

GREENLAWNS HIGH SCHOOL

FINAL EXAMINATION 2021

SUBJECT: PHYSICS

STD: IX

TIME: 1 HOUR

MARKS: 40

Note:

- All answers to this paper must be written on composition sheet.
- You will not be allowed to write during the first 10 minutes. Use this time to read the paper carefully.
- The time given at the head of this paper is the time allowed for writing the answers.
- Write your *Name, Roll no., Class-Div.* and *Page number* in the right hand side top corner of every side of your composition sheet.
- After you finish your paper, click a clear photo of each page of your answer sheet, convert it into a PDF and rename it as follows:
Roll No., Name, Class-Div. and Physics Final Exam.
- Then send it to your Physics teacher on WhatsApp only.

Q.1) A) Name the following: (5)

1. The temporary magnetism acquired by a magnetic material when it is kept near a magnet.
2. The type of cell to which a Daniel cell belongs to.
3. The substance with which the density of a substance is compared in order to find out its relative density.
4. An instrument used in an aircraft to measure its altitude.
5. The acceleration produced during free fall of a body under gravity.

B) Define: (5)

1. Variable speed.
2. SI unit of Pressure.
3. Buoyant force.
4. Electric circuit.
5. Magnetic poles.

Q.2) A) Distinguish between the following pairs on the basis of what is given in the bracket. (4)

1. Magnetic field lines of the earth and Magnetic field lines of a bar magnet (shape)
2. Potential difference and Electric resistance (SI unit)
3. Thrust and Pressure (Scalar or Vector)
4. Distance and Displacement (Magnitude)

B) Give scientific reasons.

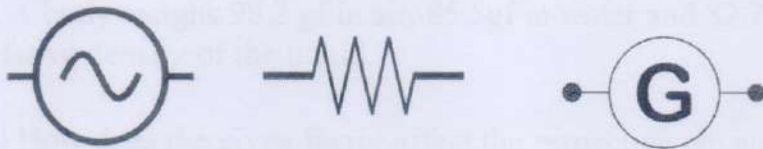
(6)

1. The resistance wire is generally made from an alloy Manganin.
2. The net magnetic field at neutral point is zero.
3. A fisherman finds it easy to pull a net full of fishes when it is inside the water.
4. A sea diver needs a special protective suit.
5. The ends of nails are made pointed.
6. The apparent weight of a floating body is always zero.

Q.3) A) Identify and name the symbols given below. (Do not copy the symbols)

(5)

- 1) 2) 3)



- 4) 5)

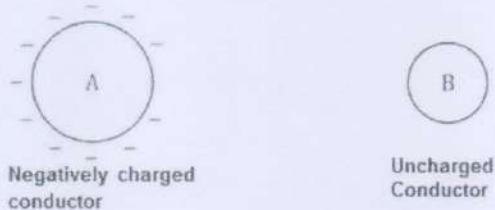


B) Copy and complete each figure according to the given instruction.(2)

- 1) Draw non uniform magnetic field lines.



- 2) Show direction of flow of electrons.



C) Which law or principle is applicable in each of the following cases? (3)

Name the law or principle. Do not write its statement.

- 1) A balloon filled with Helium gas rises up in the sky.
- 2) The buoyant force exerted on a stone is measured by the weight of water displaced by it when immersed completely in water.
- 3) Hydraulic machines are useful in vehicles as well as petrol pumps.

Q.4) A) Solve the following numericals. (7)

1. A body initially at rest travels a distance of 500m in 25sec with a constant acceleration. Calculate its acceleration.

2. The pressure of water on the ground floor is 50,000 Pa and on the second floor is 15,000 Pa. Find the height of the second floor.
($g = 9.8 \text{ms}^{-2}$, density of water = 1000kgm^{-3})

3. A body weighs 98.2 gf in air, 85.5gf in water and 82.7gf in liquid. Find the relative density of the liquid.

B) How does the given factor affect the respective physical quantity in each (3) of the following cases?

1. Increase in volume and Upthrust
2. Increase in area and Resistance of a conductor.
3. Increase in thrust and Pressure.

..... **BEST OF LUCK**