

# UASA Model Paper Form 2

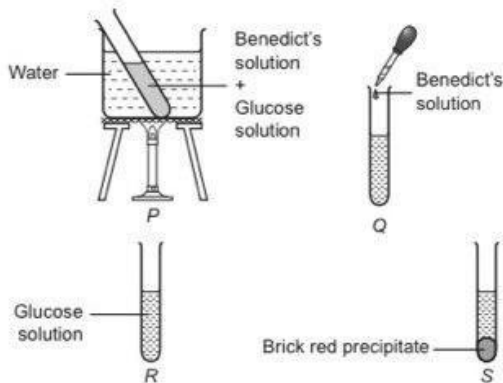
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## Section A

[20 marks]

Answer all questions in this section.

1. The diagram below shows four steps, P, Q, R and S to test the presence of glucose.



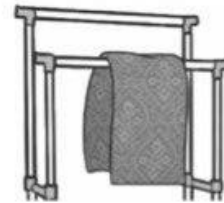
Which sequence shows the correct steps of the test?

- A  $R \rightarrow P \rightarrow Q \rightarrow S$   
 B  $R \rightarrow Q \rightarrow S \rightarrow P$   
 C  $R \rightarrow P \rightarrow S \rightarrow Q$   
 D  $R \rightarrow Q \rightarrow P \rightarrow S$
2. The calorific value of rice is 20 kJ / g. Calculate the calorific value in 100 g of rice.  
 A 0.2 kJ  
 B 50 kJ  
 C 200 kJ  
 D 2000 kJ
3. Which of the following is true about the advantages and disadvantages of a biological control method?

	Advantages	Disadvantages
A	Harmful to the environment	The slower method
B	The slower method	Harmful to the environment

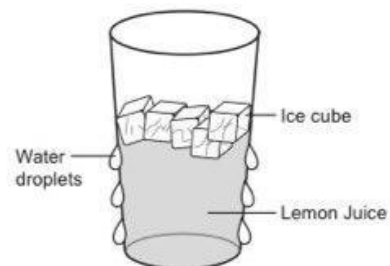
C	Cheap and economical	Harmful to the environment
D	Cheap and economical	The slower method

4. The diagram below shows a piece of towel hanging on a towel rail.



Which of the following factors will cause the towel to dry faster?

- A The slower air movement  
 B Higher temperature of the surrounding  
 C Higher humidity of the air  
 D Lower light intensity
5. The diagram below shows a few ice cubes in a glass of lemon juice.



Which of the following is true about the water droplets?

- A Have bitter taste  
 B Turn blue litmus paper to red  
 C pH 7 when tested with pH paper  
 D Have sour taste

6. What is the purpose for using filtration and boiling?

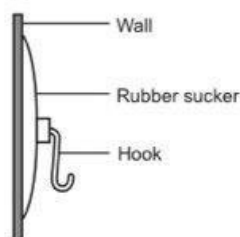
	Filtration	Boiling
A	To separate insoluble solids	To kill microorganisms
B	To remove impurities	To remove colour
C	To remove colour	To remove impurities
D	To remove smell	To kill microorganisms

7. Which method of water treatment is correctly matched with its purpose?

	Method	Purpose
A	Chlorination	Reduces acidity of water
B	Coagulation	To kill microorganisms
C	Sedimentation	Allows small particles to stick together
D	Chlorination	To kill microorganisms

8. How can the public be encourage to save water usage?
- A Use water filter  
 B Use high pressure water  
 C Turn on the tap while brushing teeth  
 D Use trickles irrigation in pineapple farm

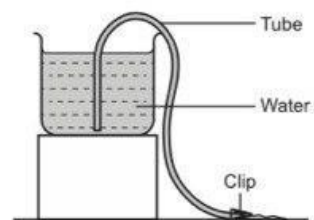
9. The diagram below shows a hook stuck onto a wall to hang a load.



What modification could be made to ensure the rubber sucker sticks more strongly on the wall to support more load?

- A Use a bigger hook  
 B Use a smaller hook  
 C Enlarge the rubber sucker diameter  
 D Reduce the rubber sucker diameter

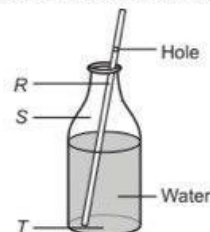
10. The diagram below shows a siphon.



What is the reason that causes the water to flow out?

- A Density  
 B Gravitational force  
 C Bouyant force  
 D Air pressure

11. The diagram below shows a drinking straw with a hole inside a bottle of water.



Why can the water not be sucked out?

- A The air pressure at R is higher than the air pressure at S.  
 B The air pressure at T is the same as the air pressure at R.  
 C The air pressure at S is the same as the air pressure at R.  
 D The air pressure at S is higher than the air pressure at T.

12. The diagram below shows the worn out shoes.



Shoe soles become worn out when

- A gravitational force attract the sole  
 B a magnetic force pulls the soles closer to the road  
 C a frictional force acts between the soles and the road  
 D an electrostatic force is produced when walking on the road

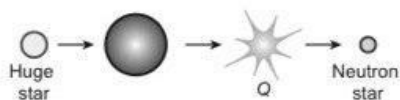


13. Which pair of devices does not use the principle of lever?
- A Screw and ladder
  - B Fishing rod and see-saw
  - C Nutcracker and bottle opener
  - D Wheel-barrow and bottle opener

14. Which statement is correct about a second class lever?
- A The effort is located between load and fulcrum.
  - B The load is located between effort and fulcrum.
  - C The fulcrum is located between load and effort.
  - D The effort is further from the fulcrum than the load.

15. Which statement is true about Milky Way?
- A It has a spiral shape.
  - B Its diameter is 200 000 light years.
  - C It contains millions of stars.
  - D Sun is not found in this galaxy.

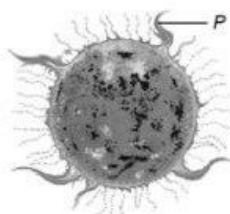
16. The diagram below shows the death of a large star to become a neutron star.



What happens at Q?

- A Dying star expands
- B Red giant star explodes
- C Red giant star collapses
- D Remaining mass of the large star contracts

17. The diagram below shows the structure of the Sun.



What is P?

- A Core
- B Corona
- C Photosphere
- D Chromosphere

18. Which of the following is correct about asteroid?

- A Fragments of rock and small metal floating in space
- B Big rock and metal that surround the Sun in their own orbit
- C Fragment of rock consisting of dust and gas that have their own orbit
- D Small body comprising a mixture of ice, gas and frozen dust that surround the Sun in their own orbit

19. Which planets have moons?

- I Earth
- II Mercury
- III Venus
- IV Mars
- A I and II
- B II and III
- C III and IV
- D I and IV

20. Which of following are correct about the class of food protein?

- I Tested with Millon's test
- II Gives red precipitate in Millon's test
- III Tested with Benedict's test
- IV Gives red brick precipitate in Benedict's test
- A I and II
- B II and III
- C III and IV
- D I and IV

**Section B**

[20 marks]

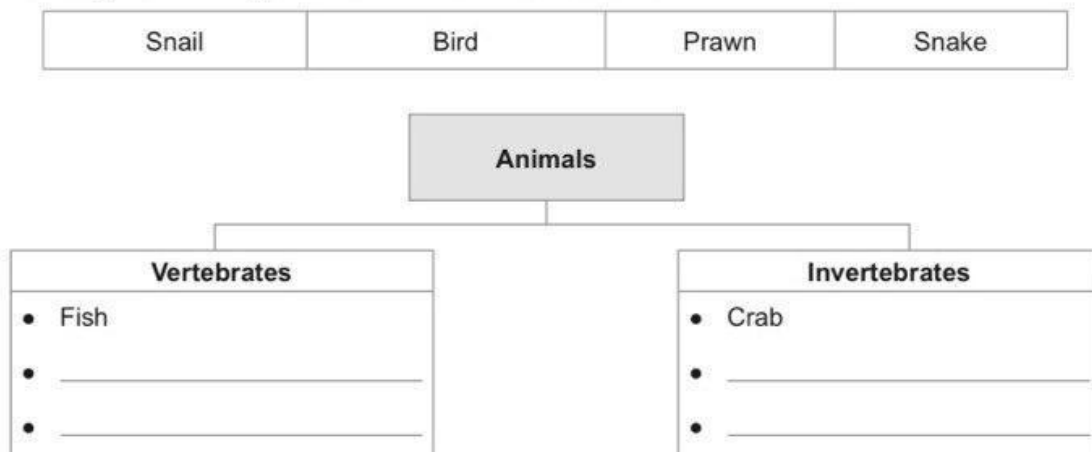
Answer **all** questions in this section.

1. (a) Match the following non-flowering plants with the correct characteristics.

Non-flowering plants	Characteristics
Moss	• Reproduce through spores and have vascular
Fern	• Reproduce through cones and have vascular
	• Reproduce through spores and have no vascular

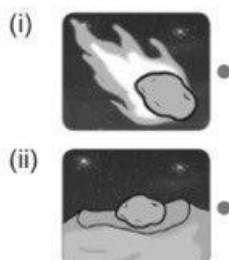
[2 marks]

- (b) Classify the following animals with the correct classification.



[2 marks]

2. (a) Match the diagram below with its name.



- Meteorite
- Meteor
- Meteoroid

[2 marks]



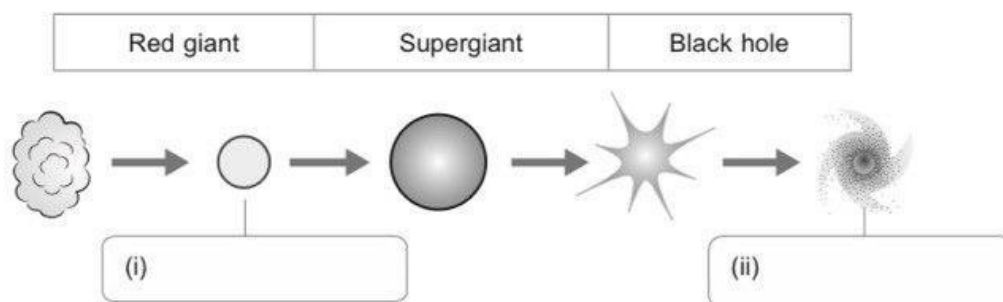
(b) Write **True** or **False** for the following statements.

Statement	True / False
(i) Asteroid is known as small planet.	
(ii) Comet is divided into three parts which are head, body and tail.	

[2 marks]

3. The diagram below shows a life cycle of super-large star.

(a) Complete the diagram below using the words given.



[2 marks]

(b) Write **True** or **False** for the following statements.

Statement	True / False
(i) Star is formed from nebula which is a large cloud consisting of dust and gases such as hydrogen and helium.	
(ii) The star will die when oxygen gas in its core has been used for nuclear reactions.	

[2 marks]

4. Water is a basic need of all living things to survive.

(a) Underline the correct answer in the bracket provided.

- (i) Water is a (compound, mixture) consists of two elements that are hydrogen and oxygen.
- (ii) Process of water from solid to liquid is known as (melting, freezing).

[2 marks]

(b) Tick (✓) to show **two** physical characteristics of water.

(i) Density of water is $10 \text{ g cm}^{-3}$		(ii) Bitter	
(iii) Colourless		(iv) Odourless	

[2 marks]