ELIZADE UNIVERSITY

ILARA-MOKIN

ONDO STATE

FACULTY: Basic and Applied Sciences
DEPARTMENT: Physical and Chemical Sciences
SECOND SEMESTER EXAMINATIONS
2018/2019 ACADEMIC SESSION

COURSE CODE: PHY 208

COURSE TITLE: WORK SHOP PRACTICE I

DURATION: 3 HOURS

HOD's SIGNATURE

TOTAL MARKS:

Matriculation Number: _____

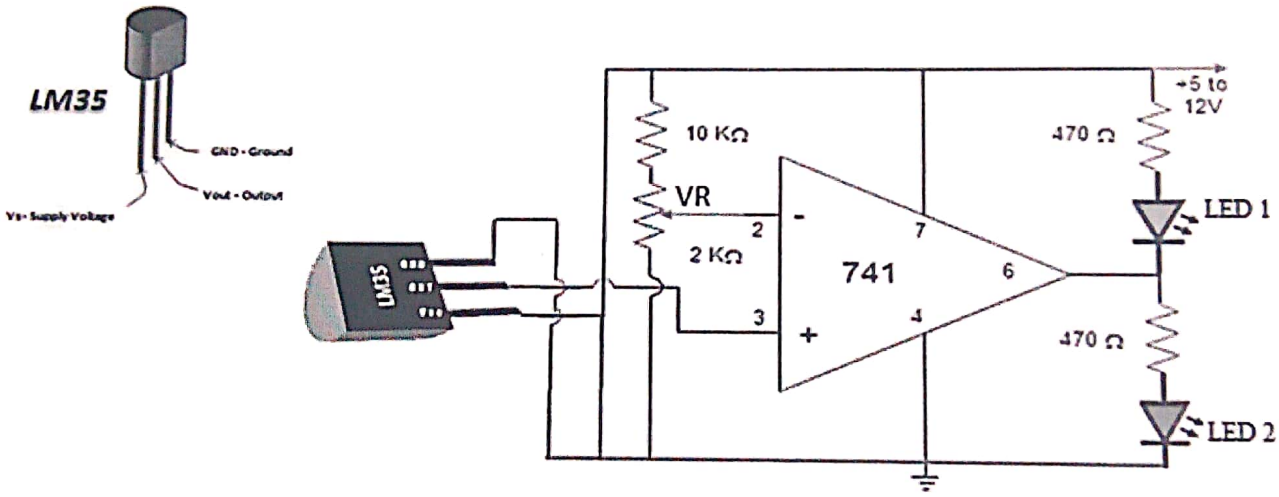
INSTRUCTIONS:

1. Write your matriculation number in the space provided above and also on the cover page of the exam booklet.
2. This question paper consists of 2 pages with printing on both sides.
3. Answer all questions in the examination booklet provided.

GIVEN COMPONENTS: IC LM35, IC LM741, Resistors, Preset, LED (Red and Green), 9V Battery/ power supply, wire

THEORY: The IC741 is a non-inverting amplifier which means pin-3 is the input and the output is not inverted. The LM35 circuit has two input terminals namely; non-inverting (+) and inverting (-) terminals and only one output pin. This sensor circuit amplifies the difference between its input terminals. The advantages of this circuit are as follow; no effect on the medium, more accurate, it has an easily conditioned output and it responds instantly.

CIRCUIT:



1. What type of IC is LM35 and LM741?
2. Draw the circuit lay out of the above circuit diagram
3. State the function of the following in the circuit above
   (i) Variable Resistor VR
   (ii) LM317
   (iii). LM741
4. Suggest a title for this circuit diagram with the reason and state one major advantage of it
5. State three other applications of LM35
6. When does LED 1and 2 light up