


### Physics Assignment Answers.

1. Concept of field: A field is a region or space under the influence of some physical agencies such as gravitation, magnetism and electricity.
2. Gravitational field: Gravitational field is a convenient and informative method of describing the gravitational attraction of one body for another at a distance. Is a force field and influences the motion of objects in the space where it operates, without coming in contact with the object.
3. Is electric field a scalar or vector? A vector
4. The north magnetic pole will move away from the compass needle.



5. 
6. The reason why two field lines never cross each other at any point in space is because if they do the electric field would move in different direction at the same point which does not make any sense.
7. Scalar field has only magnitude but no direction examples are temperature, energy, density. While, vector field has both magnitude and direction. Examples are gravity, magnetism and electricity.
8. Provided that air resistance is negligible both materials will land the same time at once.
- 9I. Lines of force start only on positive charge and end only on negative charge.  
II. The line of force do not cross each other I. E never intersect.  
III. The line of force are straight, parallel and uniformly spaced in a uniform field.  
IV. Line of force indicate the direction of the electric field.  
V. The line of force are continuous in any region with free charges.
13. Gravitational field: It is a force field that influence the motion of objects in the space where it operates.
14. Acceleration due to gravity: The acceleration of objects due to the earth's gravitational attraction is called the acceleration due to gravity. It is represented by the symbol  $g$  whose average value is about  $9.81 \text{ ms}^{-1}$ .

### Objective Questions.

1. D(All of the above)
2. B(Poles)
3. C(Wood).