## GEARSEF

Project Score Sheet - Engineering

| I. Research Problem: 10 points |  |
| :---: | :---: |
| - Description of a practical need or problem to be solved | /3 |
| - Definition of criteria for proposed solution | /3 |
| - Explanation of constraints | /4 |
| Research Problem Total: | $/ 10$ |
| Comments: |  |
| II. Design and Methodology: 15 points |  |
| - Exploration of alternatives to answer need or problem | /5 |
| - Identification of a solution | /5 |
| - Development of a prototype/model | /5 |
| Design and Methodology Total: | /15 |
| Comments: |  |
| III. Execution: Construction and Testing: 20 points |  |
| - Prototype demonstrates intended design | /6 |
| - Prototype has been tested in multiple conditions/trials | /6 |
| - Prototype demonstrates engineering skill and completeness | /8 |
| Execution Total: | /20 |
| Comments: |  |

## Creativity: $\mathbf{2 0}$ points

- Does the project offer different perspectives or open up new possibilities in a field of study? (6 points)
- Is the project idea unique? (6 points)
- Project demonstrates significant creativity in at least one of the following:

Design and Methodology
Data Collection
Analysis

## Creativity Total:

Comments:

## Presentation: 35 points

Poster (10 Points):

- Logical organization of material, how well does the physical display explain the project?
(4 points)
- Clarity of graphics and legends, how clearly are data and results presented? (3 points)
- Supporting documentation displayed (3 points)

Interview (25 points):

- Clear, concise, thoughtful responses to questions (4 points)
- Understanding of basic science relevant to project (4 points)
- Understanding interpretation and limitations of results and conclusions (4 points)
- Degree of independence in conducting project: If the work was performed in a "mentor-rich" environment, does the student exhibit evidence of their independent contributions to the work? (6 points)
- Recognition of potential impact in science, society and/or economics (3 points)
- Quality of ideas for further research (4 points)
- For team projects only - deduct points for unequal contributions to and understanding of project (up to 2 points)

Comments:

Final Comments:

