Static Electricity – 2020 O Level 5054

1. Nov/2020/Paper_11/No.7

An electrically charged plastic ball is at rest.

Which types of field are caused by the ball?

A electric, gravitational and magnetic

B electric and gravitational only

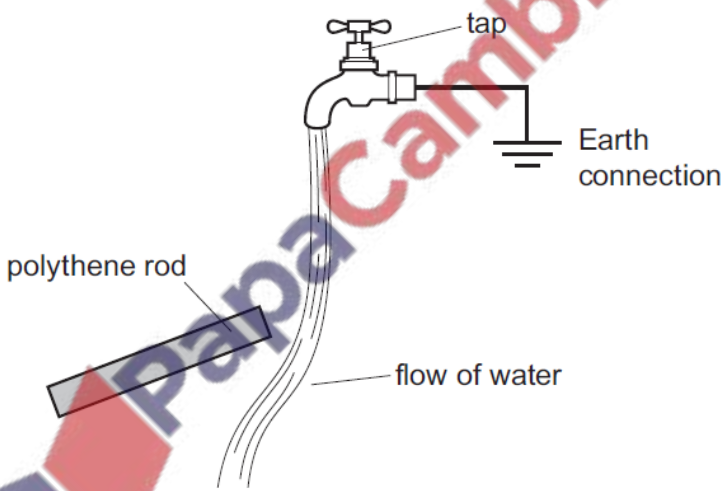
C electric and magnetic only

D gravitational and magnetic only

2. Nov/2020/Paper_11/No.33

A polythene rod is brought near to a stream of water from a metal tap which is earthed. Tap water is an electrical conductor.

The water moves towards the rod, as shown.



Which description of the rod and water is correct?

	rod	water
A	charged	charged
B	charged	uncharged
C	uncharged	charged
D	uncharged	uncharged

3. Nov/2020/Paper_11/No.34

A small negative charge is placed at a point where an electric field is vertically upwards.

There is a force on the charge due to the field.

In which direction does it act?

A vertically upwards

B vertically downwards

C horizontally to the right

D horizontally to the left

4. Nov/2020/Paper_12/No.9

An electrically charged plastic ball is at rest.

Which types of field are caused by the ball?

A electric, gravitational and magnetic

B electric and gravitational only

C electric and magnetic only

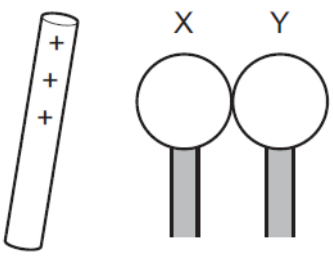
D gravitational and magnetic only

5. June/2020/Paper_11/No.34

Two insulated and uncharged metal spheres X and Y are touching.

A positively charged rod is held near X and then the spheres are moved apart.

X now has a negative charge.



What is the charge on Y?

A negative and smaller than that on X

B negative and the same size as that on X

C positive and smaller than that on X

D positive and the same size as that on X

6. June/2020/Paper_11/No.35

A stationary negative charge in an electric field experiences an electric force in the direction shown.

What is the direction of the electric field?

A to the left

B to the right

C down the page

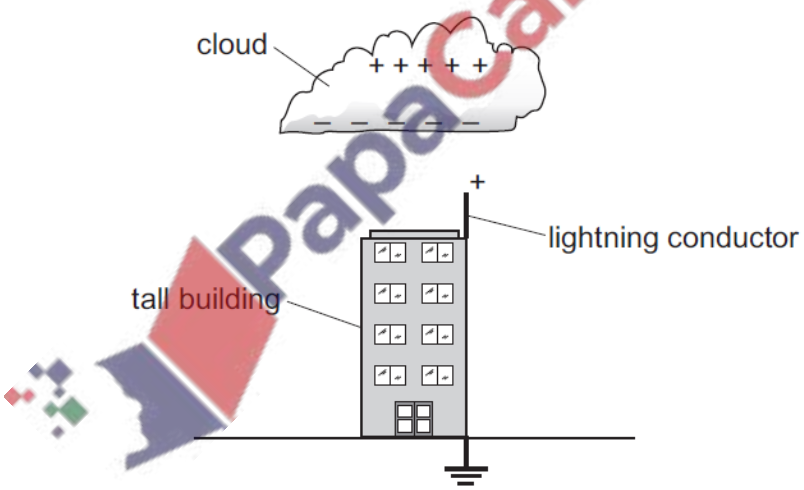
D up the page

7. June/2020/Paper_12/No.34

A metal lightning conductor is placed on the top of a tall building.

The conductor is connected to Earth.

When a charged cloud passes over the building, the metal lightning conductor becomes positively charged.



What happens to the lightning conductor to produce a positive charge at its top?

A Electrons move downwards and protons move upwards in the conductor.

B Only electrons move in the conductor.

C Only protons move in the conductor.

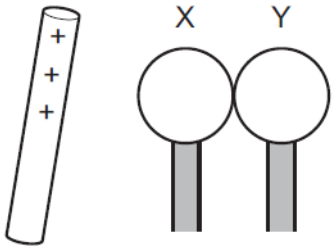
D Protons in the air attach themselves to the conductor.

8. June/2020/Paper_12/No.35

Two insulated and uncharged metal spheres X and Y are touching.

A positively charged rod is held near X and then the spheres are moved apart.

X now has a negative charge.



What is the charge on Y?

A negative and smaller than that on X

B negative and the same size as that on X

C positive and smaller than that on X

D positive and the same size as that on X

9. June/2020/Paper_12/No.36

A stationary negative charge in an electric field experiences an electric force in the direction shown.

What is the direction of the electric field?

A to the left

B to the right

C down the page

D up the page