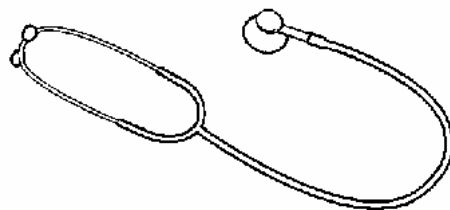
- 10 An experiment was set up as shown in the figure . It was noticed that the coloured water marker in the tube has moved towards flask J



The experiment shows that

- A the black surface is a good radiator of heat
- B the shiny surface is a good reflector of heat
- C the shiny surface is a good absorber of heat
- D the black surface is a good absorber of heat

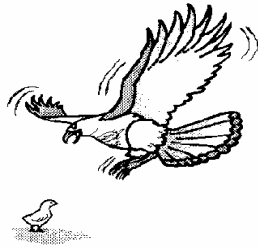
11



The figure shows a device which is used to overcome the limitation of

- A taste
- B sight
- C touch
- D hearing

- 12 The figure shows that an eagle is able to estimate distance accurately.



Which type of vision enables the eagle to catch its prey?

- A Blind spot
 - B Optical illusion
 - C Short-sightedness
 - D Stereoscopic vision
- 13 Which of the following disease is caused by the lack of vitamin A?
- A Scurvy
 - B Rickets
 - C Anaemia
 - D Night blindness
- 14 The table shows the results of food tests on a sample of food.

Food tests	Observation
Iodine test	Brownish colour
Benedict test	Brick-red precipitate
Emulsion test	Milky solution

What does the sample of food contained?

- A Glucose only
- B Glucose and fat only
- C Starch, glucose and fat
- D Starch and glucose only

- 15** A farmer plants some durian trees and rambutan trees on the same plot of land. The interaction between the two types of trees is known as

- A** parasitism
- B** mutualism
- C** competition
- D** commensalisms

- 16** The table shows three species of organisms in a certain habitat. The species are represented by M, N and O.

Organisms	Number of individuals
M	5
N	40
O	10

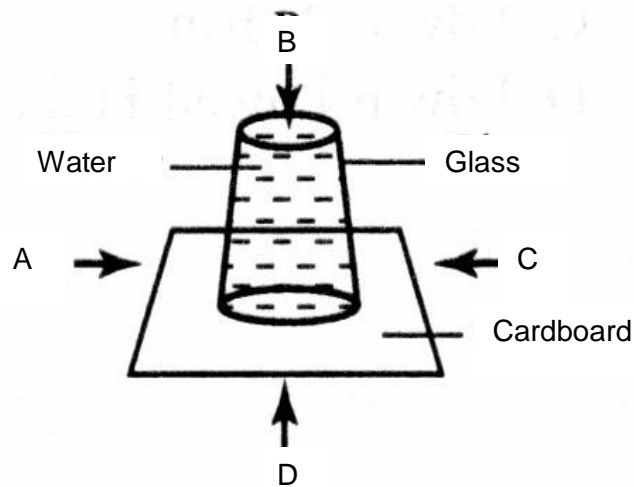
Which food chain shows the relationship between M, N and O correctly?

- A** $M \rightarrow N \rightarrow O$
 - B** $N \rightarrow O \rightarrow M$
 - C** $O \rightarrow N \rightarrow M$
 - D** $O \rightarrow M \rightarrow N$
- 17** Which of the following ways can destroy bacteria in a sample of water?
- I** By boiling the water
 - II** By filtering the water
 - III** By adding chlorine to the water
- A** I only
 - B** I, II and III
 - C** I and II only
 - D** II and III only

18 What is the freezing and boiling point of pure water

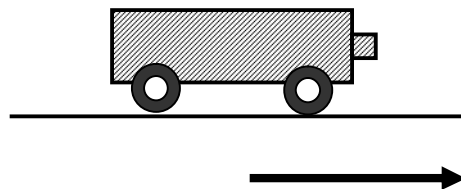
	Freezing point (° C)	Boiling point (° C)
A	0	100
B	Below 0	100
C	0	above 100
D	Below 0	above 100

19



The figure shows an inverted glass filled with water. Which of the arrows labeled A, B, C and D represents the atmospheric pressure that keeps the cardboard from falling off?

20 To increase the speed of the trolley shown in the figure, we can:



- A Use larger rollers on the trolleys.
- B Use a smaller trolley .
- C Decrease the mass of the trolley.
- D Apply a force on the trolley in the direction of its motion.

21 Which of the following animal has exoskeleton as it's support system?

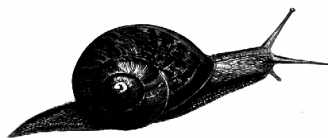
A



B



C



D



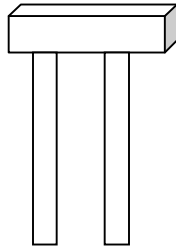
22



Which is the part of a plant that support to the cucumber?

- A Thorns
- B Tendrils
- C Buttress roots
- D Clasping roots

23 The figure shows an object that is unstable.



How can the object be made more stable?

- A Increase its mass.
- B Wider its base.
- C Decrease its volume.
- D Needs a large force to topple it.

24 In which of the following cases will the stability increase due to the increase in the base area?

- I The seal has a short heavy body.



- II An old man uses a walking stick to help him walk.



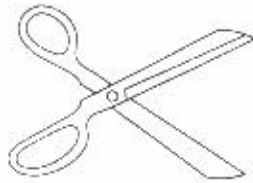
- III A giraffe will stand with its legs wide apart when it drinks water.



- A I, II and III.
- B I and II only.
- C I and III only.
- D II and III only.

- 25 Which of the following represent a third class lever?

I



II



III



- A I, II and III.
- B I and II only
- C I and III only
- D II and III only

26 The process in which oxygen reaches the alveoli then move into the surrounding blood capillaries during respiration is called

- A diffusion
- B circulation
- C exhalation
- D transportation

27 Ashraf can donate his blood to recipients of all blood groups that we called universal donors. What is Ashraf 's blood group?

- A Group A
- B Group B
- C Group O
- D Group AB

28 The figure shows blood capillaries in our body.



The walls are one cell thick

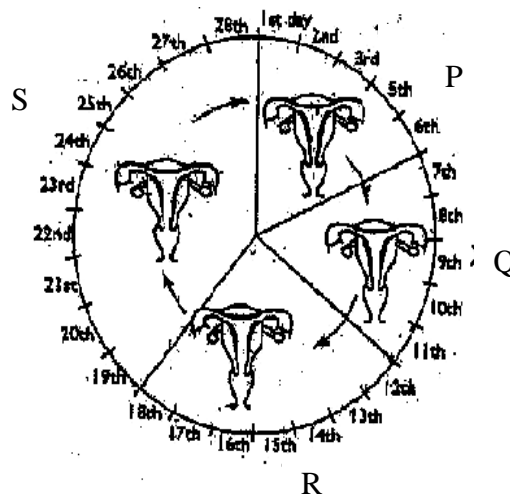
- A to ensure one-way flow of blood
- B to carry blood away from heart
- C to transport blood at a high pressure
- D to enables the exchange of gases and nutrients

29 Kidney failure can be treated through

- A dialysis
- B diffusion
- C peristalsis
- D blood transfusion

- 30 Excretion is important in keeping us healthy. Which of the following statements is true?
- A The excretion of water helps to control our body temperature
 - B The excretion of carbon dioxide helps to control the acidity of our blood
 - C The excretion of toxic substances such as urea prevents us from getting sick
 - D The excretion of excess mineral salts helps to increase our body's salt content

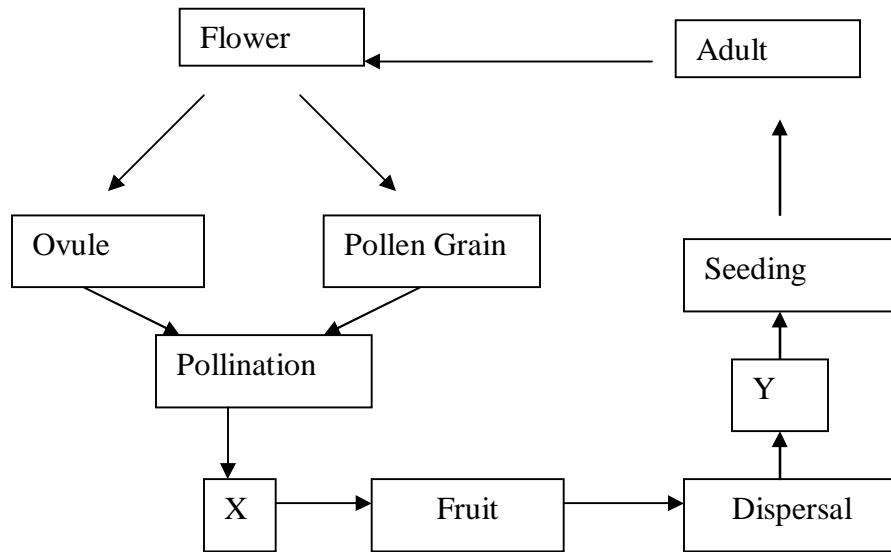
31 The figure shows a woman's menstrual cycle



At which stage of the cycle is the woman most fertile?

- A P
- B Q
- C R
- D S

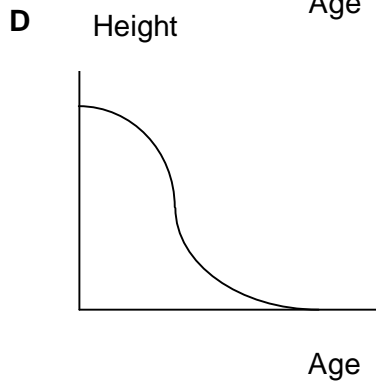
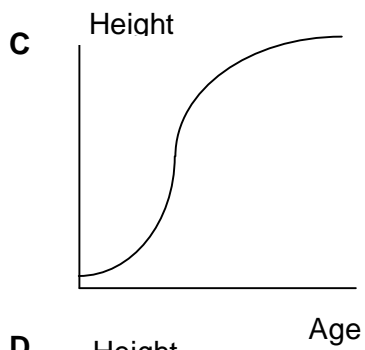
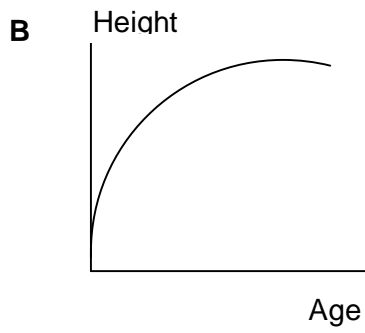
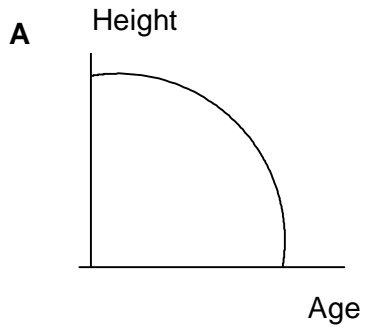
32 The figure shows the life cycle of a plant



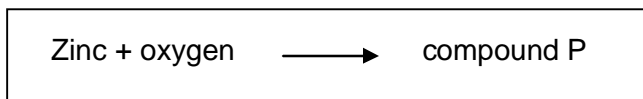
X and Y are two processes that take place in the life cycle of the plant. Which represents X and Y?

- | | X | Y |
|----------|---------------|---------------|
| A | Fertilisation | Pollination |
| B | Germination | Fertilization |
| C | Fertilisation | Germination |
| D | Germination | Pollination |

33 Which graph is correct about the growth rate of human?



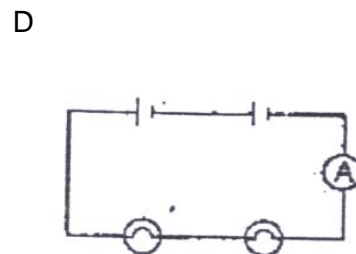
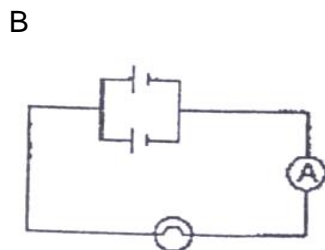
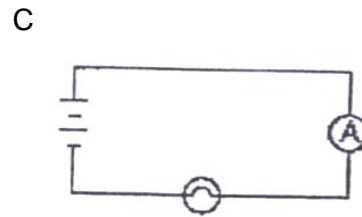
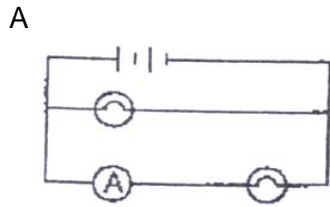
34



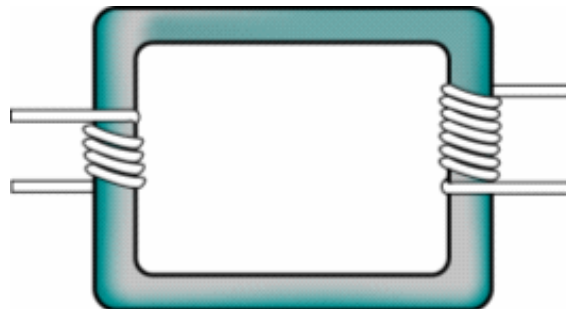
The equation above represent the reaction between zinc and oxygen. What is compound P ?

- A Zinc oxide
 - B Zinc chloride
 - C Zinc sulphide
 - D Zinc carbonate
- 35 The elements present in metal sulphides are
- A Iron and sulphur
 - B sulphur and carbon
 - C Carbon, sulphur and oxygen
 - D metal, carbon and oxygen
- 36 Which of the following gas is produced when an eggshell is put into dilute hydrochloric acid?
- A oxygen
 - B hydrogen
 - C carbon dioxide
 - D sulphur dioxide

- 37 Bulbs, an ammeter and a dry cell are connected in the following circuits. Which circuit will show the highest ammeter reading?



- 38 The figure shows a transformer.



What is it used for?

- A To produce a strong magnetic field.
- B To convert direct current into alternating current
- C To increase the voltage of an alternating current
- D To decrease the voltage of an alternating current

- 39**
- Outermost layer
 - A thin layer of gas
 - Has a temperature of about 2 million °C

Which phenomena that occurs on the sun surface is described?

- A** Flares
 - B** Corona
 - C** Sunspots
 - D** Prominences
- 40** The first reusable manned spacecraft is
- A** Sputnik 1
 - B** Sputnik 2
 - C** Sputnik 3
 - D** Space Shuttle

END OF QUESTION PAPER