GEARBOX ACADEMY

ASSESSMENT 1

A : 17 and above   B : 12-16   C : 7-11   D: 6 and below

1. Define what an embedded system is and give 2 examples (2mks)
2. Identify and explain the 4 major power pins in pico(4mks)
3. State the role of PWM in circuits and give the formula for the duty_cycle(2mks)
4. State the role of ADC in pico and define the meaning of resolution in context with ADC(2mks)
5. Illustrate a binary counter system with up to 4 bits in a table(4mks)
6. Briefly describe working principle of these sensors (6mks)
   a. HCSRO4
   b. LDR
   c. HCSR501