GATITU DAY MIXED SEC SCHOOL TIME: 1 HR

TERM 2 2012 C.A.T 1

PHYSICS FORM ONE

1. Define mass and start its SI units (2mks)

2. 1800 cm3 of fresh water of density 1000 kgm3 is mixed with 2200 cm3 of sea water of density 1025 kg/m3.Calculate the density of the mixture (4mks)

3. Define density and state its SI units (2mks)

4. State and explain four branches of physics (4mks)

5. In each of the following physical basic quantities give the SI units and their symbols

|  |  |  |
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| Basic physical quantity | SI unit | Symbol |
| a. Electronic current  |  |  |
| b. Thermodynamic temperature |  |  |
| c. Luminous intensity |  |  |
| d. Amount of substance |  |  |

6. Define the terms basic physical quantities and derived quantities (4mks)

7. Explain how physics relates with the following subjects

 a. Mathematics

 b. Chemistry

8. Define forces and state its SI unit (2mks)

9. Name 4 types of forces (4mks)

10. The density of mercury is 13.6 g /cm3 ,find the volume of 2720 g of mercury in m3 (3mks)

11. The density of concentrated sulphuric acid is 1.89g/cm3, calculate the volume of 3.1 kg of the acid (3mks)

12. Define time (1mk)

13. The mass of an empty density bottle is 20 g. Its mass when tilled with water is 40 g and 50 g when tilled with liquid X. Calculate the density of liquid X if the density of water is 1000kg /m3 (4mks)