School of Tomorrow
Addis Ababa
Grade 9 Physics Revision Questions

Instruction:-I **Write 'True' if the statement is correct, or 'False' if it is incorrect.**

_____1. The V.R of a pulley system depends on the number of sections of rope that lift the load.

_____2. A complex machine is one where two or more simple machines are combined to function as a single mechanism.

_____3. A large force acting on a small area creates relatively greater pressure.

_____4. Fluid statics deals with fluids that are in motion (flows)

_____5. Both temperature and pressure have an effect on the volume of a fluid.

Instruction:-II **Choose the correct answer from the given alternative.**

____1. A complex machine that uses a screw in combination with a lever is

A. jack screw C. movable pulley

B. differential pulley D. no answer is given

____2. The most common instrument that used to measure atmospheric pressure is

A. nanometer B. barometer C. sunction pad D. force pump

____3. The layer of air surrounding the Earth is

A. atmosphere C. atmospheric pressure

B. pressure difference D. altitude

____4. What pressure does a 62.8kg women exerts on the floor when she balances on one of her heels if each of her heels has an average radius of $1cm^2$?

A. 2×10^6pa B. 3×10^3pa C. 3×10^4pa D. 2×10^3pa

____5. A rectangular box measures 20m×10m×50m and it has a mass of 100kg.What is the least (minimum) pressure it can exert when it rests on a flat horizontal surfaces?

A. 1pa B. 2pa C. 0.5pa D. 5pa

____6. When a drawing pin is pushed against a board with a force of 20N, a pressure of 2×10^6pa is exerted what is the area of the pin?

A. $0.1cm^2$ B. $0.2cm^2$ C. $0.6cm^2$ D. $0.8cm^2$

____7. 1 atm is equal to

A. 101 pa B. 101k pa C. 101,000k pa D. B and C

____8. The standard atmospheric pressure is

A. 1atm B. 101pa C. 101k pa D. A and C

____9. Which pressure is the largest of all?

A. 100pa B. 1bar C. 400torr D. 600cm Hg

____10. An eroid barometer does not contain

A. air B. system of spring C. liquid D. metal box

Instruction:-III **Give short answer for the following questions.**

1. What is complex machine and give at least two examples?
   a. _____
   b. _____
2. Write the equation of the IMA for the Jack Screw with handle length, R and pitch, p

   _____

   _____
3. How can you find the V.R of a block and tackle?

   _____

   _____

4. Define fluid statics.

   _____

   _____

5. Write the relationship between pressures to that of area.

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