

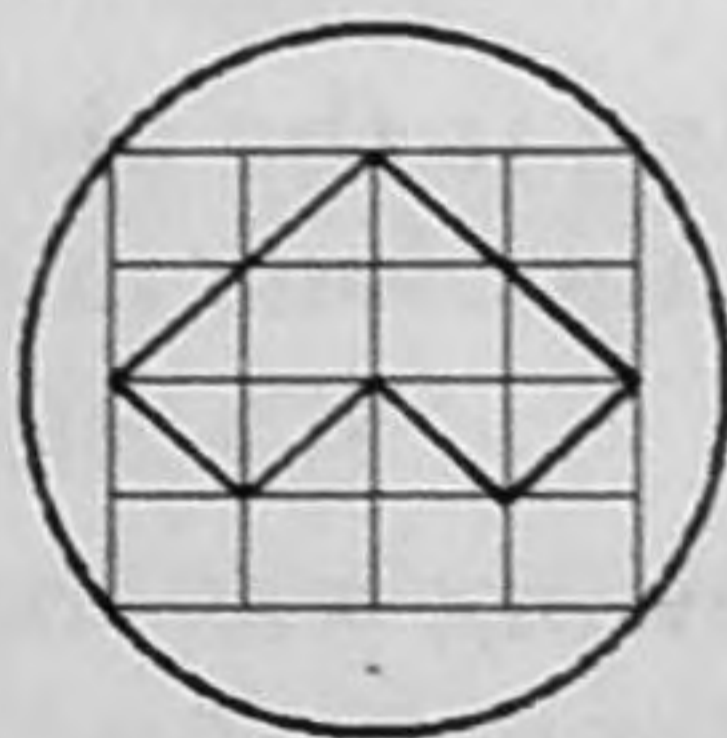
1 The number of prime numbers less than 100 whose sum of the digits is 2 is:

- (A) 1 (B) 2 (C) 3 (D) 4

2 Which one of the following is incorrect?

- (A) Doubling the length of a rectangle doubles the area  
(B) Doubling the altitude of a triangle doubles the area  
(C) Doubling the given quantity may make its area greater than the original  
(D) Doubling the radius of a circle doubles the area

3 The diameter of the circle in the picture is 10 cm. The perimeter of the region marked in thick line in cm is:



- (A) 12 (B) 16 (C) 20 (D) 24

4 Anne's running speed is 10% faster than John's. John is given a head start by being allowed to start from the 10 m mark in a 100 m race. Who will win the race?

- (A) Anne will win (B) John will win  
(C) It will be a draw (D) It cannot be determined

5 The weight (mass) of a clothespin is 9.2 gm. Which of these is the best estimate of the total weight (mass) of 1000 clothespins?

- (A) 900 gm (B) 9,000 gm (C) 90,000 gm (D) 900,000 gm

6 Which of the following are complementary angles?

- (A)  $30^\circ$  and  $65^\circ$  (B)  $45^\circ$  and  $40^\circ$   
(C)  $60^\circ$  and  $30^\circ$  (D)  $90^\circ$  and  $90^\circ$

7 What is the angle between two hands of the clock at 2:30?

- (A)  $100^\circ$  (B)  $105^\circ$  (C)  $120^\circ$  (D)  $110^\circ$

8 The average of 7 numbers is 23. If I add 1 to the 1st number, 2 to the 2nd number, 3 to the 3rd number and so on until I add 7 to the 7th number, what is the new average of these 7 numbers?

- (A) 25 (B) 26 (C) 27 (D) 28

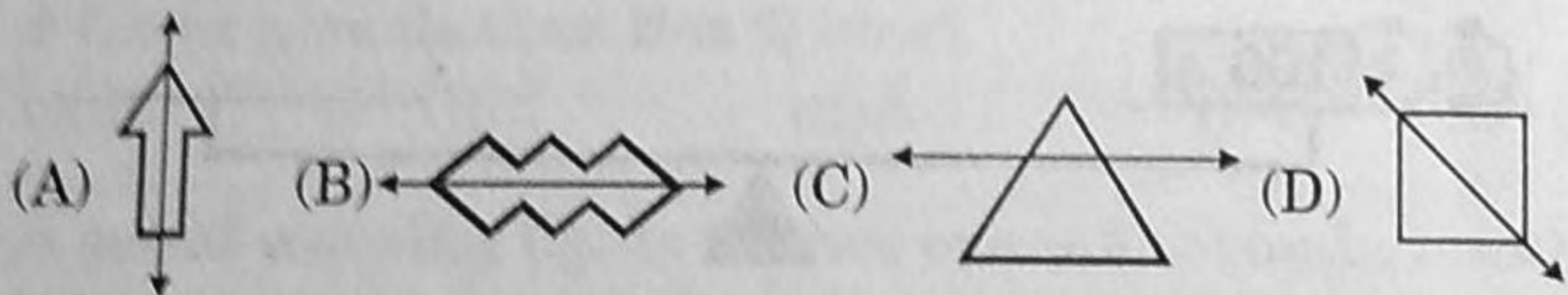
9 The HCF of two number is 28 and their LCM is 336. If one number is 112 then the other number is:

- (A) 74 (B) 84 (C) 78 (D) 48

10 Reciprocal of  $\frac{7}{5}$  is:

- (A)  $1\frac{2}{5}$  (B)  $\frac{5}{7}$  (C)  $5\frac{2}{3}$  (D)  $\frac{12}{5}$

11 Which of these does not show a line of symmetry?



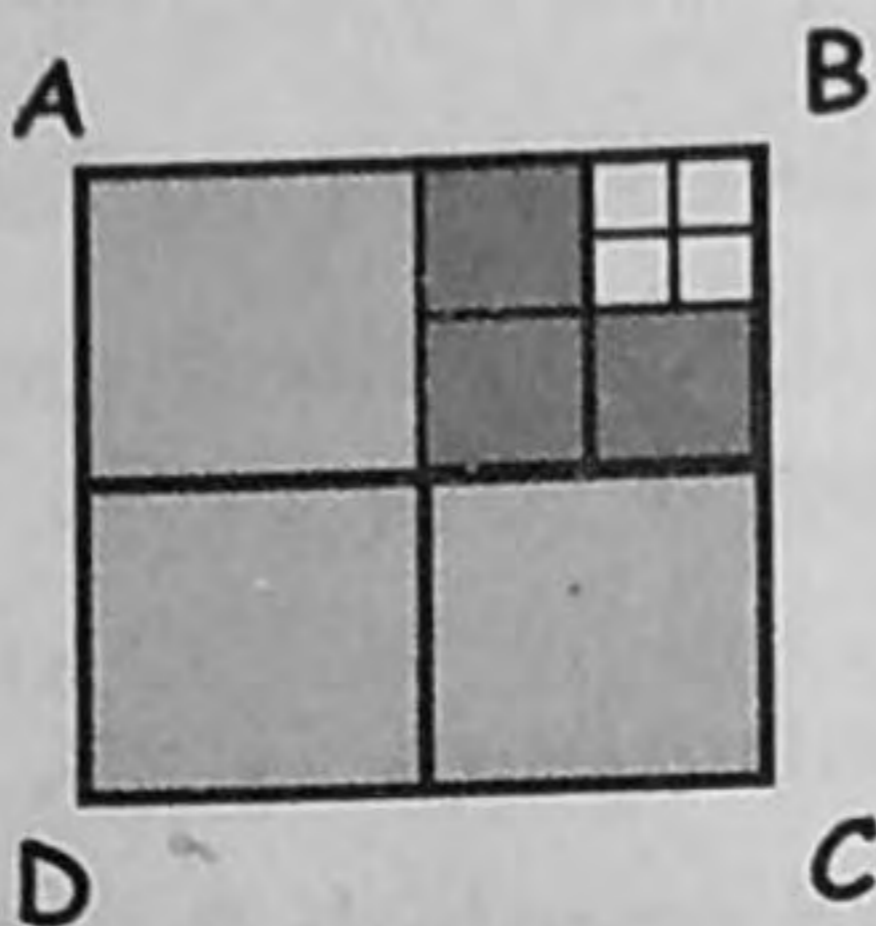
12  $0.05 \times 0.09 \times 5$  is:

- (A) 0.025 (B) 0.225 (C) 0.005 (D) 0.0225

13 The value of  $100 - 7 \times 8 + 4 \div 2$  is:

- (A) 78 (B) 46 (C) 92 (D) 96

14 Observe the figure, ABCD is a square of side 2016 cm. It is divided as shown in the figure into four equal squares. The top right hand side square is again divided into 4 equal squares. Again the top right hand square is divided into four equal squares.



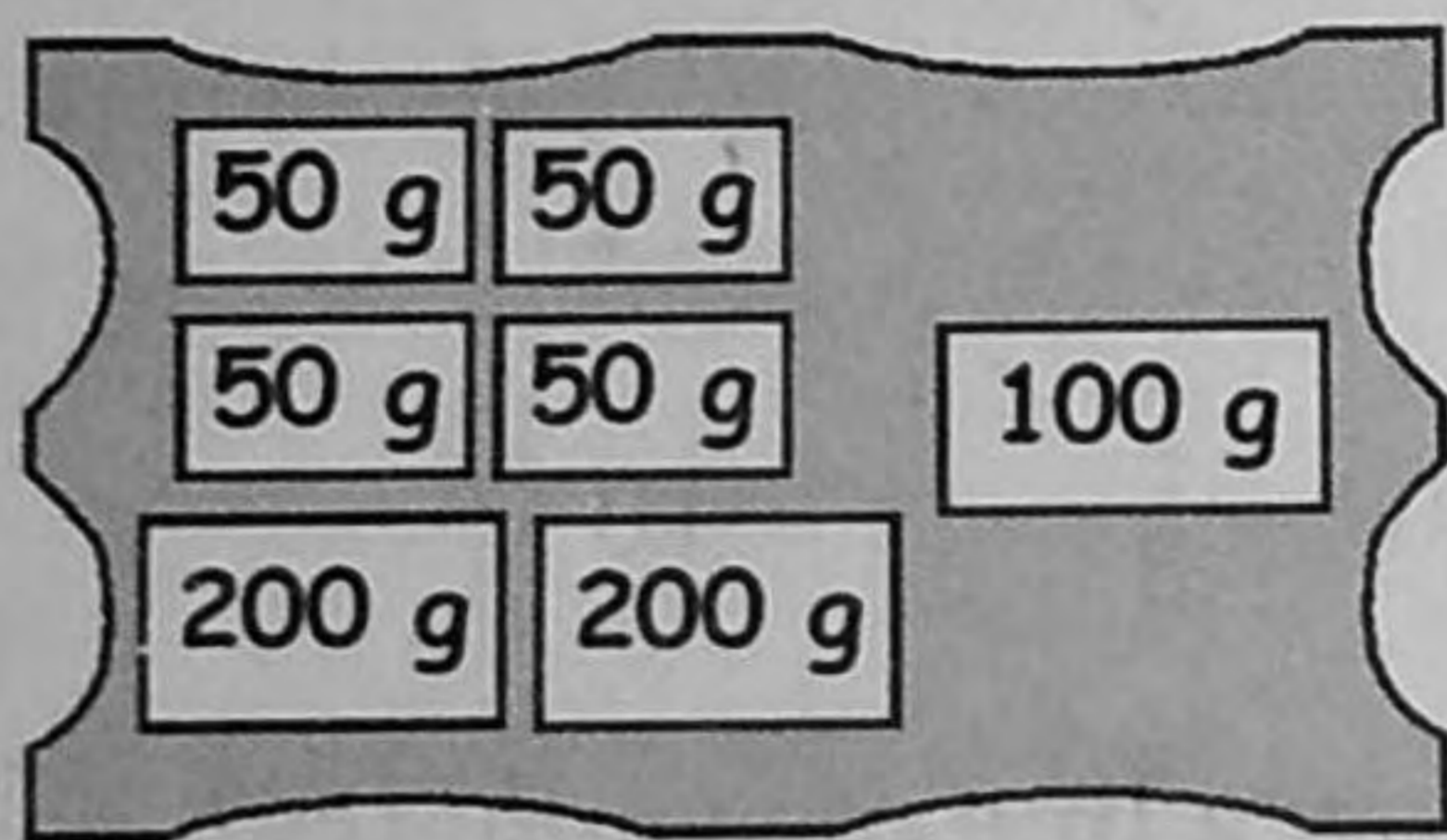
The side of each smallest square is:

- (A) 1002 cm    (B) 1004 cm    (C) 502 cm    (D) 252 cm

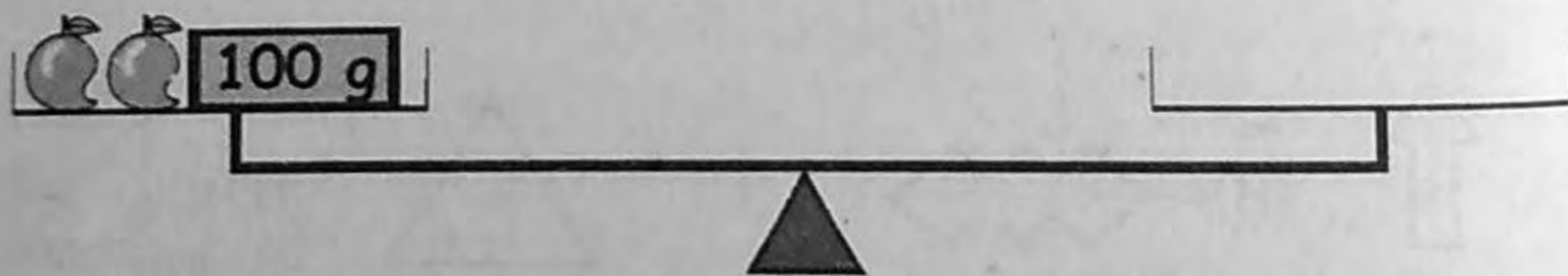
**15** Average of the first six even numbers is:

- (A) 7    (B) 5    (C) 3    (D) 1

**16** Find the mass required to balance the scale below.



**Key:** 3 = 4   
 2 + 200 g = 500 g



In how many ways can you balance the scale using the weight?

- (A) 1    (B) 2    (C) 3    (D) 4

**17** The sum of the reciprocals of all the divisors of 6 is:

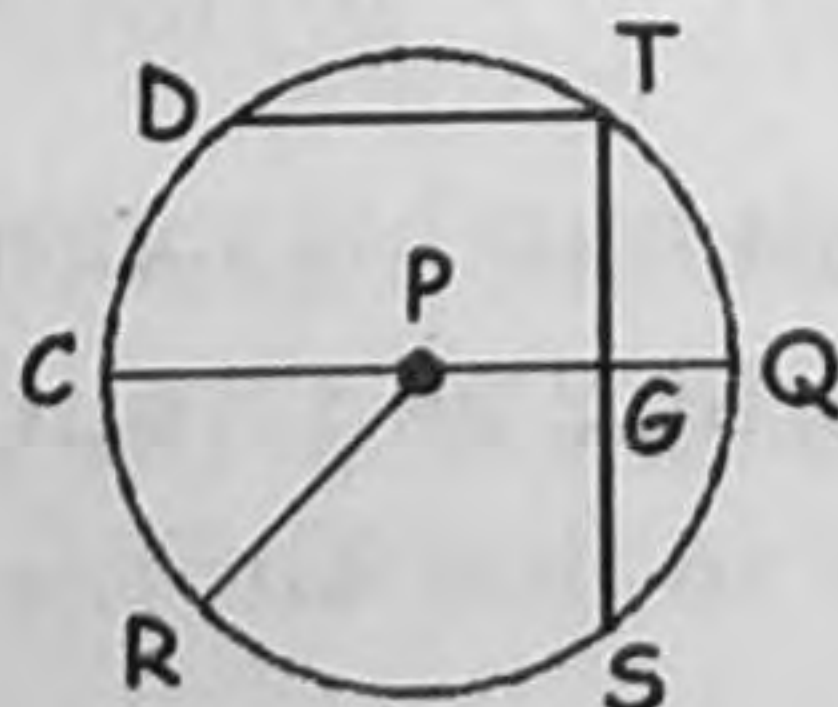
- (A) 1    (B) 2    (C) less than 2    (D) greater than 2

**18** How many two digit numbers greater than 10 are there, which are divisible by 2 and 5 but not by 4 or 25?

- (A) 3    (B) 12    (C) 5    (D) 2

- 19** A bus driver completes a trip of 180 km in 4 hrs. If he averages 50 km/hr during the first 3 hrs of trip, then his speed in the final hour is:  
 (A) 45 km/hr (B) 35 km/hr (C) 50 km/hr (D) 30 km/hr
- 20** P and Q are respectively 20% and 10% lower than C, what percent of Q is P?  
 (A) 66.66 (B) 88.88 (C) 50 (D) 45
- 21** Three cubes of metal whose edges are 3 cm, 4 cm and 5 cm are melted and formed into a single cube. If there is no wastage in the process, the edge of the new cube is:  
 (A) 12 cm (B) 7 cm (C) 9 cm (D) 6 cm
- 22** If the profit made on a packet of tea is Rs. 4 and the cost price of the packet is Rs. 20, then how much is the profit percentage?  
 (A) 25% (B) 50% (C) 20% (D) 40%
- 23** Box P has 5 more pencils than Box Q. How many pencils must be moved from Box P to Box Q, such that Box P has 9 fewer pencils than Box Q now?  
 (A) 4 (B) 5 (C) 6 (D) 7
- 24** A set of warning lights flashes every 3 seconds, another set flashes every 5 seconds and third set flashes every 8 seconds. If they all flash together at 12:00 noon, at what time will they flash together again?  
 (A) 12:01 P.M. (B) 12:02 P.M. (C) 12:06 P.M. (D) 12:15 P.M.

- 25** Number of chords drawn in the figure below are:



- (A) 2 (B) 3 (C) 4 (D) 5

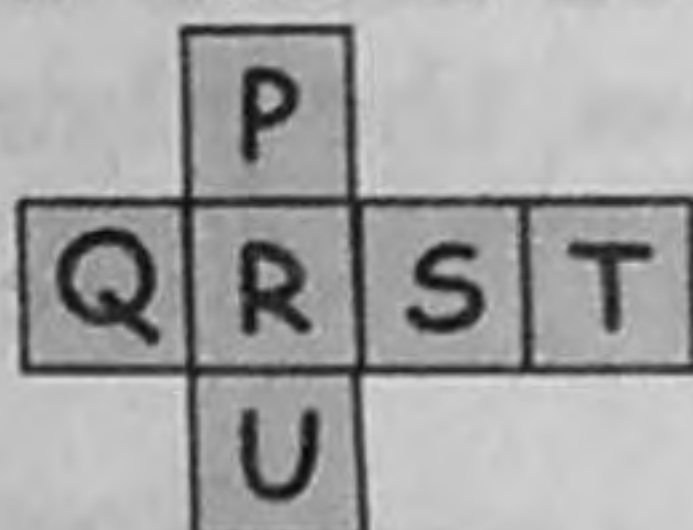
**26** On what sum of money lent out at 9% per annum for 6 years does the simple interest amount to Rs. 810?

- (A) Rs. 500      (B) Rs. 1,250      (C) Rs. 750      (D) Rs. 1,500

**27** Ravi had  $\frac{5}{6}$  of a cake. He ate  $\frac{2}{3}$  of it. What part of the cake did he eat?

- (A)  $\frac{5}{9}$       (B)  $\frac{10}{12}$       (C)  $\frac{10}{6}$       (D)  $\frac{10}{3}$

**28** The diagram shows a 'net' to make a cube.



If the cube is made, the face opposite to T is:

- (A) P      (B) Q      (C) R      (D) U

**29** A brick weighs  $\frac{3}{4}$  the weight of itself plus  $\frac{3}{4}$  kg. The weight of the brick (in kg) is:

- (A) 2      (B) 2.5      (C) 3      (D) 2.75

**30** Playing dice generally come in the shape of a:

- (A) square      (B) rectangle      (C) cube      (D) cuboid

**31** A student starts at the year 2011 and counts backwards 8 at a time, giving the sequence of years:

2011, 2003, 1995, .....

A year which she will count is:

- (A) 1976      (B) 1971      (C) 1972      (D) 1965

**32** Rishi's birthday falls on a certain month, the dates of which are shown below. Use the clues given below and the calendar sheet to find out the date and month?

- I. The date has 2 digits  
 II. It is a multiple of 7 but not a multiple of 2

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

- (A) 21<sup>st</sup> March (B) 28<sup>th</sup> February (C) 21<sup>st</sup> February (D) 14<sup>th</sup> March

**33** At what rate of interest per annum will a sum double itself in 8 years?

- (A)  $33\frac{1}{3}\%$  (B) 50% (C)  $12\frac{1}{2}\%$  (D) 25%

**34** How many of these statements are true?

- (I)  $12 \div \frac{1}{2} = 6$   
 (II)  $3\% = 0.3$   
 (III)  $\frac{1}{7} < \frac{1}{9}$   
 (IV)  $0.2 \times 0.4 = 0.8$

- (A) One (B) Two (C) Three (D) None of these





**35** If two angles in a triangle are  $40^\circ$  and  $60^\circ$ , then the third angle is:

- (A)  $90^\circ$  (B)  $80^\circ$  (C)  $60^\circ$  (D)  $70^\circ$

- 36** Identify the largest value among the options.  
 (A)  $\frac{4}{5}$  (B) 80% (C)  $0.2 \times 0.2 \times 0.2$  (D)  $0.9 \times 0.9$
- 37** The greatest number of 3 digits, which is exactly divisible by 35 is:  
 (A) 995 (B) 985 (C) 980 (D) 975
- 38** How many rectangles of perimeter 16 cm can be formed?  
 (A) 8 (B) 5 (C) 3 (D) 1
- 39** How many edges does the cube have altogether?  
 (A) 6 (B) 8 (C) 9 (D) 12
- 40** 21 and 29 are:  
 (A) prime numbers (B) co-primes  
 (C) multiples of 7 (D) even numbers
- 41** Arrange the following in ascending order of their circumference:  
 (I) 5 rupee coin  
 (II) Dial of a wall clock which is round  
 (III) a child's bangle  
 (IV) a scooter wheel  
 (V) a one rupee coin
- (A) V, IV, III, II, I (B) I, II, III, IV, V  
 (C) I, III, V, IV, II (D) I, V, III, II, IV
- 42** X's salary is 50% more than Y's. How much percent is Y's below X's?  
 (A) 50% (B)  $33\frac{1}{3}\%$  (C) 75% (D) 25%

- 43 What is the side view of the below given shape from the right side?



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

- 44 A triangle is formed by joining three \_\_\_\_\_ points.

- (A) collinear (B) non-collinear  
(C) equal (D) none of these

- 45 An angle which measures more than  $0^\circ$  and less than  $90^\circ$  is called:

- (A) obtuse (B) acute (C) right (D) straight line

**CLASS : V**

**GENERAL SCIENCE**

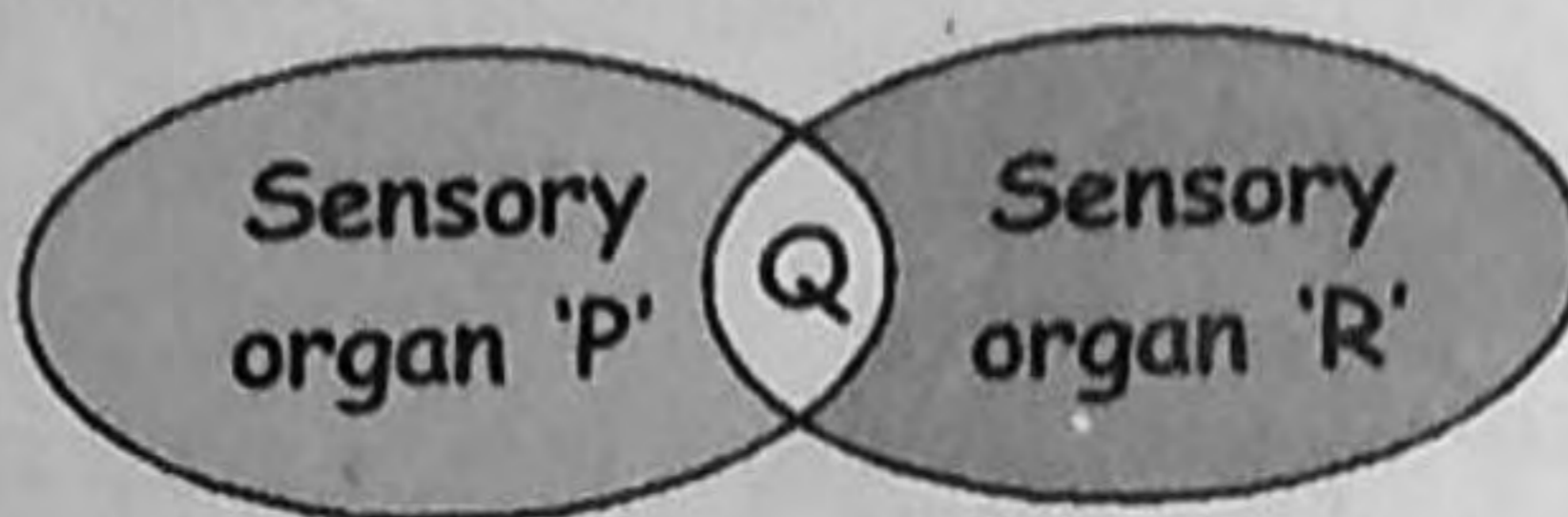
- 46 Which of the following sentences can be linked with the words given below?

- \* Water
- \* Wind
- \* Explosive mechanism
- \* Animals

- (A) They help animals reproduce  
(B) They form spores  
(C) They encourage parent plants to look after their offsprings  
(D) They disperse seeds to avoid competition



- 47** In the figure given below, Q is a chemical substance that can be detected by sensory organs P and R.



Which of the following most probably represents P and R?

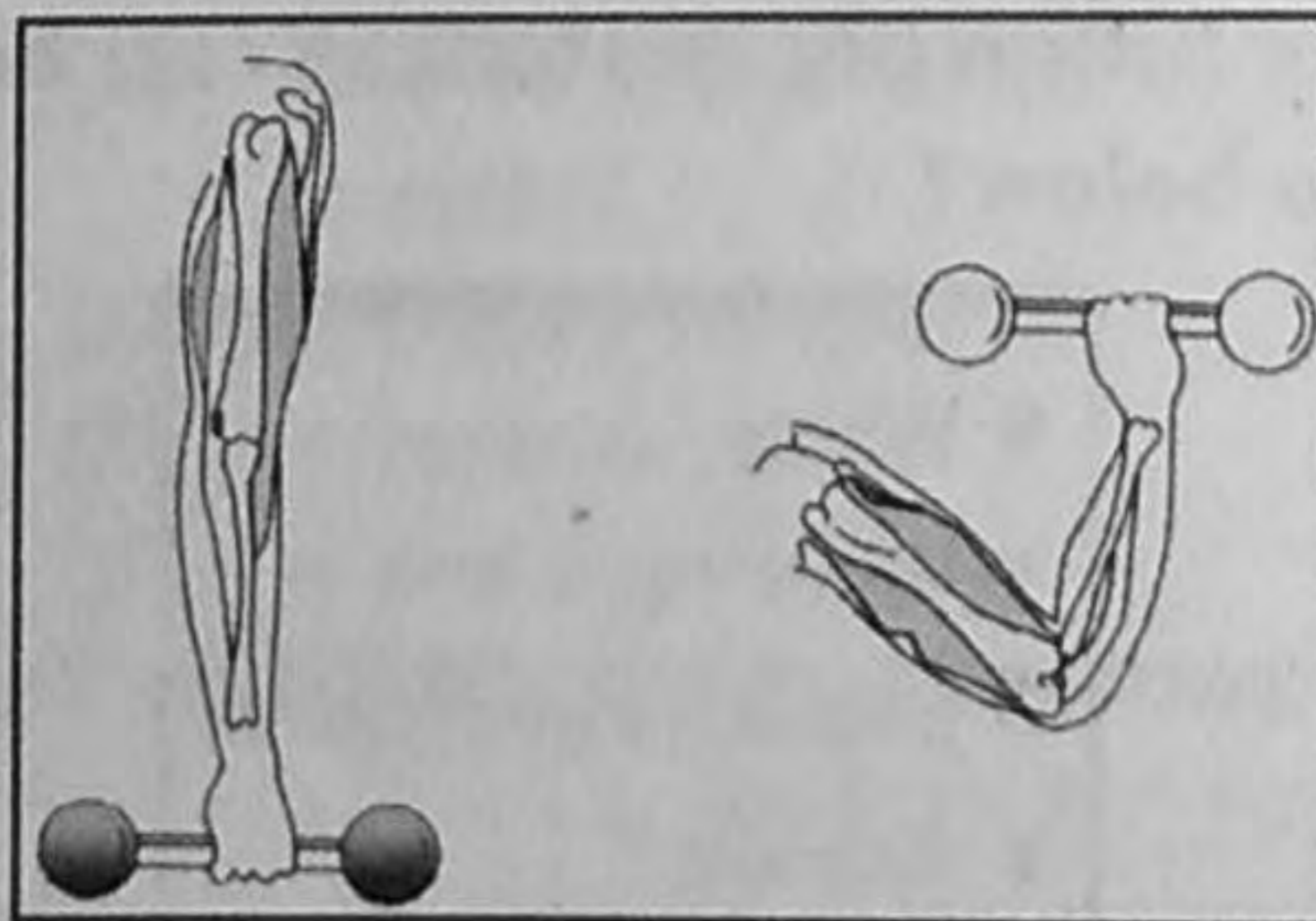
- I. The nose
- II. The ear
- III. The tongue

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

- 48** Which one of the following is a change of state due to heat gain?

- (A) Water becoming ice cubes in an ice tray  
(B) Water in a pond becoming solid during winter  
(C) Steam becoming water droplets on a metal lid  
(D) Ice becoming a puddle of water

- 49** Balu lifts a dumbbell with his right hand.



Which of the following statements describes the above diagram?

- I. There are two sets of muscles one set pull the bones up and the other to pull the bones back.
- II. The muscular and skeletal systems are working together to move the arm.
- III. A joint is necessary to lift the arm.

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

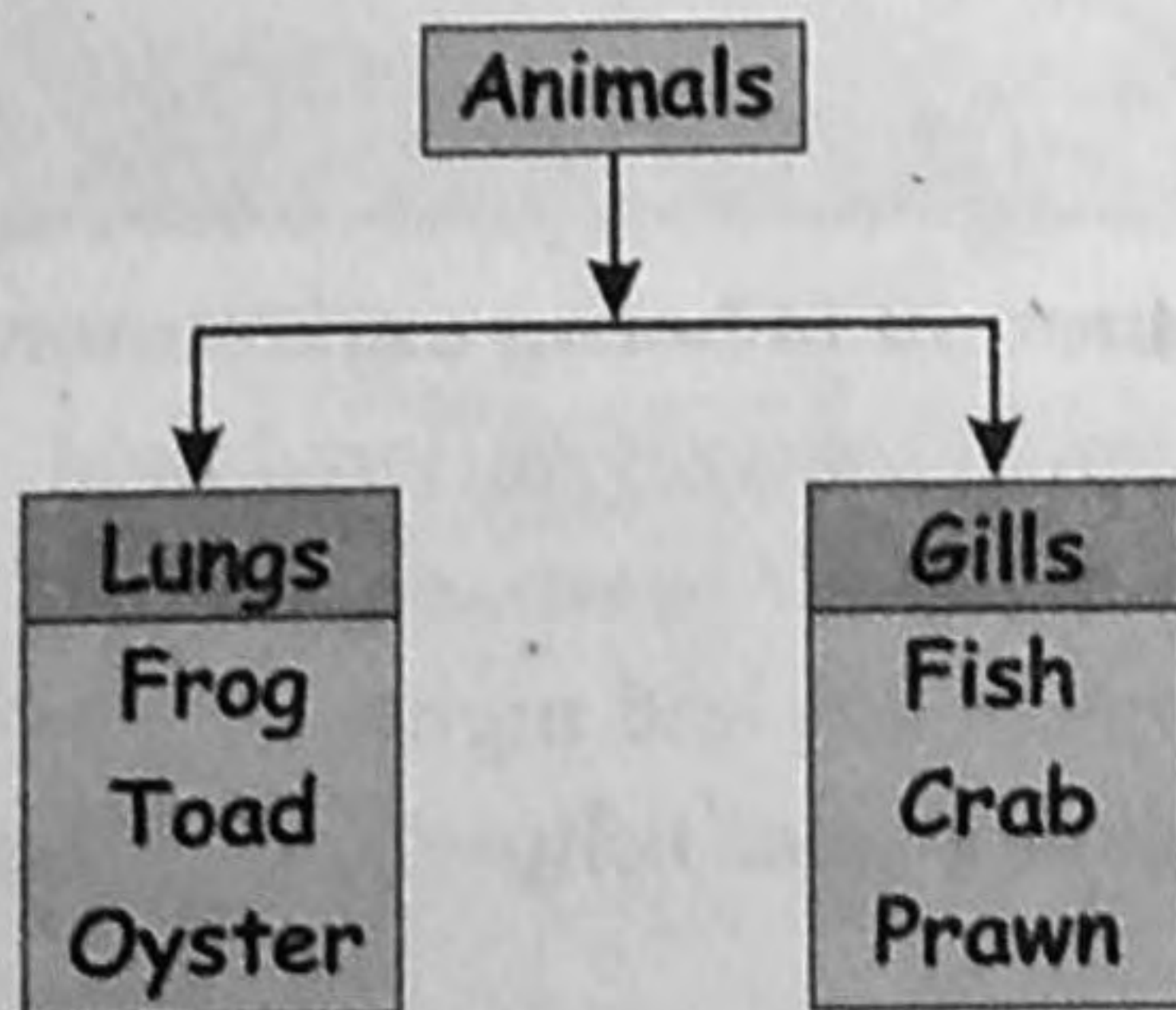
**50** The diagram below shows a part of the skeletal system.



Which part of the body does these bones protect?

- (A) Brain (B) Kidneys (C) Spinal cord (D) Lungs

**51** Sneha had a list of animals that live in water. She classified them on their breathing methods. Which of the following is wrongly classified?



- (A) Toad (B) Oyster (C) Crab (D) Prawn

**52** When a stone is thrown up into the air, it will come down after sometime because of:

- (A) electrical force (B) frictional force  
(C) magnetic force (D) gravitational force

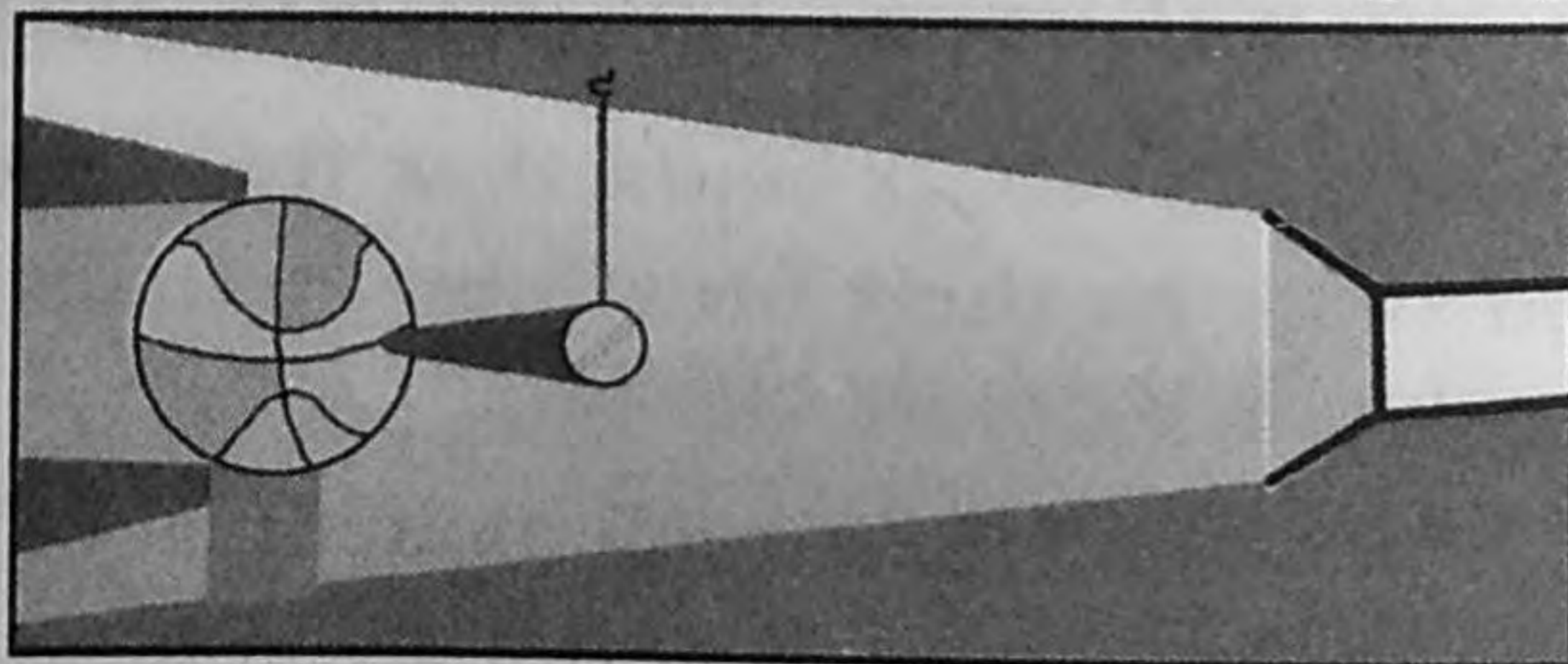
**53** Table given below shows some ways by which plants reproduce.

Examples	The way by which plants reproduce
Bean	P
Ginger	Q
Fern	R

Identify P, Q and R.

	P	Q	R
(A)	Seed	Aerial stem	Spores
(B)	Seed	Underground stem	Spores
(C)	Suckers	Leaves	Seeds
(D)	Seed	Spores	Leaves

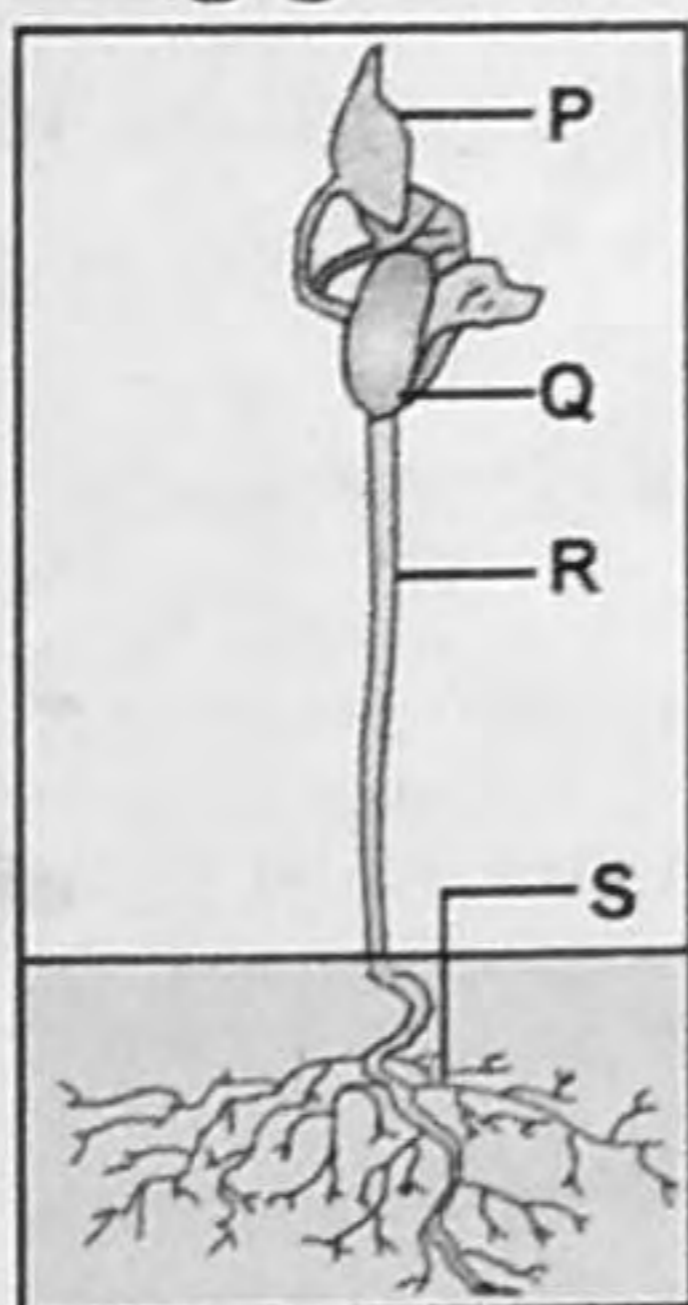
**54** Some students carried out the following experiment.



Which phenomenon is being experimented?

- (A) The formation of the gravitational field  
(B) The formation of four seasons  
(C) The formation of day and night  
(D) The formation of solar eclipse

- 55** The diagram below shows a seedling. Before it starts to make food, the seedling gets its food from:



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

- 56** The figure shows a fruit.



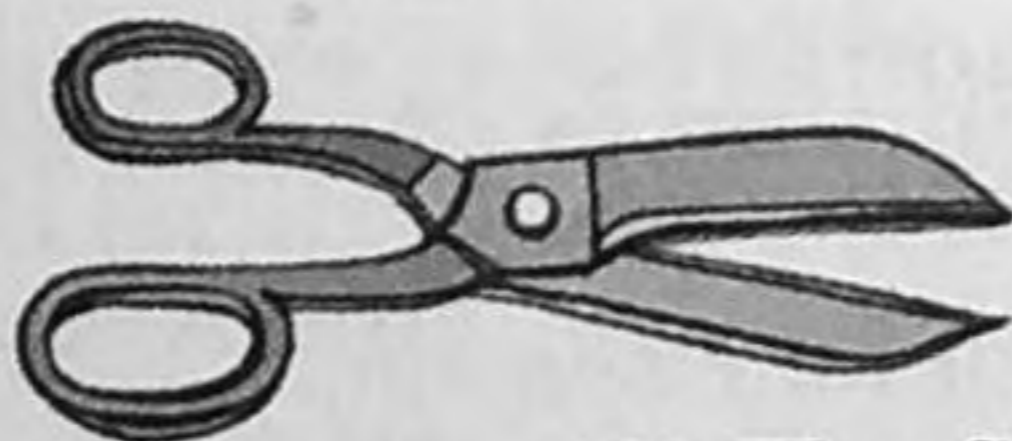
Which of the following methods of seed dispersal help the above fruit?

- (A) Dispersal by water                      (B) Dispersal by animals  
(C) Dispersal by air                      (D) Dispersal by explosion

- 57** A person met with an accident and wrapped himself in a blanket. The accident may be due to:

- (A) cuts                      (B) poisoning  
(C) an electric shock                      (D) burns

- 58** Which of the following simple machines belong to the same order of lever as that of the given tool?



- (A) A bottle opener                      (B) The fire tong  
(C) A hand pump                      (D) A wheel barrow

**59** The figure shows an animal.



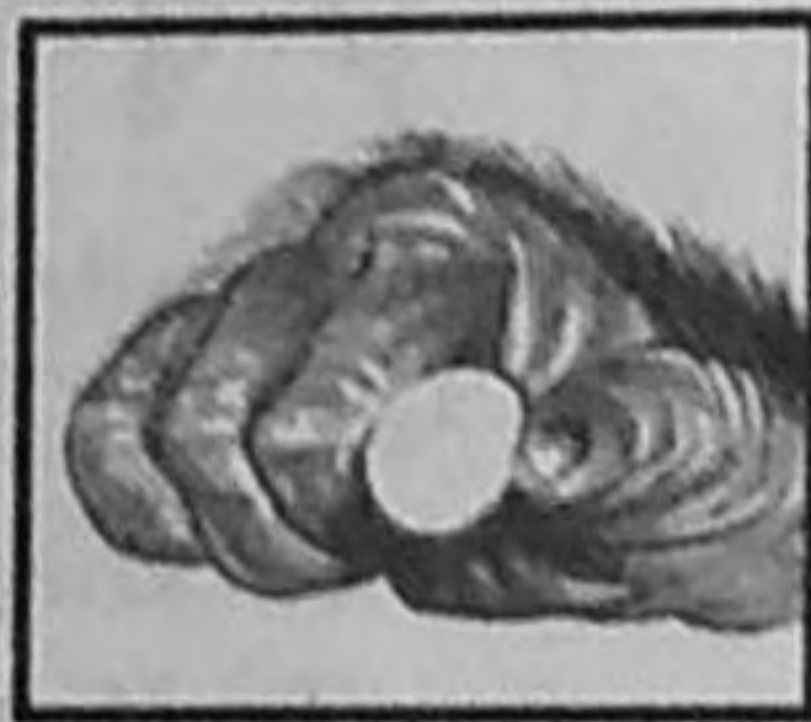
**How does the animal protect itself from extreme weather conditions?**

- (A) It undergoes hibernation
- (B) It has a very thick cover of feathers
- (C) It migrates to warmer places
- (D) It has folded skin

**60** Study the figures given below.



Slow loris



Chimp



Man

**Which one of the following characteristics is common to all the three of them?**

- (A) They have opposable thumb
- (B) They have scales for body covering
- (C) They live both on land and in water
- (D) They use both their hind limbs and forelimbs to walk

**61** Primarily air pollution is caused by:

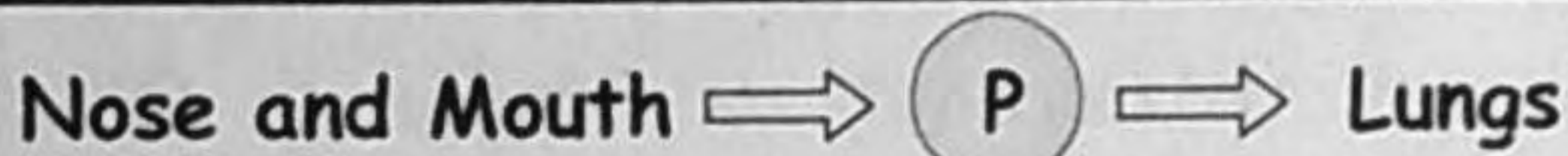
- (A) insecticides
- (B) sewage
- (C) smoke
- (D) loud speaker

- 62 Figure given below shows few organisms found in a garden.



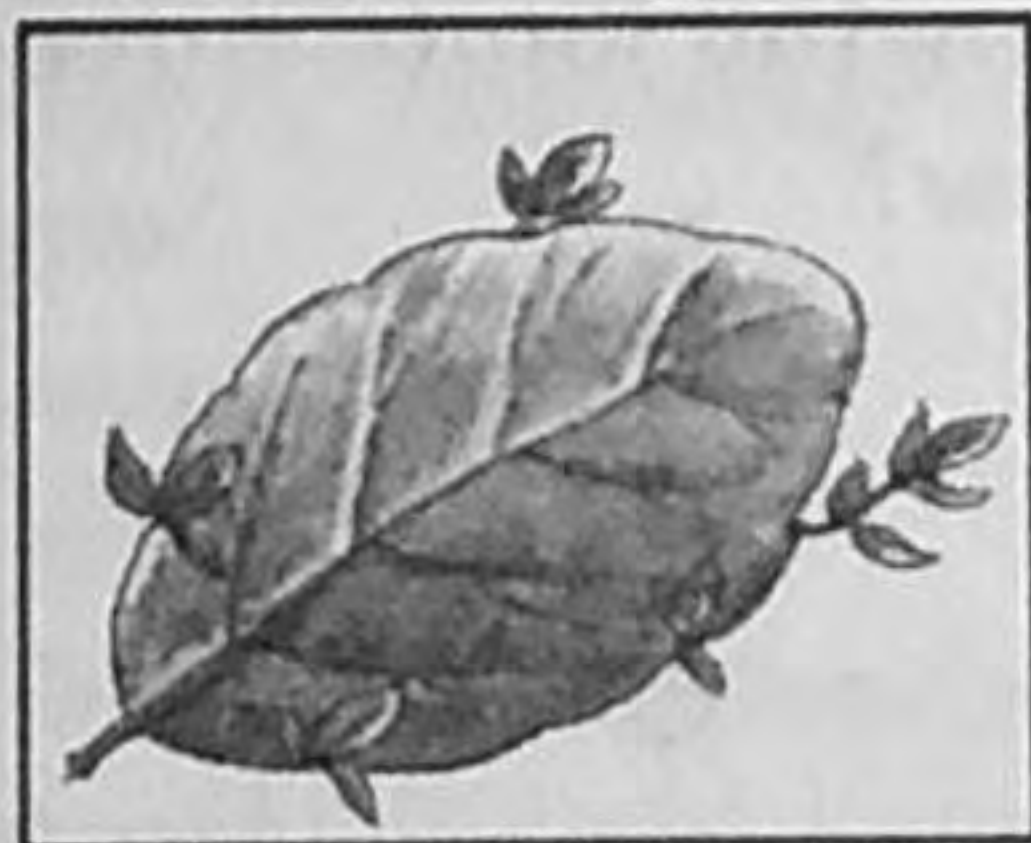
Write a food chain based on the given figure?

- (A) Snake  $\Rightarrow$  bird  $\Rightarrow$  plant  $\Rightarrow$  grasshopper  
(B) Plant  $\Rightarrow$  grasshopper  $\Rightarrow$  bird  $\Rightarrow$  snake  
(C) Grasshopper  $\Rightarrow$  plant  $\Rightarrow$  bird  $\Rightarrow$  snake  
(D) Bird  $\Rightarrow$  grasshopper  $\Rightarrow$  plant  $\Rightarrow$  snake
- 63 Inhaled air reaches our lungs through the passage given below.



What is 'P'?

- (A) Trachea (B) Tongue (C) Blood (D) Stomach
- 64 The figure shows a leaf of a plant.



What additional function is performed by the given leaf?

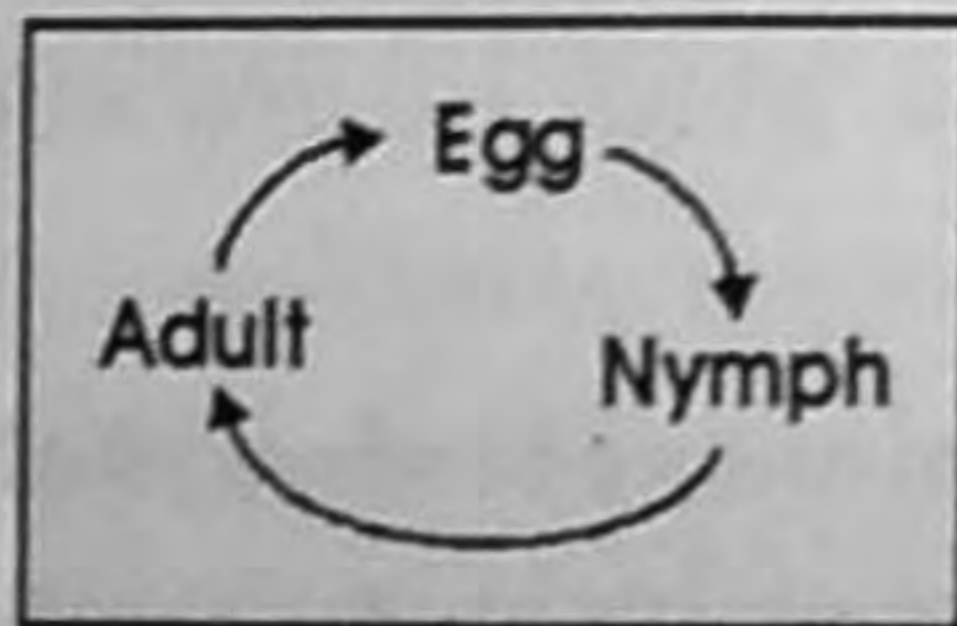
- (A) Respiration (B) Reproduction  
(C) Excretion (D) Defecation
- 65 If you grow a plant in the darkroom with only a small hole in the wall, then:

- (A) the stem will bend away from the hole
- (B) the stem will bend towards the hole
- (C) only flowers will bend towards the hole
- (D) the roots will grow towards the hole

**66** Which of the following animals does not reproduce by laying eggs?

- (A) Sparrow      (B) Cow      (C) Butterfly      (D) Lizard

**67** The diagram below shows the life cycle of an animal.



Which of the following animals has the same life cycle as above?

- (A) Butterfly      (B) Frog      (C) Moth      (D) Grasshopper

**68** Which of the following seeds is dispersed by wind?

- (A) Xanthium      (B) Coconut      (C) Madar      (D) Mango

**69** Which of the following animals has longer hind limbs than the forelimbs?

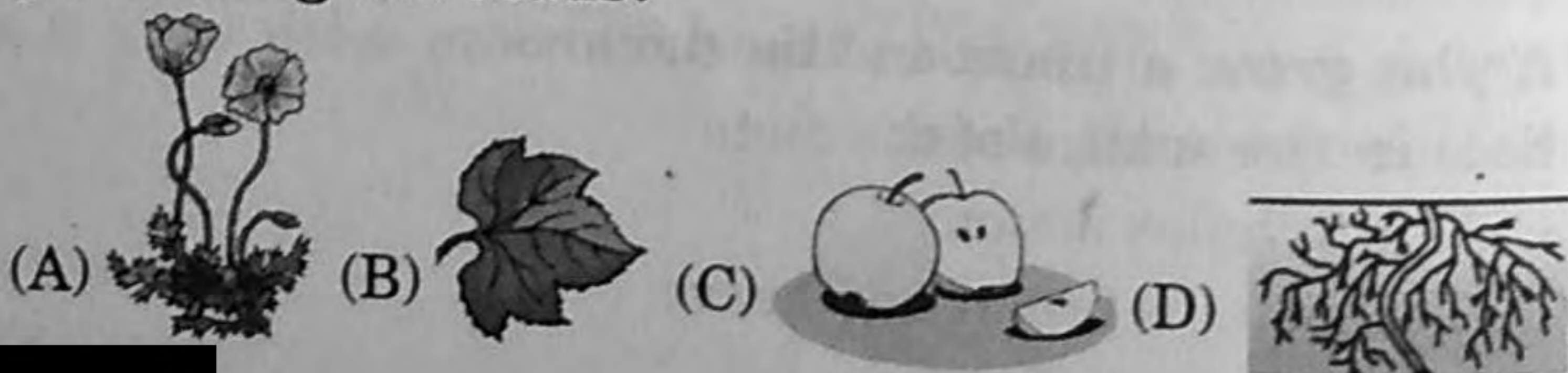
- (A) Frog      (B) Fish      (C) Goat      (D) Elephant

**70** Which of the following joints move same as shown in the figure given below?



- (A) Gliding joint      (B) Pivot joint
- (C) Hinge joint      (D) Ball and socket joint

**71** Which of the following plant parts play the role of protecting the seeds?



**72** What are the senses that Ravi is using in the situation given below?



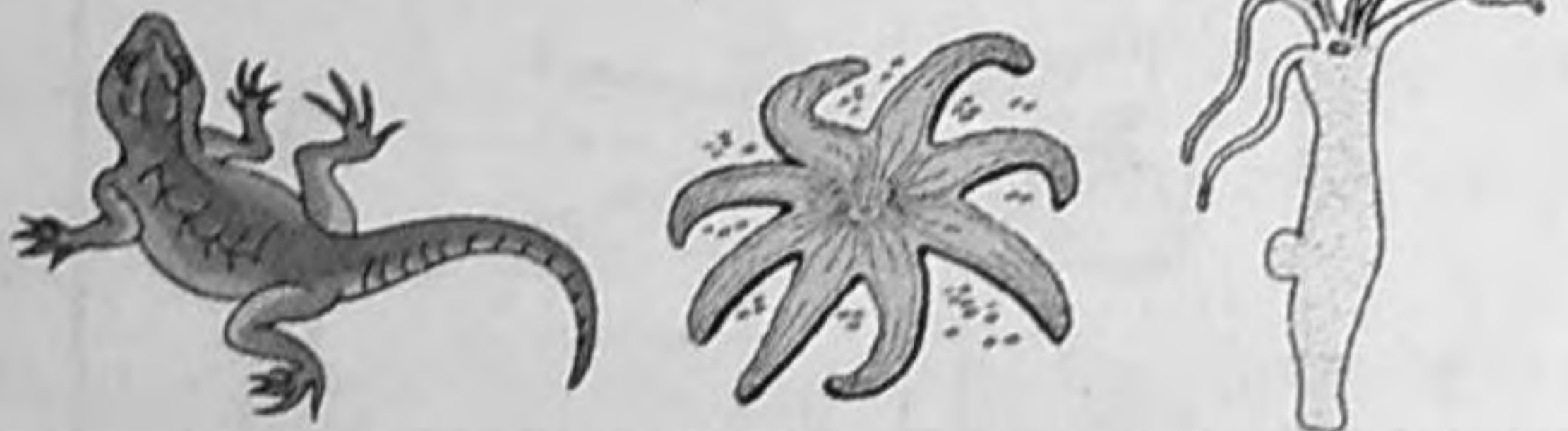
- |      |         |
|------|---------|
| I.   | Smell   |
| II.  | Hearing |
| III. | Touch   |
| IV.  | Sight   |

- (A) I and II only  
(B) II and III only  
(C) II, III and IV only  
(D) II and IV only

**73** The 'venus fly trap' closes its lid when the housefly enters it. What stimulus causes this response?

- (A) Water      (B) Touch      (C) Light      (D) Gravity

**74** Look at the figures below.



Which of the following characteristics is common to all the three organisms?

- (A) All have backbones  
(B) All move in the same way  
(C) All these animals can exhibit regeneration  
(D) All these reproduce in the same way

**75** Abhi accidentally touched a hot metal and spontaneously withdraw his hand from the metal. Why does he react spontaneously?

- (A) Due to the attraction of the metal  
(B) Due to repulsion of the metal  
(C) Due to reflex action  
(D) The metal is bright and heavy



**76** An X-ray diagnosis is very much important in case of:  
(A) fracture (B) burns (C) dogbite (D) headache

**77** Which of the food items shown in the given picture are called protective foods?

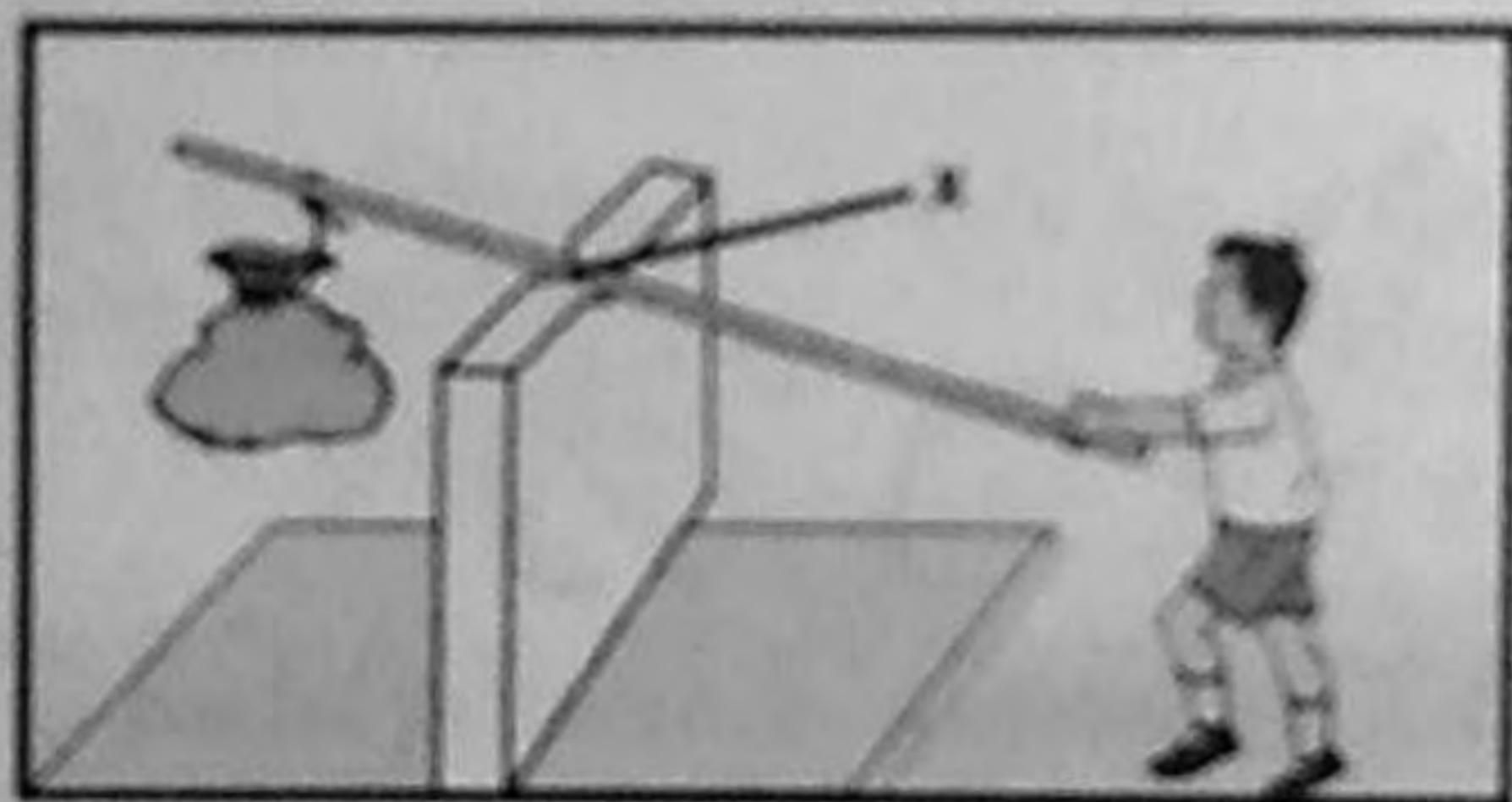


(A) P (B) Q (C) R (D) S

**78** An electrical fire should not be put out by using water since there is a danger of:

(A) burning (B) electrocution  
(C) fracture (D) spreading

**79** In the given figure, what is 'X'?



(A) Fulcrum (B) Load (C) Effort (D) Force

**80** Which of the following is called good food practice?

(A) Cooking rice in excess water and throwing away the rice water  
(B) Washing vegetables after peeling and cutting  
(C) Do not overcook the food  
(D) Do not use the water left after boiling the vegetable for making curry

**81** Eating food exposed to flies spread:

(A) tuberculosis (B) measles (C) cholera (D) tetanus

**82** Where is air present?

- I. In containers
- II. In soil
- III. In water

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

**83** Which of the following gases protects us from harmful rays?

- (A) Helium (B) Neon (C) Nitrogen (D) Ozone

**84** The function of the organ given below is:



- (A) breathe in and breathe out air  
(B) thinking and controlling of all the functions of the body  
(C) pumps blood to all parts of the body  
(D) purify the blood

**85** Which of the following does not help to save the Earth?

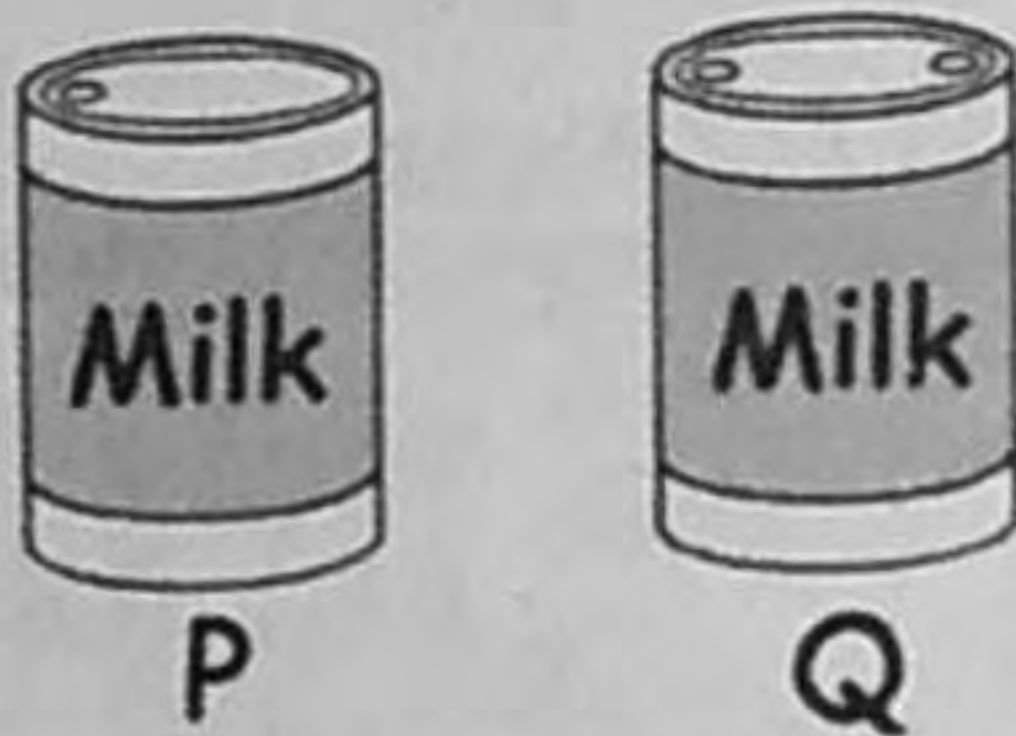
- (A) Using the fan instead of the air conditioner  
(B) Walking to work instead of driving  
(C) Recycling old newspapers  
(D) Spraying more insecticides to make our vegetables cleaner and safer

**86** Millions of years ago, the Earth consisted of dense forests. When the plants and animals died, they got covered by sand and mud and slowly decayed to form:

- (A) quartz (B) granite (C) coal (D) mica

**87** The figure shows two condensed milk tins, P with one hole and the other tin Q with two holes.

It was observed that milk flowed out faster from Q than P.



Which of the following statements is true about the given observation ?

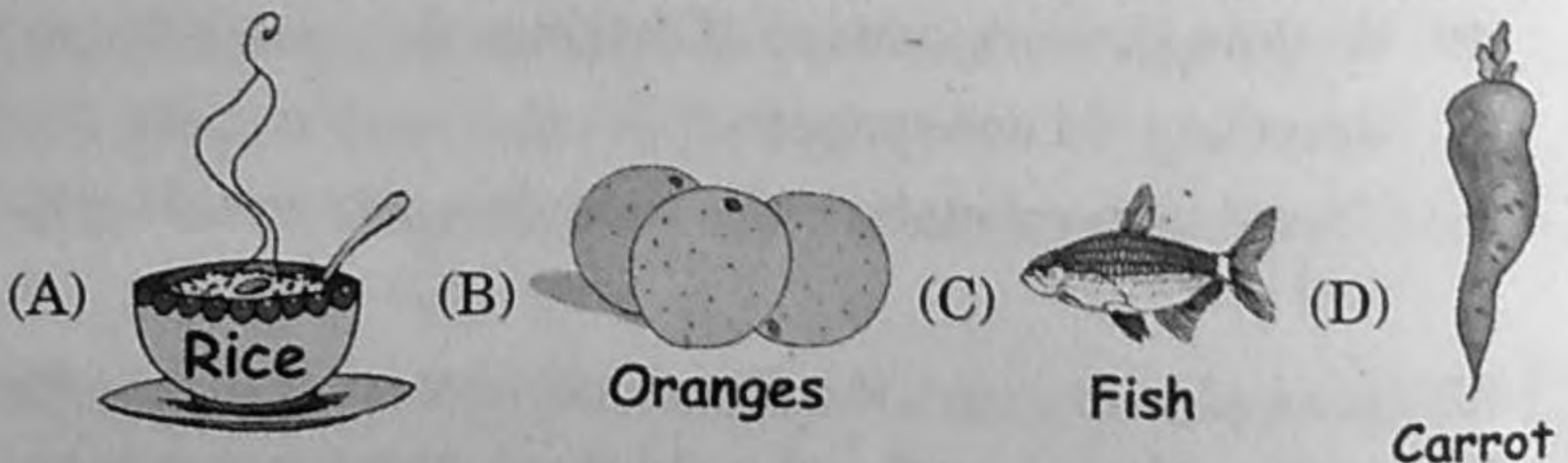
- (A) Tin Q is bigger than tin P
- (B) Milk flows out through two holes
- (C) Air enters through both sides and pushes the milk out from tin Q
- (D) Air enters through one hole and pushes the milk out from the other hole through tin Q

**88** Which of the following activities are usually done with levers?

- I. Using your arm to lift a handbag
- II. Using scissors to cut cloth
- III. Using a wheel barrow to transfer tools

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

**89** The disease kwashiorkar is caused due to the lack of certain class of food. Which of the following types of food should be consumed to reduce the risk of kwashiorkar?



**90** Which of the following is an example of sedimentary rock?

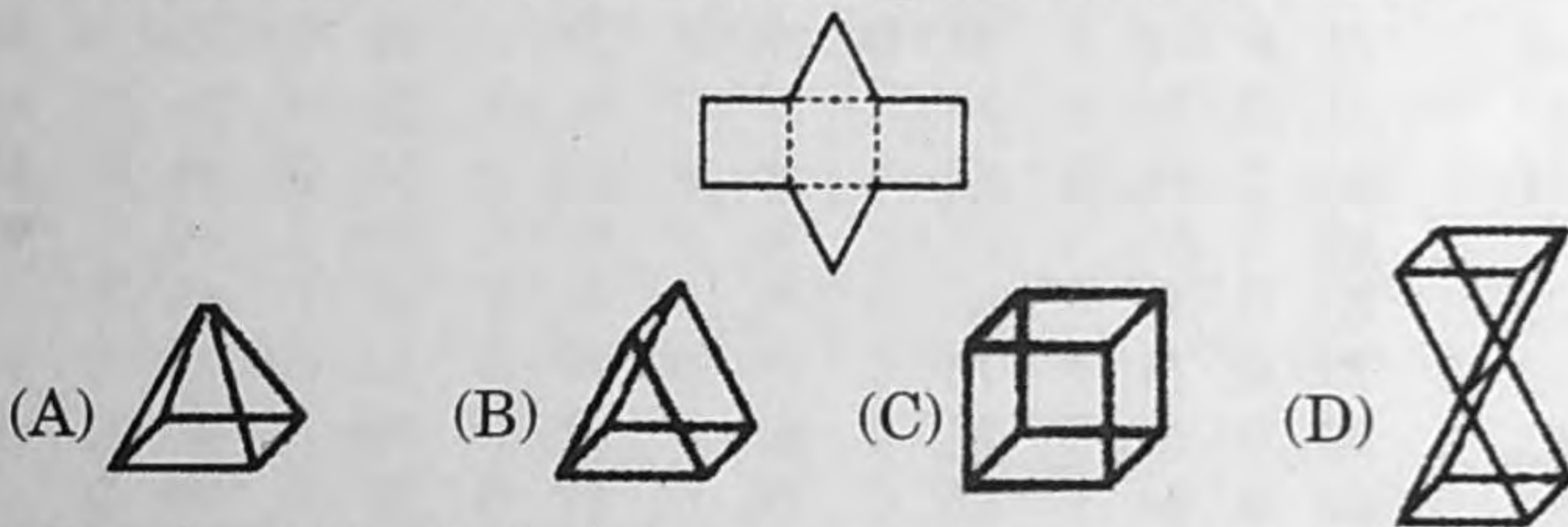
- (A) Marble
- (B) Granite
- (C) Sandstone
- (D) Pumice

**91 Oxygen : Burn :: Carbon dioxide : ?**  
 (A) Isolate (B) Foam (C) Extinguish (D) Explode

**92 Capital city of Australia is:**  
 (A) Melbourne (B) Canberra (C) Sydney (D) Perth

**93 How many legs do butterflies have?**  
 (A) 2 (B) 4 (C) 6 (D) 8

**94 Which figure could be made if the piece of cardboard shown below is folded along the dotted lines ?**



**95 Which of the following is used to explore the internet?**  
 (A) Browser (B) Spreadsheet  
 (C) Clipboard (D) Draw

**96 Who wrote 'Gulliver's Travels'?**  
 (A) Rudyard Kipling (B) Alexandre Dumas  
 (C) Jonathan Swift (D) R.L. Stevenson

**97 Who was the first Indian woman to go into space?**  
 (A) Valentina Tereshkova (B) Dr. Kalpana Chawla  
 (C) Stephanie Wilson (D) Kunjurani Devi

**98 Which was the first country to host the Asian Games?**  
 (A) Korea (B) India (C) Japan (D) China

**99 The shortcut key to close any window is:**  
 (A) Alt + D (B) Alt + F4 (C) Alt + tab (D) Alt + H

**100 Which city has canals instead of roads and the only way to travel is by boat called gondola?**  
 (A) Berlin (B) Rome (C) Venice (D) Paris