Université Ibn Khaldoun – Tiaret
Faculté des Sciences de la Matière
Département de Physique

Correction of 2nd year Physique

1) Mark the statements T for 'true' or F for 'false'. Correct. (5points)
   - True: also known as the "Principia
   - False: independently, although there were a dispute with Gottfried Leibniz.
   - False: reclusive and introverted.
   - True: are still widely used in physics.
   - False: Mathematical principles of Natural philosophy.
2) Complete the following sentences:(5 points)
   - The temperature is measured by the scientist.
   - The engineer designed the circuit.
   - The behavior of light has been observed by the researcher.
   - The velocity was being calculated by the physicist.
   - The mechanic had been repairing the machine.
3) Reorder the following scientists and mention (1) of their works (6 points)
   - Aristotle: viewed the process of learning as one of observation and thinking.
   - Humankind: realized that experimentation and observation were equally important.
   - Nicolaus Copernicus: introduced the heliocentric system claiming that the planets move around the sun.
   - Johannes Kepler: concluded that the planets follow not circular but elliptical orbits with the sun at one focus of the ellipse.
   - Galileo Galilei: constructed a telescope in 1609.
   - Isaac Newton:
4) Choose two from these items and explain Them: (4points)
   - Velocity: The speed of an object in a given direction. It is a vector quantity that includes both magnitude and direction
   - Gravity: The force of attraction between two objects due to their mass. It is responsible for keeping us grounded and governs the motion of celestial bodies.
   - Energy: The ability to do work or cause a change. It exists in different forms such as kinetic energy (energy of motion) and potential energy (stored energy).
   - Mass: the amount of matter in an object. It determines how much force is needed to accelerate the object.
   - Force: A push or pull on an object that can cause it to accelerate or change its motion.