CONCLUSION :

1. Calculate the percentage error with the accepted mass of Jupiter (1.8986 × 10^27 kg).
**M found = 1.775E27
M accepted =   1.8986E+27
 (1.8986E+27 – 1.775E27)/(1.8986E+27) x 100
% error =  -6.51%**
2. There are moons beyond the orbit of Callisto. Will they have larger or smaller periods than Callisto? Why?

They will have larger periods because any moon beyond the orbit of Callisto has a larger orbital radius which is directly proportional to the period. Therefore, as the orbital radius increases, so will the period.

1. Which do you think would cause the larger error in the mass of Jupiter calculation:  a ten percent error in **"T"** or a ten percent error in **"r"**? Why?

I believe that a ten percent error in “r” would cause a larger error due to the fact that the “r” term is being cubed while the “t” term is only squared.

1. Why were Galileo's observations of the orbits of Jupiter's moons an important piece of evidence supporting the heliocentric model of the universe (or, how were they evidence against the contemporary and officially adopted Aristotelian/Roman Catholic, geocentric view)?

By making such observations Galileo showed that smaller objects are pulled into the gravity of much larger objects, and in fact orbit around them. Therefore, since the Sun is larger than all the planets it must be the center of our gravitational pull. Because the Sun’s mass is larger its gravitational force is larger. If Earth’s mass was the largest in our solar system the other planets would be orbiting around it, however; it is not and therefore it orbits around the largest, the sun.