

## SAST 2020 Sample question paper for class 8

### Maths

1. The lengths of sides of triangle are  $x$  cm,  $(x + 1)$  cm and  $(x + 2)$  cm, the value of  $x$  when triangle is right angled is

A) 5cm

B) 4cm

C) 3cm

D) 6cm

2. Sum of two positive numbers is always

A) Positive

B) Negative

C) 0

D) 1

3.  $(-1) \times (-1) \times (-1) \dots 10$  times is equal to

A) 1

B) -1

C) 1 or -1

D) None of these

4. The circumference of a circle with radius 14 cm is ————

A) 88 cm

B) 44 cm

C) 22 cm

D) 11 cm

### Chemistry

1. Which one of the following is a physical change?

A) Rusting of Iron

B) Heating of Iron

C) Burning of wood

D) Ripening of fruit

2. A household cleaner has a pH around 10. It would be considered

- A) a base.
- B) an acid.
- C) neutral.
- D) a liquid..

3. A chemical combination of two or more atoms is a(n) .

- A) volume
- B) molecule
- C) chemical bond
- D) isotope

4. Density is

- A) matter/solids.
- B) volume/mass.
- C) gas/liquid.
- D) mass/volume

**Physics**

1. Matter is pulled to the ground by .

- A) space
- B) gravity
- C) air
- D) soil

2. Which of the following best explains the scenario below?

On a summer morning, John walks barefoot across his paved driveway with no problem. However, later that afternoon he steps barefoot onto the same driveway and must quickly run off because the bottoms of his feet feel like they are burning.

- A) As the temperature increased during the day, the particles in the pavement moved slower and the thermal energy increased.

- B) As the temperature increased during the day, the particles in the pavement moved slower and the thermal energy decreased.
- C) As the temperature increased during the day, the particles in the pavement moved faster and the thermal energy increased.
- D) As the temperature increased during the day, the particles in the pavement moved faster and the thermal energy decreased.

3. The force of attraction between any two objects that have mass is .

- A) energy
- B) force
- C) gravity
- D) speed

4. Thermal energy can be transferred by

- A) conduction only
- B) convection only
- C) radiation only
- D) conduction, convection, and radiation

### **Biology**

1. Organisms which respire in the absence of air are called

- A) microbes
- B) anaerobes
- C) aerobes
- D) None of these

2. Which of the following is the male reproductive part of flower

- A) Stamen
- B) Pistil
- C) Stem
- D) Root

3. Which component of blood in mammals build up defence against harmful germs entering the body?

- A) RBCs
- B) Plasma

C) Platelets

D) WBCs

4. Which of the following organism gets its food from dead and decaying matter?

A) Algae

B) Fungi

C) Amoeba

D) Insectivorous plants.

**Mental ability**

1.  $5 : 2431 :: 8 : ?$

A) 4287

B) 5461

C) 7624

D) 6743

2. Find the missing number/letter from the given responses?

AGM, BHN, CIO, ?

A) COU

B) FQK

C) DJP

D) QXD

3. Find the missing number

5, 7, 11, ?, 35, 67

A) 23

B) 28

C) 30

D) 10

4. If STRONG is written as ROTNSG, then how would NAGPUR be written in the same code?

A) GPAUNR

B) PGUARN

C) PGAURN

D) GPUANR

