SAST 2020 Sample question paper for class 10

Maths

1. The coefficient of x2 in 3x3+2x2-x+1 is:

A) 1

B) 2

C) 3

D)-1

2. The value of f(x) = 5x−4x2+3 when x = -1, is:

A) 3

B) -12

C) -6

D) 6

3. The angle subtended by the diameter of a semicircle is:

A) 45°

B) 180°

C) 90°

D) 60°

4. In a triangle ABC, it is given that base = 12 cm and height = 5 cm. Find its area.

a. 30 cm^2

b. 40 ccm^2

c. 50 cm^2

d. 60 cm^2

Chemistry

1. One gram of which of the following contains largest number of oxygen atoms?

A) O

B) O2

C) O3

D) All contains same

2. The formation of SO2 and SO3 explain:

A) The law of conservation of mass

B) The law of multiple proportions

C) The law of definite properties

D) Boyle's law

3. The work function of a metal is 4.0 eV. The longest wavelength of light that can cause photoelectron emission from the metal is approximately:

A)540nm

B)400 nm

C)300 nm

D)220 nm

4. In an atom, the constituent electrons:

a) Do not move

b) Are uniformly distributed

c) Move around the nucleus in fixed energy levels.

d) Move around the nucleus in a random way.

Physics

1. Why a goalkeeper in a game of football pulls his hands backwards after holding the ball shot at the goal?

A) Keep the ball in hands firmly

B) Reduce the force exerted by the ball

C) To exert larger force on the ball

D) None of these

2. The maximum distance of a vibrating body from its mean position is called its –

A) Frequency

B) Quality

C) Amplitude

D) Pitch

3. A big stone and small are dropped from the roof of the house at the same time. Which one will reach the ground first?

A) Big Stone

B) Small stone

C) Both at the same time

D) Not able to determine with the given data

4. An object is thrown vertically upwards and rises to a height of 10 m. Calculate the velocity with which the object was thrown upwards? Take g=9.8 m/s2

A) 14m/s

B) 16m/s

C) 10m/s

D) 9.8 m/s

Biology

1. Karyotheca is another name of -

A) Nuclear envelope

B) Nucleus

C) Nuclear pores

D) Nucleolus

2. The largest cell in the human body is -

A) Nerve cell

B) Muscle cell

C) Liver cell

D) Kidney cell

3. AIDS virus cannot be transmitted to another person by -

A) Blood transfusion

B) Shaking hands

C) Sexual contact

D) Infected needles

4. An animal that transmits a disease from infected person or its stools etc. to other potential host is called

A) primary host

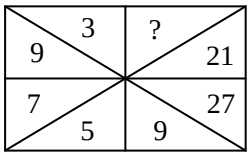
B) secondary host

C) parasite

D) vector

Mental ability

1. Find the missing term



A) 12

B) 15

C) 30

D) 28

2. Find the next term

5, 9, 17, 29, 45, (...)

A) 60

B) 65

C) 68

D) 70

3. In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that

code?

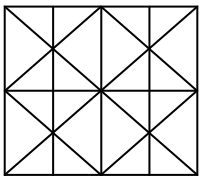
A) QDFHS

B) SDFHS

C) SHFDQ

D) UJHFS

4. What is the number of straight lines in the following figure?



A) 11

B) 14

C) 16

D) 17