

Question - 1 |

Tarun faces towards North. Turning to his right, he walks 25 metres. He then turns to his left and walks 30 metres. Next, he moves 25 metres to his right. Finally, he turns to the right and moves 40 metres. In which direction is he now from his starting point?

Option A

South-West

Option B

South

Option C

North-West

 Option D

South-East

Question - 2 |

Which of the following is exactly in the middle of the 17th element from the right end and 18th element from the left end in the given arrangement?

3 D 6 \$ C 4 E 8 # N 5 F 1 A P * 9 M @ K 2 B % 7 H U

 Option A

A

Option B

1

Option C

F

Option D

%

Question - 3 |

X is present in the stomach. However, presence of excess of it causes indigestion, which requires the intake of milk of magnesia to undo the effect of X. What is X?

Option A

HCl

Option B

H_2SO_4

Option C

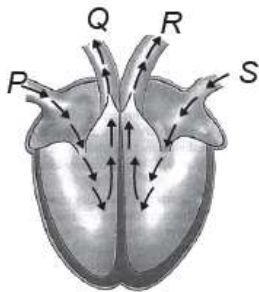
NaOH

Option D

KOH

Question - 4 |

The given diagram shows blood circulation pathway in the heart. Which of the following correctly shows the relative amount of oxygen and carbon dioxide at P, Q, R and S?



- | | More CO_2 | More O_2 |
|-----|-------------|------------|
| (A) | R | P, Q, S |
| (B) | Q and R | P and S |
| (C) | S | R |
| (D) | P and Q | R and S |

Option A

A

Option B

B

Option C

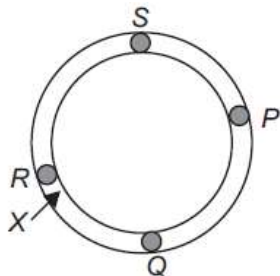
C

Option D

D

Question - 5 |

Some blobs of wax are placed on a silver ring as shown in the diagram. If the ring is heated at X, then choose the correct option regarding the melting of wax because of heating.



Option A

Only R blob melts.

Option B

Blobs R, S and Q melt together.

Option C

Melting of blobs occurs in the order R, Q, S and P.

Option D

P, Q, R and S blobs melt together.

Question - 6 |

Which one of the following is true for all chemical reactions?

Option A

There is a change in volume

Option B

Heat is evolved

Option C

Chemical bonds are broken or formed

Option D

There is a change in mass

Question - 7 |

Garima carried out a fair test to find out the speed with which water passed through four different kinds of soil. She recorded her findings in the table below.

Kind of soil	P	Q	R	S
Time taken (seconds)	33	23	45	18

In which type of soil would you find the mangrove trees growing in?

Option A

P

Option B

Q

Option C

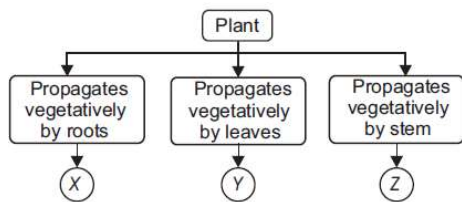
R

Option D

S

Question - 8 |

Study the given flow chart and select the option that correctly identifies X, Y and Z.



- X** **Y** **Z**
- (A) *Bryophyllum* *Bougainvillea* Carrot
 (B) *Dahlia* *Begonia* Potato
 (C) *Begonia* Ginger *Asparagus*
 (D) *Bryophyllum* Strawberry *Dahlia*

Option A

A

Option B

B

Option C

C

Option D

D

Question - 9 |

Which of the following joints is present between thigh bone and shin bone?

Option A

Hinge joint

Option B

Pivot joint

Option C

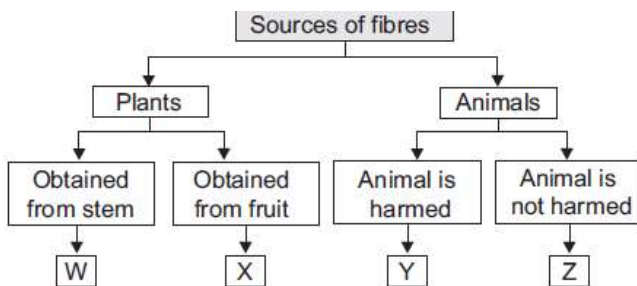
Fixed joint

Option D

Ball and socket joint

Question - 10 |

Refer the given flowchart and select the correct option.



Option A

X – Flax, Y – Silk

Option B

W – Cotton, Y – Silk

Option C

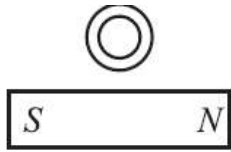
W – Flax, Z – Wool

Option D

X – Jute, Z – Wool

Question - 11 |

A small compass is placed beside the middle of a bar magnet.



In which direction will the compass needle point?

- (A)  (B) 
- (C)  (D) 

Option A

A

Option B

B

Option C

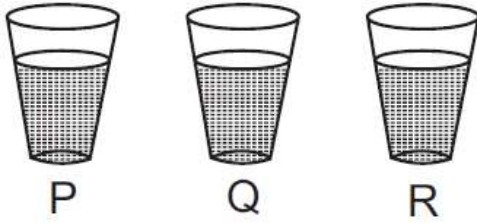
C

Option D

D

Question - 12 |

Three glasses P, Q and R having equal amount of water were taken and equal amount of salt was added to each one of them. After that, P was cooled, Q was heated and R was left undisturbed. Water in which glass will now taste most salty?



Option A

P

Option B

Q

Option C

R

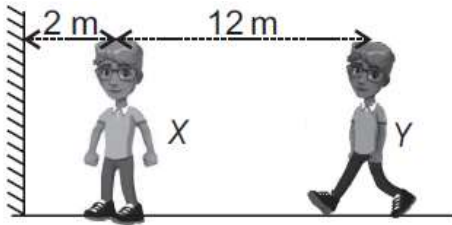
Option D

All will taste the same.

Question - 13 |

Two boys are standing in front of a plane mirror as shown in the given figure. If boy Y walks

5 m towards boy X, then how far away would boy Y appear to be in the mirror to boy X?



Option A

9m

Option B

10m

Option C

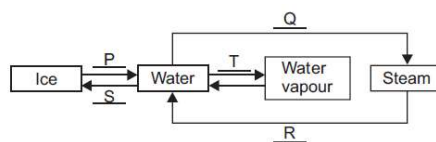
11m

Option D

14m

Question - 14 |

Observe the given diagram carefully and fill in the blanks.



- | | P | Q | R | S | T |
|-----|----------|-------------|--------------|----------|--------------|
| (A) | Freezing | Boiling | Condensation | Melting | Evaporation |
| (B) | Freezing | Evaporation | Boiling | Melting | Condensation |
| (C) | Melting | Boiling | Condensation | Freezing | Evaporation |
| (D) | Melting | Evaporation | Condensation | Freezing | Boiling |

Option A

A

Option B

B

Option C

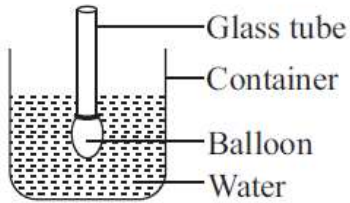
C

Option D

D

Question - 15 |

A balloon attached to a hollow glass tube was submerged in a container of water as shown here. Rohan placed his mouth over the open end of the glass tube and blew air into it. He observed that the water level in the container rose. This experiment tells us that air _____.



- (i) has mass
- (ii) occupies space
- (iii) has a definite volume
- (iv) can be compressed

Option A

(i), (ii) and (iv)

Option B

(ii) and (iii)

Option C

(i) and (ii)

Option D

(ii) only

Question - 16 |

Bees which are not carrying honey fly with a flapping frequency of 440 Hz while those which are carrying honey fly with a flapping frequency of 300 Hz. The sound made by bees which are not carrying honey has

Option A

A lower pitch

Option B

A higher pitch

Option C

A smaller loudness

Option D

A greater loudness

Question - 17 |

The pressure of the water near the bottom of the wall forming a dam does not depend on _____.

Option A

The depth of the water

Option B

The cross-sectional area of the reservoir

Option C

Density of water

Option D

Atmospheric pressure

Question - 18 |

When Cu is exposed to moist air for a long time, which of the following is formed?

Option A

$Cu(OH)_2$

Option B

$CuCO_3$

Option C

Both (A) and (B)

Option D

Cu_2O

Question - 19 |

Which of the following on reshuffling gives the term that refers to the process of sowing seeds manually by sprinkling them on soil by hand?

Option A

INIGTIL

Option B

GLNOPUIHG

Option C

ATNBRDOCAIGS

Option D

GLOWNWIN

Question - 20 |

Which of the following groups represents the bacterial diseases?

Option A

Cholera, Tuberculosis, Malaria, Measles

Option B

Small pox, Tuberculosis, Malaria, Typhoid

Option C

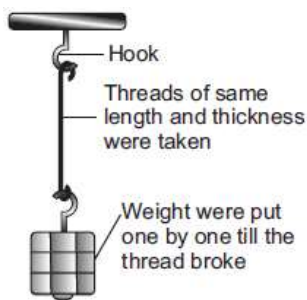
Cholera, Tuberculosis, Typhoid, Measles

Option D

Cholera, Anthrax, Tuberculosis, Typhoid

Question - 21 |

A n u j p e r f o r m e d an experiment to compare the strength of different fibres. He arranged the set-up as shown in the figure :



Arrange the threads in order of their increasing strength.

Option A

Nylon < Silk < Cotton

Option B

Silk < Cotton < Nylon

Option C

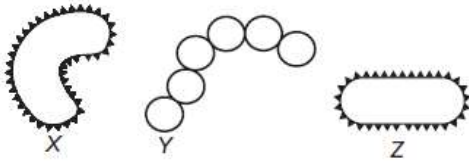
Cotton < Nylon < Silk

Option D

Cotton < Silk < Nylon

Question - 22 |

Refer to the given figures of bacteria X, Y and Z and read the statements (i), (ii), (iii) and (iv) regarding them.



- (i) Bacterium X can be causal organism of typhoid.
 - (ii) Bacterium Y can cause a disease which disrupts proper exchange of gases.
 - (iii) Bacterium Z can convert lactose sugar of milk into lactic acid.
 - (iv) Bacterium X can be the causal organism of cholera.
- Which of these statements are incorrect?

Option A

(i) only

Option B

(i) and (ii) only

Option C

(ii), (iii) and (iv) only

Option D

(i), (ii), (iii) and (iv)

Question - 23 |

Which of the following cannot be used for measurement of time?

Option A

A leaking tap.

Option B

Simple pendulum.

Option C

Shadow of an object during the day.

Option D

Blinking of eyes.

Question - 24 |

A bus travels 54 km in 90 minutes. The speed of the bus is

Option A

0.6 m/s

Option B

10 m/s

Option C

5.4 m/s

Option D

3.6 m/s

Question - 25 |

Laviza walks to his school which is at a distance of 3 km from his home in 30 minutes. On reaching he finds that the school is closed and comes back by a bicycle with his friend and reaches home in 20 minutes. His average speed in km/h is

Option A

8.3

Option B

7.2

Option C

5

Option D

3.6