**GATITU MIXED SECONDARY SCHOOL**

**OPENER EXAM 2015**

**TERM I**

**PHYSICS FORM 2**

**INSTRUCTIONS**

* *Answer* ***ALL*** *the questions in the spaces provided.*
* *Remember to write your* ***name*** *and* ***admission number****.*
1. Define pressure and state its SI units (2 marks)
2. Define atmospheric pressure. State its SI units. (2 marks)
3. A block of copper of density 8.9 g/cm3 measures 5cm 3cm 2cm. given that the force of gravity is 10N/Kg. determine;
4. The maximum pressure. (2 marks)
5. The minimum pressure that it can exert on a horizontal surface. (2 marks)
6. Show diagrammatically how force of 7N and 9N can be combined to give a resultant force of; (2 marks)
7. 2N b) 9N
8. Define the following terms and give examples in each case. (4 marks)
9. Vector quantity
10. Scalar quantity
11. A spring stretches by 6cm when supporting a load of 15N.
12. By how much would it stretch by supporting a load of 5Kg (2 marks)
13. What load would make the spring to stretch by 25mm? (2 marks)
14. Explain the following
15. Two blankets are warmer than a single thick one? (2 marks)
16. Draw the three types of light beams (3 marks)
17. 1800cm3 of fresh water of density 1000Kg/m3 is mixed with 2200cm3 of sea water of density 1025Kg/m3. Calculate the density of the mixture. (3 marks)
18. Differentiate between adhesive and cohesive forces. (2 marks)
19. Large mercury drops form oval balls on a glass slide. Explain. (2 marks)