***GATITU MIXED SECONDARY SCHOOL***

 ***END OF TERM1 EXAMS -2013***

 ***FORM 1 PHYSICS***

1. Define physics (1mk)
2. State and explain six branches of physics (12mks)
3. Give the relationship between physics and the following subjects (4mks)

 a) Mathematics

 b) Chemistry

 c) Home science

 d) Technology

1. State four career opportunities courses offered at the university level (4mks)
2. State three career opportunity courses offered at the college level (3mks)
3. State five physics laboratory rules (3mks)
4. Explain how you would react to help parents involved in the following accidents (3mks

 i) When an irritating chemical lands on his eye

 ii) When he swallows a chemical accidentally

 iii) When he experiences an electric shock

1. Differentiate between basic an d derived quantities (2mk s)
2. What is matter (1mk)
3. Give three states of the matter (3mks)
4. Give two examples of the following

 a) Basic quantities (2mks)

 b) Derived quantities (2mks)

1. Define the following terms and give SI units

 a) Length

 b) Area (4mks)

1. A student wanted to determine the diameter of a measuring cylinder. He wrapped the cylinder with a thin thread 10 times. He found out that the length of the 10 turns was 42 cm. calculate the diameter of the cylinder in SI units (5mks)
2. Fill in the table using the correct SI units and symbols (14mks)

|  |  |  |
| --- | --- | --- |
|  Basic / fundamental Quantity  | SI units  | Symbols  |
| Length |  |  |
| Mass |  |  |
| Time |  |  |
| Thermodynamic |  |  |
| Temperature |  |  |
| Electric current |  |  |
| Amount of substances |  |  |
| Luminous intensity |  |  |

15. Convert the following to m2 (2mks)

 a) 100cm2

 b) 0.0000693 km3

16. Find the area of a sphere whose radius is 7cm (2mks)

17. Convert the following units to m3 (2mk s)

 a) 0.0007 litres

 b) 1300km3

18. A beaker of radius 7cm contains water to a height of 10cm. What is the volume of the water in the beaker (3mks)