



# Manav Rachna International School

SESSION: 2021-22  
SCHOLARSHIP TEST PAPER  
FOR GRADE VII

Duration: 2 Hours

M.M: 100

KINDLY FILL THE GIVEN DETAILS

Name: \_\_\_\_\_

Father's Name: \_\_\_\_\_

Mother's Name: \_\_\_\_\_

Current Class: \_\_\_\_\_

Examination Centre: Manav Rachna International School \_\_\_\_\_

## GENERAL INSTRUCTIONS:

- This paper is divided into 4 sections  
**SECTION – A:** Logical Reasoning: 20 marks (All questions carry 2 marks each)  
**SECTION – B:** English: 20 marks (All MCQs carry 1 mark each, Short Answer Type Questions carry 2 marks each, Long Answer Type Question carries 10 marks)  
**SECTION – C:** Math: 30 marks (All Objective Questions carry 1 mark each. All Subjective Questions carry 2.5 marks each)  
**SECTION – D:** Science: 30 marks (All Objective Questions carry 1 mark each. All Subjective Questions carry 2 marks each)
- All sections are compulsory.
- Read each question carefully before answering.
- Objective Questions need to be **tick marked** in the question paper itself and submitted.
- Subjective Questions need to be attempted in the answer sheets provided and submitted.

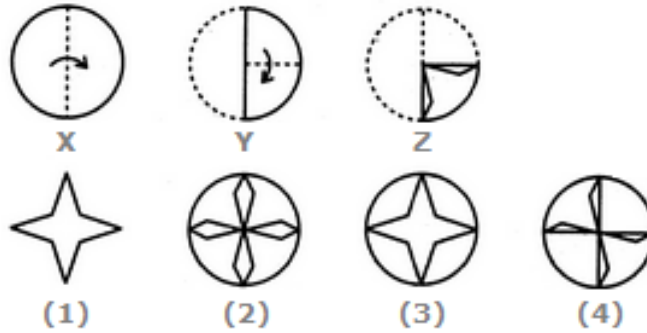
## SECTION A LOGICAL REASONING

1. Today is Monday. After 61 days it will be
  - a) Wednesday
  - b) Saturday
  - c) Tuesday
  - d) Thursday
2. To approach this question, use a sentence: “A \_\_\_\_\_ could not exist without \_\_\_\_\_.”  
Find the word that fits in **champion**
  - a) running
  - b) swimming
  - c) winning
  - d) speaking

3. Look at this series- 80, 10, 70, 15, 60... What number should come next?

- a) 20
- b) 25
- c) 30
- d) 50

4. Choose a figure which would most closely resemble the unfolded form of Figure Z.



- a) 1
- b) 2
- c) 3
- d) 4

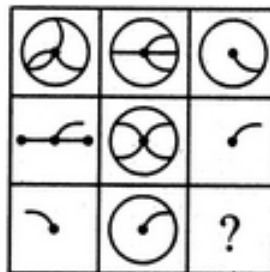
5. Look at this series: 12, 11, 13, 12, 14, 13, ..... What number should come next?

- a) 10
- b) 16
- c) 13
- d) 15

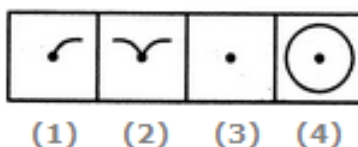
6. Safe : Secure :: Protect :

- a) Lock
- b) Guard
- c) Sure
- d) Conserve

7. Choose a figure which would most closely resemble the unfolded form of Figure Z.



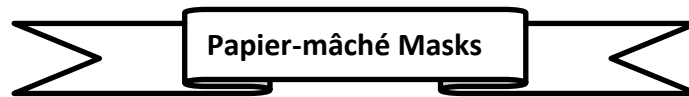
- a) 1
- b) 2
- c) 3
- d) 4



8. A man has Rs. 480 in the denominations of one rupee notes, five rupee notes and ten rupee notes. The number of notes of each denomination is equal. What is the total number of notes he has?
- 45
  - 60
  - 75
  - 90
9. An Informal Gathering occurs when a group of people get together in a casual, relaxed manner. Which situation below is the best example of an Informal Gathering?
- A debating club meets on the first Sunday morning of every month.
  - After finding out about his salary raise, Jay and a few colleagues go out for a quick dinner after work.
  - Meena sends out 10 invitations for a bachelorette party she is giving for her elder sister.
  - Whenever she eats at a Chinese restaurant, Roop seems to run into Dibya.
10. Paw : Cat :: Hoof : ?
- Lamb
  - Horse
  - Elephant
  - Tiger

## SECTION B ENGLISH

1. Read the passage and answer the questions that follow-



Masks are always fun to wear at festive events, and they can also be used to decorate walls. Here's a simple and inexpensive way to make masks. The face you create should reflect your unique and original style. Have fun applying your own creative touch to this project!

### Supplies

- Newspapers
- 1 medium sized balloon
- Flour and water
- Various colours of tempera paint
- Paintbrush
- Scissors
- A hole punch
- String
- Cookware pot

## Instructions

### Preparation

- Blow up balloon to a size that is slightly larger than the circumference of your head. Tie and set aside.
- Tear newspaper into strips about 1-inch wide and 4 to 6 inches long.
- To make the glue for the papier-mâché, mix 1/2 cup of flour with 1/2 cup of warm water until the mixture is creamy and free of lumps. On the stove, bring 2 cups of water to a boiling point. Add the mixture to the pot of boiling water and simmer for 3 to 5 minutes. Allow to cool.

### Let's begin

- Place the balloon in a container such as a bowl or shallow box. This will hold the balloon stable while applying the papier-mâché strips.
- Next, dip a strip of paper into the glue mixture. Using your fingers, wipe off excess glue, and begin wrapping it around the entire balloon in vertical and horizontal layers. Apply 2 to 3 layers and allow it to dry completely. (Drying time usually requires 7 to 8 hours but may need as much as 2 days depending on the humidity.)
- When the balloon is dry, begin shaping small pieces of newspaper into raised features, such as the nose, brows, lips, and cheeks. Secure everything onto the balloon with extra strips of newspaper dipped into the glue. Make any modifications needed on the features and then allow the balloon to completely dry again.
- Next, using a sharp pin, pierce the hardened mask and pop the balloon. With scissors, cut the mask into the shape that will fit a face. (Do not forget the holes for the eyes!)

### Final Touches

Paint the entire mask in vivid and expressive colours. This may require 2 coats for complete coverage. Adding feathers, sequins, and glitter can also give your mask more flair. Cut a piece of string about 1-foot long. With the hole punch, punch a hole at opposite ends of the mask (about where the ears would be) and attach the string.

**On the basis of your reading of the above passage, choose the correct option from the following: -**

**i. Which step must occur before applying the papier-mâché strips?**

- a) The balloon has to be put in a secure place.
- b) Small pieces should be shaped into features.
- c) The mixture needs to be completely dry.
- d) Holes for the eyes of the mask must be cut.

**ii. Why did the author, most likely, write the selection?**

- a) To inform the reader how to make a papier-mâché mask
- b) To trace the history of papier-mâché masks
- c) To describe the appearance of a papier-mâché mask
- d) To persuade the reader to purchase a papier-mâché mask

**iii. Which step is done last when making a papier-mâché mask?**

- a) Paint the mask with vivid colours.
- b) Cut the mask into a specific shape.
- c) Attach the string to the mask.
- d) Add decorations to the mask.

**iv. In what phase of the papier-mâché process is the glue made?**

- a) Heating
- b) Beginning
- c) Preparation
- d) Final Touches

**v. Fill in the blanks with suitable words-**

Adding feathers, \_\_\_\_\_ and \_\_\_\_\_ can also give your mask more flair.

**vi. Find the synonyms of the following from the given passage.**

- a) gaudy
- b) economical

**vii. Put the given sequence of mask making in the correct order.**

- A. Dip a strip of paper into a glue mixture
- B. Blow up balloon to a size that is slightly larger than the circumference of your head.
- C. Assemble supplies
- D. Using your fingers, wipe off excess glue, and begin wrapping it around the entire balloon in vertical and horizontal layers
- E. Tear newspaper into strips about 1-inch wide and 4 to 6 inches long.

- a) C, D, A, E, B
- b) B, C, E, D, A
- c) C, B, E, A, D
- d) B, E, A, D, C

**viii. Read the sentence given below: -**

**Masks are always fun to wear at festive events.**

Is the author stating a fact or an opinion about masks? Use details from the passage given to support your answer.

**ix. The instructions include a preparation section. Explain what would happen if the preparation step was ignored.**

2i. You are one of the characters in your favourite book. Keeping the context in mind, make a diary entry at the end of a day. (Word limit – 150 words)

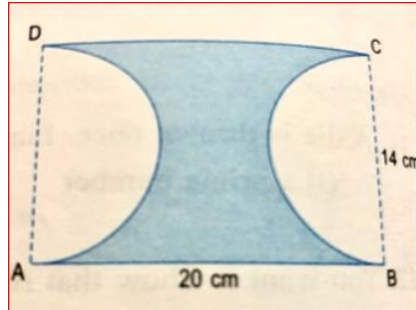
**OR**

2ii. On the occasion of ‘Safer Internet Day’, write a speech for your school assembly. (Word limit – 150 words)

**SECTION C**  
**MATH**

**OBJECTIVE**

1. In the adjoining figure (not to scale), ABCD is a rectangle with AB = 20cm and BC = 14cm. Two semicircles are cut from each of the two breadths as diameters.



The perimeter of the shaded region is

- a) 84cm            b) 60cm            c) 100cm            d) 120cm
2. The CP of 16 tables is equal to the SP of 12 tables. Find the gain or loss%.
- a)  $33\frac{1}{3}\%$             b)  $30\frac{1}{3}\%$             c)  $3\frac{1}{3}\%$             d)  $13\frac{1}{3}\%$
3. Which of the following CANNOT be used to find the perimeter of a square with side length 's' ?
- a)  $F = s+s+s+s$     b)  $G = 2s+2s$             c)  $H = 4s$             d)  $P = s \times s$
4. Amrita's Department Store is having a sale. The table shows the regular price 'r' and the sale price 's' of several items .

Item	Regular Price ( r )	Sale Price (s)
A	Rs 5.00	Rs 2.50
B	Rs 7.00	Rs 3.50
C	Rs 10.00	Rs 5.00
D	Rs 12.00	Rs 6.00

Which formula can be used to calculate the sale price?

- a)  $s = r - 2.5$             b)  $s = r \times 2.5$             c)  $s = r \times 0.5$             d)  $s = r - 0.5$
5. Mr. Zameer started a 6-week exercise program. The first week he jogged 1km each day , the second week he jogged  $1\frac{1}{4}$  km each day , and the third week he jogged  $1\frac{1}{2}$  km each day. If pattern continues, how far will he jogged each day of the sixth week.
- a)  $1\frac{1}{4}$  km            b)  $2\frac{1}{4}$  km            c) 6 km            d)  $9\frac{3}{4}$  km
6. Pushpa spends a total of 60 hours per week at school and at her job. She attends school from 8:45am till 3:45 pm , Monday through Friday. Which equation can be used to find t , the maximum numbers of hours Pushpa works at her job each week.
- a)  $t = 60 - (5 \times 7)$             b)  $t = 60 - (5 \times 8)$             c)  $t = 60 - 7 + 7 + 7 + 7 + 7$             d)  $t = 5 \times 7 - 60$

7. When 75% of a number is added to 75, the result is the same number. The number is  
 a) 150                      b) 300                      c) 100                      d) 450

8. Aryan polled 15 classmates to find out what kind of pets they have. Which of the following gives the most detailed information about the individual students and their pets ?

(a) Types of pets owned by students

(c) Types of pets owned by students

Type of Pet	Number of Students
Cat	10
Fish	6
Dog	3

(b) Types of pets owned by students

Type of Pet	Number of Students
Cat	10
Fish	6
Dog	3

(d) None of these

9. The ratio of sugar and other ingredients in the biscuits of three bakeries –Mongunies ,Karachi and Baker’s Inn – are 5:4 , 13:12 and 29:24 respectively . The biscuits of which bakery are the sweetest ?

- a) Mongunies
- b) Karachi
- c) Baker’s Inn
- d) All the three types of biscuits are equally sweet.

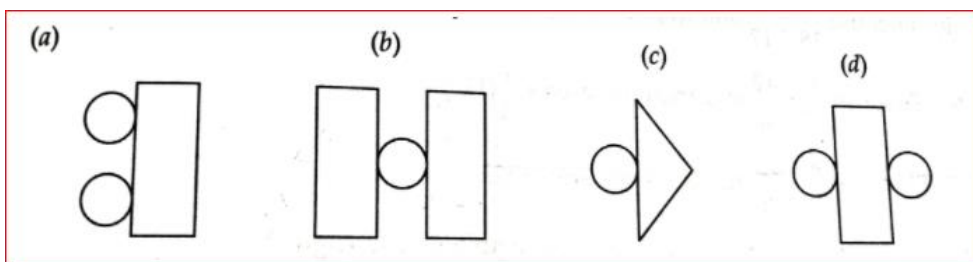
10. The sum of a number and its reciprocal is  $\frac{8}{15}$  less than three times the sum of one third the original, and its reciprocal. The original number is :

- a) 11                      b) 25                      c) 35                      d) 15

11. A regular hexagon is inscribed in a circle of radius 10cm. The perimeter of the hexagon is

- a) 40 cm                      b) 30 cm                      c) 50 cm                      d) 60 cm

12. Which net can be used to make a cylinder ?



13. If  $\Delta$  is an operation such that for integers  $a$  and  $b$  we have  $a \Delta b = a \times a + b \times b - a \times b$ , then find  $(-3) \Delta 2$ .

- a) 16                      b) 19                      c) 13                      d) 14

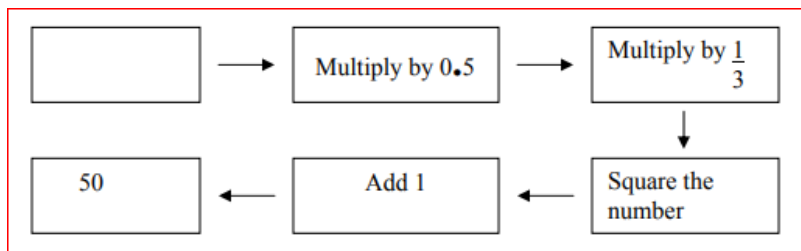
14. \_\_\_\_\_% of 6 is 0.75

- a) 125                      b) 1.25                      c) 12.5                      d) 10.25

15. The teacher tells the class that the highest marks obtained by a student in her class is twice the lowest the marks plus 7. The highest score is 87. What is the lowest score.

- a) 40                      b) 24                      c) 68                      d) 28

16. Fill in the blank with the starting number.

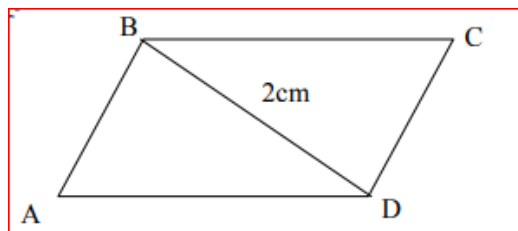


- a) 42                      b) 24                      c) 36                      d) 49

17. There are 300 fishes in the tank. Their number is increased by 20%. Then 20% of the fishes die. The number of fishes in the tank now is \_\_\_\_\_.

- a) 288                      b) 280                      c) 360                      d) 278

18. The angles of  $\Delta BCD$  are equal. The perimeter of the parallelogram ABCD is \_\_\_\_\_.



- a) 8cm                      b) 4cm                      c) 10cm                      d) 12cm

19. A sewing machine stitches 4000 stitches per decametre .The number of stitches it would stitch per decimetre is \_\_\_\_\_.

- a) 40                      b) 400                      c) 120                      d) 4

20. If  $e, f, g$  and  $h$  are consecutive odd integers and  $e < f < g < h$  , then  $g+h$  is how much greater than  $e+f$  .

- a) 3                      b) 4                      c) 5                      d) 8

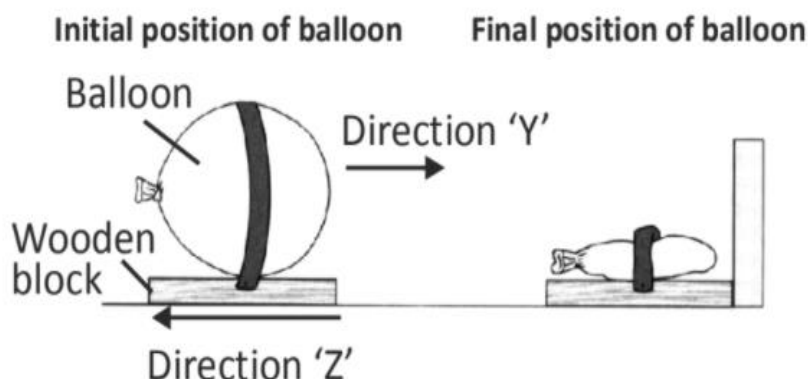


## SUBJECTIVE

1. To  $33\frac{1}{3}\%$  of  $\frac{1}{3}$  of the predecessor of smallest ten digit number add successor of the smallest number formed by the digits of first five composite numbers, find the number.
2. Floor of a room measures 4.5 metres  $\times$  3 metres. Find the minimum number of complete square marble slabs of equal size required to cover the entire floor.
3. In a school library, there were 780 books of English and 364 books of Science. Ms Sharma, the librarian of the school wants to store these books in shelves such that each shelf should have the same number of books of each subject. What should be the minimum number of books on each shelf?
4. Swati wants to finish a novel as soon as possible. So far, she has read only 42 pages. What fraction of the book has she read, if there are 147 pages in the book in all. Also simplify the fraction in the least form.

## SECTION D SCIENCE

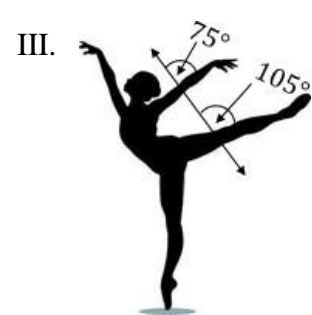
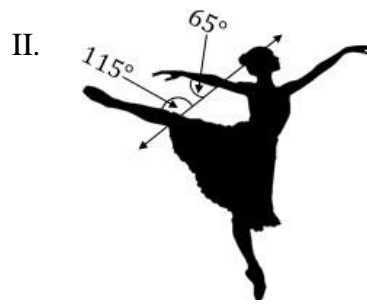
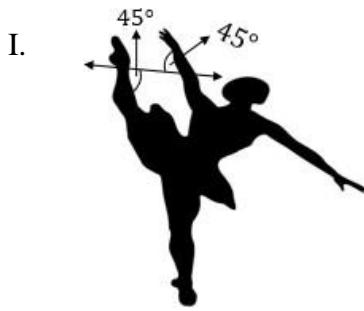
1. Observe the figure given below.



Which of the following option is true out of the following?

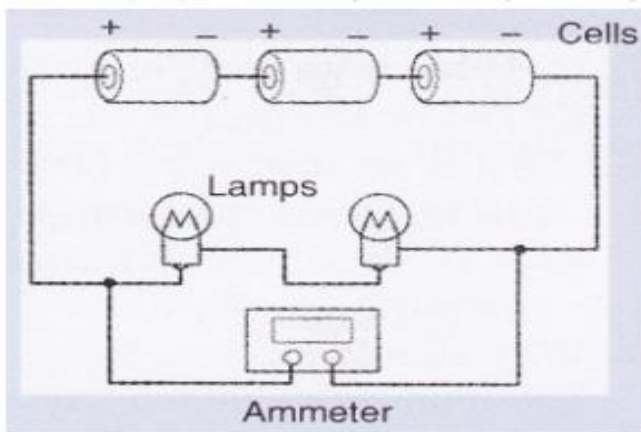
- a) A push force is acting in Y direction and frictional force is acting in Z direction.
  - b) Only frictional force is acting in Z direction, no push force is exerting in Y direction.
  - c) A magnetic force pulls the balloon in direction Y.
  - d) Only push force is acting in Y direction, no frictional force is exerting in Z direction.
2. If an object is placed at a distance of 2.5 cm in front of a plane mirror, the distance between the object and the image formed by the mirror will be
    - a) 5 m
    - b) 2.5 cm
    - c) 5 cm
    - d) 0.5 cm

3. Shown below are three dancers trying to perform a dance step. The correct form of this dance step is to keep **one hand and one leg parallel to each other**. Who among the following is doing the dance step correctly?



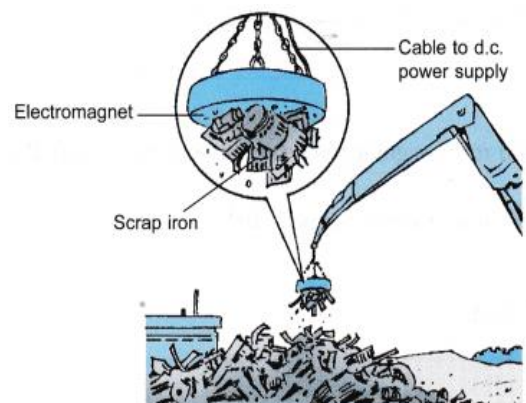
- a) Only I                      b) Only II                      c) Only III                      e) Only II and III

4. If the Ammeter is replaced by an open switch, choose the incorrect statement:



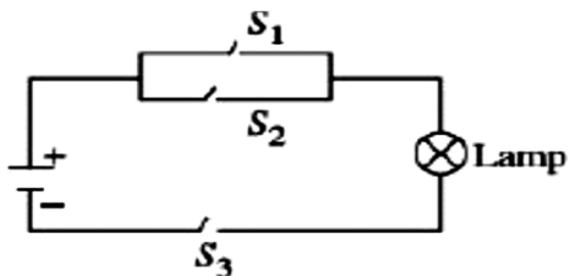
- a) The lamps will not stop glowing  
 b) The lamps will not stop glowing if the polarity of the middle cell is reversed  
 c) The lamps will not stop glowing if the switch is closed  
 d) The lamps will not stop glowing if the middle cell is replaced by another closed switch
5. Choose the correct option if the electromagnet is replaced by a permanent magnet:

- a) The magnet will drop all the scrap iron when the dc power supply is switched off.  
 b) The magnet will lose its magnetism if the dc power supply is removed  
 c) The magnet will pick up more iron scraps if the dc power supply is increased  
 d) The magnet will lose some of its strength over time

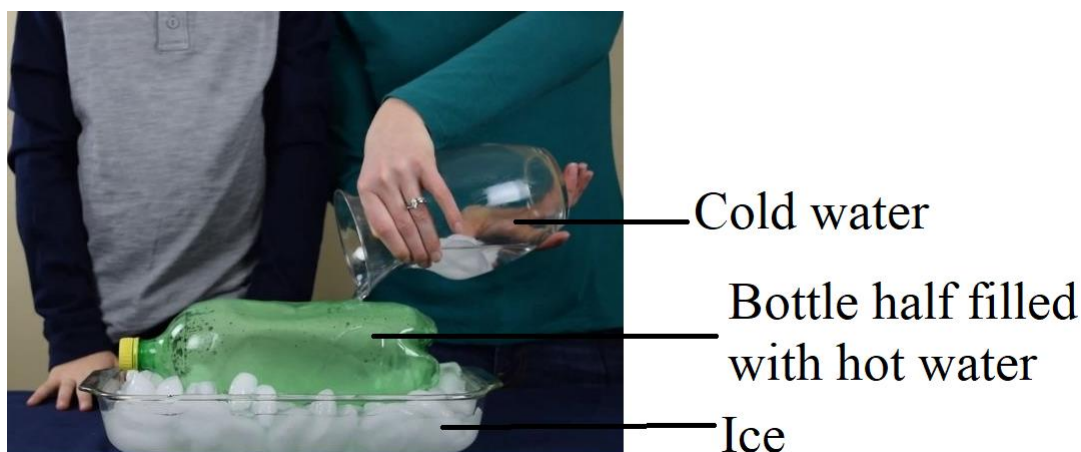


6. When an incident ray falls normally on a plane mirror, then angle of incidences and reflection are :
- $90^\circ, 90^\circ$
  - $0^\circ, 0^\circ$
  - $180^\circ, 0^\circ$
  - $45^\circ, 90^\circ$

7. S<sub>1</sub>, S<sub>2</sub>, S<sub>3</sub> are switches. Which combination is correct for the lamp to glow?



- S<sub>1</sub>: opened , S<sub>2</sub>: opened, S<sub>3</sub>: closed
  - S<sub>1</sub>: opened , S<sub>2</sub>: closed, S<sub>3</sub>: closed
  - S<sub>1</sub>: opened , S<sub>2</sub>: opened, S<sub>3</sub>: opened
  - S<sub>1</sub>: closed , S<sub>2</sub>: closed, S<sub>3</sub>: opened
8. What do you conclude on the basis of the activity shown in the following picture?

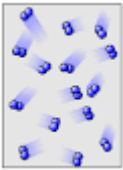
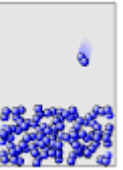



- Condensation of water outside the bottle results increase in air pressure outside the bottle.
  - Condensation of water outside the bottle results in decrease in air pressure inside the bottle.
  - Condensation of water inside the bottle results in increase in air pressure inside the bottle.
  - Condensation of water inside the bottle results in decrease in air pressure inside the bottle.
9. Match the contents of the column I with column II.

Column I	Column II
i. An atom	a. Hydrogen gas
ii. A molecule	b. Distilled water
iii. A compound	c. Pond water
iv. A mixture	d. Iron particles

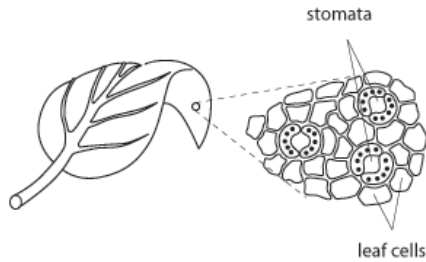
- i-b, ii-c, iii-b, iv-a
- i-d, ii-a, iii-b, iv-c
- i-d, ii-c, iii-a, iv-b
- i-a, ii-d, iii-c, iv-b

10. Soft drink bottles are never filled at the factory till the brim of the bottle because:
- Soft drink may spill out of the bottle.
  - Soft drinks contain gases that expand on cooling.
  - Soft drinks contain lot of water that expands on cooling.
  - Soft drinks contain lot of water that keeps evaporating.
11. A commonly used chemical for loading is:
- Oxygen
  - Hydrogen
  - Alum
  - Water
12. Solubility of gases in water can be increased by:
- Heating water
  - Cooling water
  - Dissolving alum
  - Dissolving salt
13. When a wine bottle is sealed, air between the surface of the wine and bottom of the cork includes both oxygen and carbon di-oxide gases. Carbon dioxide gas forms the lower layer above wine as:
- Carbon di-oxide gas is lighter than oxygen gas so the oxygen gas can easily dissolve in the wine and enhance its taste.
  - Oxygen gas is lighter than carbon di-oxide gas so it prevents the acidity perception of the wine.
  - Carbon di-oxide gas is heavier than oxygen gas so it doesn't allow oxygen to change the taste of wine.
  - Oxygen gas is heavier than carbon di-oxide gas so it prevents the gas from catching fire if it is exposed to heat.
14. Match the diagrams showing particles of the three states of matter in column I with the items shown in the column II.

Column I		Column II
i.		a. Sodium
ii.		b. Chlorine molecule
iii.		c. Mercury at room temperature

- i-c, ii-b, iii-a
- i-b, ii-c, iii-a
- i-c, ii-a, iii-c
- i-a, ii-c, iii-b

15. The diagram shows stomata, which are usually found on the underside of the leaf.



Which of the following is NOT a function performed by them?

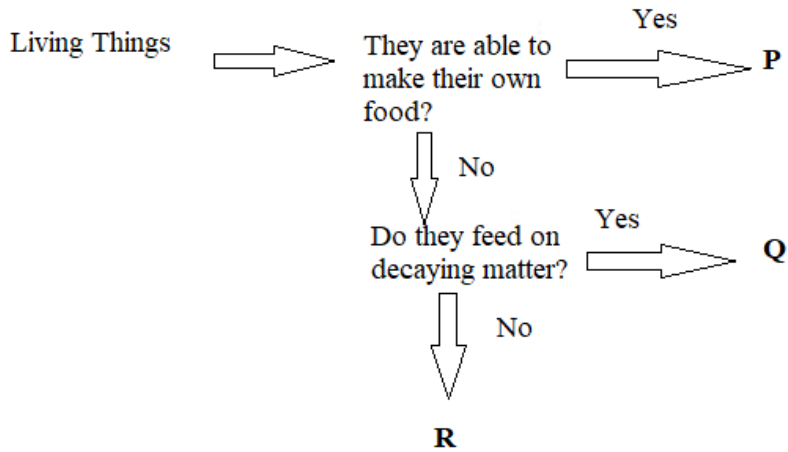
- a) Take in carbon dioxide and give out oxygen
- b) Trap sunlight to make food for plant
- c) Take in oxygen and give out carbon dioxide
- d) Allow excess water to evaporate from the leaves

16. Two different organisms have following characteristics in common:

- i) They are aquatic animals
- ii) They give birth to their young ones.
- iii) They have blowholes and breathe through lungs.

- a) A turtle and a frog
- b) A dolphin and a whale
- c) A sword fish and a shark
- d) A turtle and a penguin

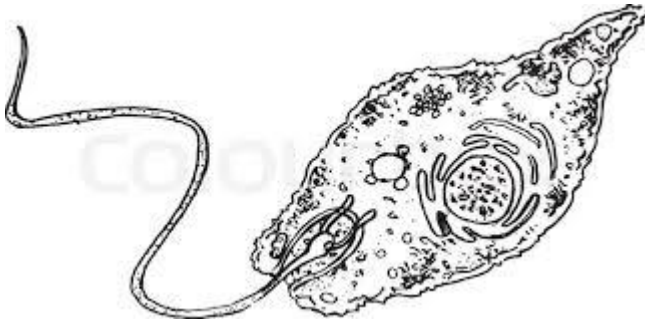
17. The flowchart given shows how some living things are classified:



Identify P, Q and R:

	P	Q	R
a)	Mouse	Mushroom	Mango
b)	Grass	Mould	Frog
c)	Mushroom	Grass	Mould
d)	Fern	Grasshopper	Moss

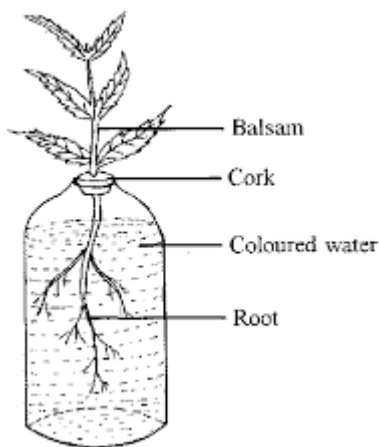
18. Observe the figure given below. It possess characteristics of plants and animals.



Which of the following statements prove that the organisms possess the characteristic of an animal?

- a) It lacks cell wall
- b) It lacks chloroplast
- c) It is unicellular
- d) It exhibits movement

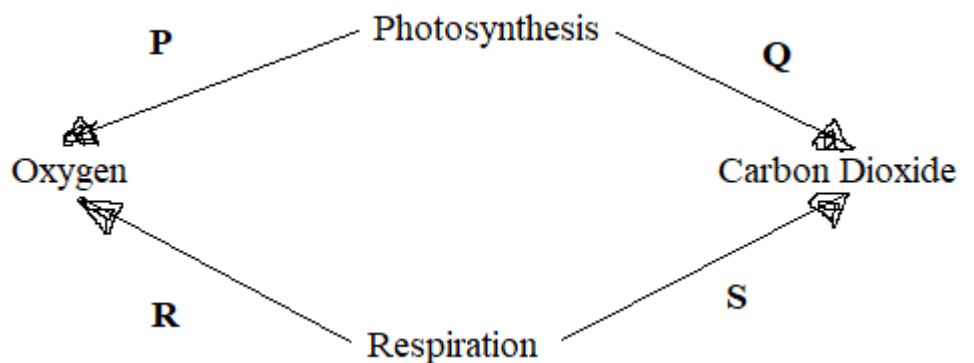
19. The figure given below shows how water is transported through a plant.



Which part of the leaf controls the rate of loss of water to air?

- a) Epidermis
- b) Stomata
- c) Vascular bundle
- d) Cuticle

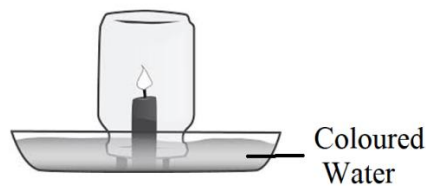
20. Study the diagram given below carefully. It shows the relationship between photosynthesis and respiration. Which arrow is/ are wrong?



- a) P only
- b) Q only
- c) R and S only
- d) Q and R only

## SUBJECTIVE

1. Speed can be defined as the distance an object travels in a certain amount of time. Mohan completes a long distance run at speed of 9 km/hr. If it takes him 3 hours, how far did he run?
2. Draw a circuit diagram to show how two bulbs can be controlled by a switch such that both bulbs will glow when the switch is on while one bulb will glow when the switch is off.  
(Ans: one bulb and switch in series and the other bulb in parallel to the combination)
3. 'Salt powder is sprinkled to clear the roads covered with snow.' Justify the statement.
4. 'What would you observe when the candle shown in the following diagram extinguished? Justify your answer.'



5. In the given food web, how many producers, primary consumers and tertiary consumers are there?

