**Questions presented to the students**

1. How much acceleration can an object in free fall take within 10 s of falling from the roof of a 50 m building?

2. At what height will this same object be 10 s after falling?

3. What speed will the same object have at the instant of time 55 s?

4. How can you identify the anode of an LED?

5. In a surface mount integrated circuit how is pin 1 located?

6. How can you know the value of a resistor without using the multimeter?

7. How much speed does a moving object that is going at 100 km/h lose if it collides with another object that is at rest?

8. Describe the behavior of an object of mass 1500 kg if its acceleration graph has a positive slope.

9. How can you identify if a 7-segment display is common anode or common cathode?

10. Explains the process to identify the coil in an electromechanical relay.

11. In the same relay of the previous question, explain the process to identify the pin NO (normally open).

12. A mobile is slowing down at 2 m/s2, is going at 70 km/h and has traveled 500 m. What position will the mobile have after 10 min?

13. How much speed must each foot have the instant it hits the ground if a person wants to run at 8 km/h?

14. If an electromechanical relay is direct current, is there a correct way to connect the power source that will activate it? Explain your answer.