NAME: .....ADM NO. .....

CHIEF MOHAMED JARI SECONDARY SCHOOL

TERM TWO 2017

END OF TERM EXAMINATION

PHYSICS

FORM ONE

INSTRUCTION: ***Answer all questions***

1. Define pressure and state it SI unit (2mrk)

2. Name two hydraulic machine (2mrk)

3a) State the Pascal principle of pressure (1mrk)

b)A hydraulic car jade piston of diameter 2cm and 20cm,Find the height of the car that can be lifted by a force of 250N. (3mrk)

4a) Draw a well labeled diagram of a siphon and explain how it works.(Take Π=3.142) (5mrk)

b)Explain why air is not used as a hydraulic fluid (1mrk)

5a) Define frictional force (1mrk)

b)State four advantage of friction in day to day life (4mrk)

6.Study the diagram below of a metal block immersed in water and label the force acting on it(3mrk)

7.Name the instrument below and state their reaching.

8.Distinguish between mass and weight (2mrk)

9.A lift cabin of mars 0.5 tones is suspended from a steel rope, what tension force is exerted by the rope?(Take $g=10Nkg^{-1}$) (3mrk)

b)Calculate the reaction force adding on the wooden block resting on a flat surface as shown below, given the mass of the block is 30kg (2mrk)

10. Explain why weight varies from place to place . (2mrk)

11a) Explain why tractor are fitted with wide tyres (2mrk)

b)A glass is filled with water upto a height 10cm,Calculate pressure exerted by water.(Density of water=$1000kg/m^3$) (3mrk)

11.Convert the following quantities into SI units. (10mrk)

a)40 minutes

b)2 ½ days

c)2.9 g/cm^3

d) 60g

e)725cm^3

12a)Define volume and state its S1 unit (2mrk)

b)State two method used for measuring the volume of irregularly shaped object (2mrk)

c)The tap of burette is adjusted such that water comes out in drops, What would be the reading on the burettes if 60 drop of water fall from the burette. Take the average volume of the drop to be 50mm^3(4mrk)

13.A cylinder has diameter of 4.2cm,How many time would a thread of 132cm would be wound a round the cylinder (3mrk)

14a)Name two instruments used for measuring the atmospheric pressure (2mrk)

b)Explain the crashing can experiment (2mrk)

15a)Explain why water wet glass (1mrk)

b)By stating example define scalar and vector quantities (4mrk)