

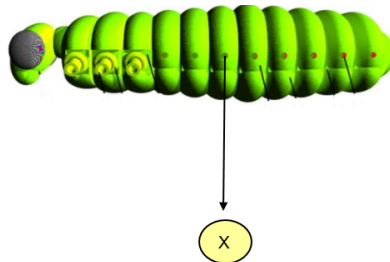


ISO SCIENCE OLYMPIAD

Sample Paper

BASIC : (3 Points)

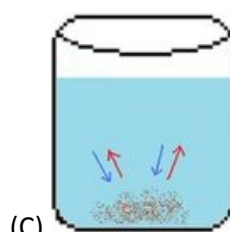
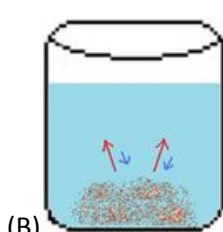
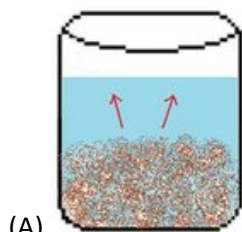
1. Riya is solving a puzzle. Which system of her body she is using while solving the puzzle?
(A) Respiratory system (B) Digestive system (C) Nervous system (D) Circulatory system
2. Identify X in the given diagram and answer the following question.
Which of the following statement is incorrect about X?



- (A) It lies on the exoskeleton
(B) In most of the insects it is located along the thorax and abdomen
(C) Fluid enters an insect body through X
(D) Air enters an insect's body through X
3. What is the similarity between energy possessed by a running boy and a running car?
(A) Both possess kinetic energy
(B) Both possess gravitational energy
(C) Both possess buoyant force
(D) None of these
4. Identify the medium through which sound can travel.
(A) Solid and liquid (B) Gas and Liquid (C) Both a and b (D) None of the above
5. Why is plastic good insulating material for making ice-cubes?
(A) It is cheap
(B) It decreases friction with the water
(C) It is not a good conductor of electricity
(D) It is a good conductor of electricity

FOUNDATION: (4-Points)

6. Which of the following diagram correctly represents the saturated solution?



(D) None of these

7. Name the rock used by dentists for polishing teeth.

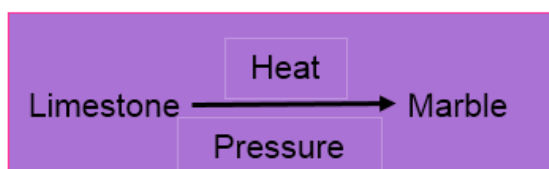
(A) Granite

(B) Basalt

(C) Pumice

(D) Obsidian

8. Study the table below and choose correct option for it.



I. Product formed has same chemical composition as limestone

II. Here, the reactant recrystallizes into marble

III. Product formed is softer than the reactant

(A) Only I

(B) I and II

(C) Only III

(D) I and III

9. Name the only active volcano in the Indian subcontinent.

(A) Barren Island

(B) Etna

(C) Yasur

(D) Pacaya

10. The object shown in the given diagram can be used by

(A) Mountaineers

(B) Astronauts

(C) Asthma patient

(D) All of them



Exploration: (5 Points)

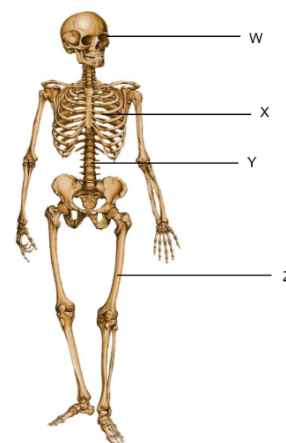
11. Which of the following is incorrect regarding the parts of the given body system labelled as W, X, Y and Z?

(A) W – Encloses the brain

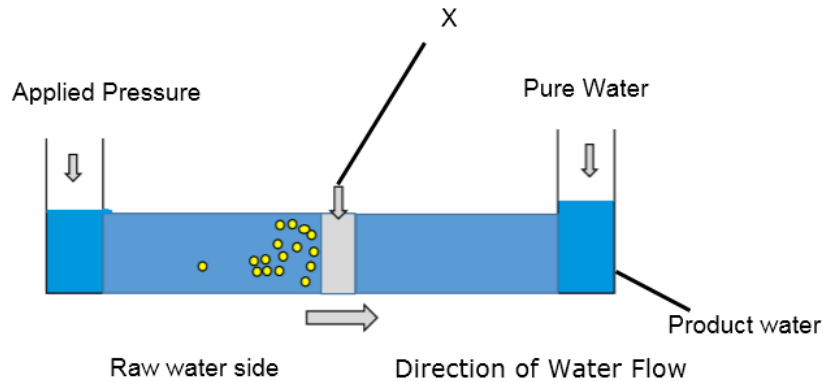
(B) X – Protects the heart

(C) Y – does not help in movement

(D) Z – Longest bone



12. The given diagram shows the process of reverse osmosis. What is correct about X shown here?



- (A) X is a filter paper
(B) X is a semi permeable membrane
(C) X is an permeable membrane
(D) X is moisture

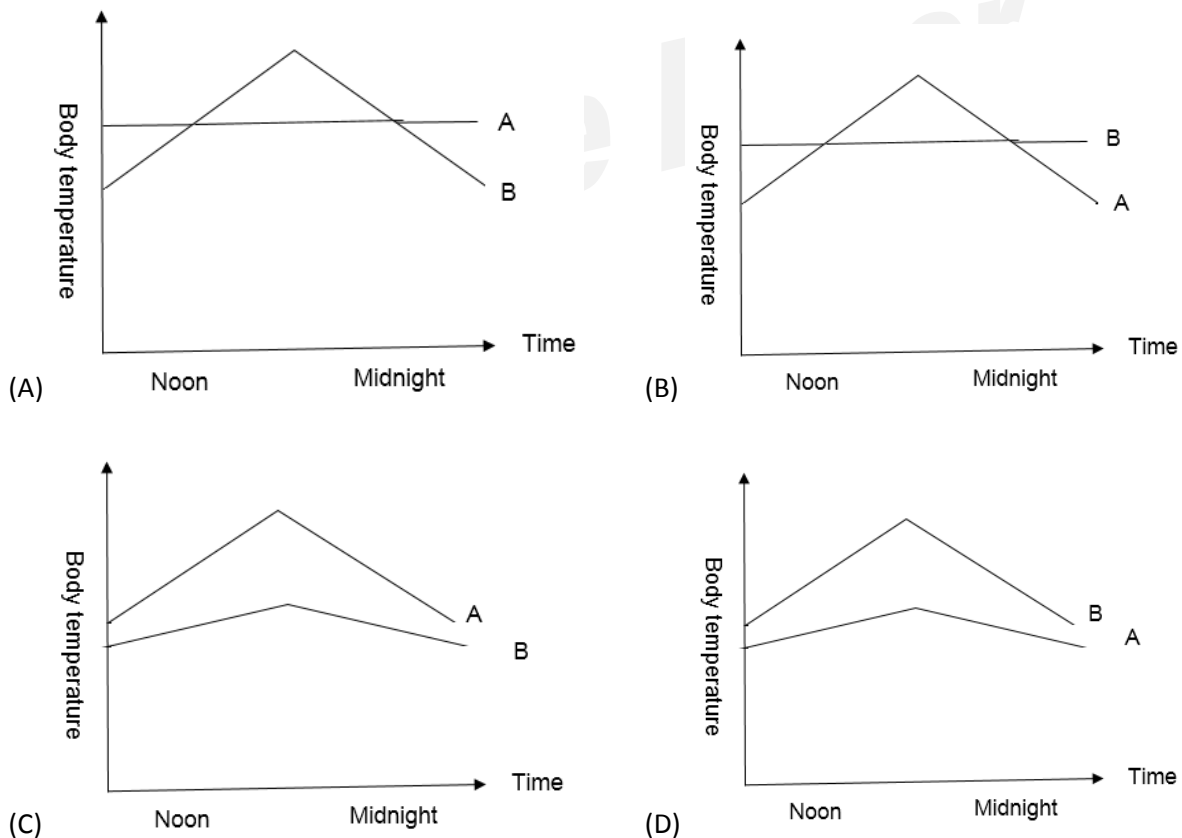
13. A bacteria cell reproduces by splitting itself into two every 15 seconds. If it starts with a single bacterium, how many bacteria would there be after a minute?

- (A) 4
(B) 5
(C) 8
(D) 16

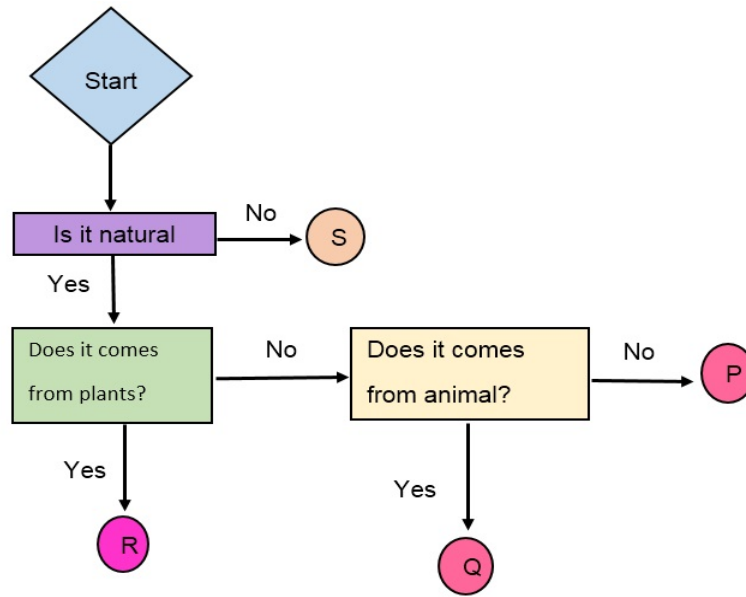
14.

“Animals have different body coverings. Those with feathers and fur have a constant body temperature despite changes in the temperatures of their surroundings.

A group of students set out to research on the above fact. They measured the body temperature of two animals over a 12 – hour period. The two animals studied were toad (A) and rabbit (B). Which one of the following graph represents the temperature of the two animals correctly?



15. Study the given flowchart carefully. Jute and metal are represented by the letters _____ and _____ respectively.



(A) P and Q
(C) R and S

(B) P and R
(D) P and S

**ANSWER KEY**

1-C

2-C

3-A

4-C

5-C

6-C

7-C

8-B

9-A

10-D

11-C

12-B

13-D

14-B

15-B