ILOCOS SUR SIGLAT FESTIVAL
ROBOCAMP FOR SENIOR HIGH SCHOOL STUDENTS

TO: **DEPED ILOCOS SUR DIVISION**
DEPED CANDON CITY DIVISION
DEPED VIGAN CITY DIVISION
ST. PAUL COLLEGE OF ILOCOS SUR
UNIVERSITY OF NORTHERN PHILIPPINES
ILOCOS SUR POLYTECHNIC STATE COLLEGE/UIP
DIVINE WORLD COLLEGE OF VIGAN
STI VIGAN CITY
SAINT JOSEPH INSTITUTE, CANDON CITY

SUBJECT: **FINAL MECHANICS FOR THE COMPETITION DURING THE ROBOCAMP ON JULY 23, 2024**

"Arduino Speed Programming Challenge"

Objectives:

- To test participants' skills in Arduino programming.
- To evaluate the speed and accuracy of solving given problems using Arduino.

Participants:

- 1 team per school
- Teams of 1-3 members each.
- Each team must represent a STEM school from Ilocos Sur.

Materials:

- Arduino kit (provided to each school by the province).
- Laptop or computer for programming.

Competition Rounds:

1. **Preliminary Round**:
   - Each team will receive the same problem.
   - The problem will involve basic Arduino programming tasks (e.g., blinking an LED, reading a sensor value).
   - Teams will have 30 minutes to complete the task.
   - The first 10 teams to submit a correct and functioning solution move to the final round.
2. **Final Round**:
   - Teams will receive a more complex problem
   - Teams will have 40 minutes to complete the task.
   - **The first three (3) teams shall be awarded as winners.**

Judging Criteria:

- **Speed** (50%):
  - Time taken to complete the task.
  - Points will be awarded based on the order of submission (1st place = highest points, 10th place = lowest points).
- **Accuracy** (50%):
  - Correctness of the solution.
  - Functionality of the programmed Arduino.

- Adherence to the problem requirements.

Scoring:

Scoring Table for Speed

Placement	Points
1st place	50
2nd place	45
3rd place	40
4th place	35
5th place	30
6th place	25
7th place	20
8th place	15
9th place	10
10th place	5

Scoring Table for Accuracy

Accuracy Level	Points
Correct and fully functional	50
Minor issues but functional	40
Significant issues or partially functional	30
Major issues or non-functional	20
Incomplete	10

Tie-breaking:

- In case of a tie, additional points will be awarded based on the clarity and organization of the code.

Awards:

- Certificates and prizes will be given to the top 3 teams.
- Consolation prizes will be given to 5 teams.

Rules and Regulations:

1. All teams must have a photocopy of their ID on the day of the competition.

Teams must use the Arduino kit provided.

2. All programming must be done on-site during the competition.
3. Teams are not allowed to seek external help.
4. Any form of cheating or misconduct will result in immediate disqualification.
5. Judges' decisions are final.

Noted by:

SPM CHRISTOPHER ABRAHAM R. BATERINA
Board Member, Provincial Government of Ilocos Sur
Chairman, Committee on Environmental Protection, Climate Change and Disaster Preparedness
Chairman, Committee on Research, Science and Technology
Chairman, Committee on Energy, Water and Utilities

July 22, 2024

TO: **Public Secondary School Heads**

For information and guidance. Interested teachers and learners are encouraged to participate in the activity on voluntary basis.

VILMA D. EDA, CESO V
Schools Division Superintendent

SCHOOLS DIVISION OFFICE
DEPED VIGAN CITY
23 JUL 2024
RELEASED
BY: