# Sample Paper 

MAXIMUM TIME: 60 MINUTES
MAXIMUM MARKS: 100

## INSTRUCTIONS

1. Please DO NOT OPEN the contest booklet until you are asked to do so.
2. The question paper comprises of 4 sections (Total 50 questions):

Section A: Scientific Reasoning 25-Questions (2 mark each)
Section B: Everyday Science 15-Questions (1 mark each)
Section C: Logical Reasoning 5-Questions (2 mark each)
Section D: BrainBox 5-Questions (5 mark each)
3. All questions are compulsory. There is no negative marking.
4. No electronic devices capable of storing and displaying visual information such as calculator and mobile are allowed during the course of the exam.
5. Fill all your detail properly on the OMR sheet.
6. There is only ONE correct answer of each question.
7. To mark your choice of answers by darkening the circles on the OMR Sheet, use an HB Pencil or a Blue/Black Ball Point Pen only.
8. Shade your answer clearly as per the given example:

$\square$
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Student's Name:

1. Which of the following is correct about micro organisms?
i) All microbes are harmful to us.
ii) They do not need food to grow.
iii) They come in different shapes and sizes.
iv) They cannot be seen with naked eye.
a) (i) \& (ii) only
b) (ii) \& (iii) only
c) (i), (ii) \& (iii)
d) All the these
2. A group of students observed the given plant. They note down the features of this plant as given.

Which of the above mentioned features this plant cannot have?

a) Fruits
b) Flowers
c) Seeds
d) All of these
3. Aman added 300 ml water in a beaker containing sand as shown in the figure.


Why could the water level not reach upto 500 ml after pouring water into sand?
a) Sand is solid and water is liquid
b) Sand is insoluble in water.
c) Sand particles have air bubbles in between in which some amount of water particles get fixed.
d) Both a and b
4. Radhika noticed water droplets on glass windows of her mother's AC car in afternoon. What could be the possible reason?
i) The car's window is colder than the atmospheric air outside.
ii) The car's window is warmer then the atmospheric are outside.
iii) Water vapours in the car condensed on the cold window of the car.
iv) Water vapours outside the car condensed on the cold window of the car.
a) i) \& ii)
b) i) \& iv)
c) ii) \& iii)
d) ii) \& iv)

## SECTION B: EVERYDAY SCIENCE

5. Which of the following surfaces will produce a diffused reflection?
a) A plane of glass
b) A concave mirror
c) A horizontal wall
d) A perfectly reflecting mirror
6. Penicillin is an antibiotic used to fight bacterial infection. Where is this medicine extracted from?
a) Bacteria
b) Killed microbes
c) Mould
d) Attenuated virus
7. What comes next?

a)

b)

c)

d)



## SECTION D: BRAINBOX

9. Two persons carry the same amount of sand in wheelbarrow. The one who uses the longer handles feels tired than the one who uses the shorter handles. Which of the following statements best describes the reason?

a) Though the mass is same, weight of sand is different in the two wheel barrows.
b) Different amount of energy has been lost as heat energy.
c) Different forces are required to lift and push the two wheelbarrows.
d) Different amount of friction between the wheels and the ground in each case.
10. When a ball was placed between a light source and a white screen, a shadow was seen on the screen as shown below.


If a red bulb is used as the light source in this situation, what will you observe? Mark your answer.
a)

b)

c)

d)


ANSWERS

1. (B)
2. (D)
3. (C)
4. (B)
5. (C)
6. (C)
7. (C)
8. (D)
9. (C)
10. (B)
