**Design Evaluation Score Sheet Summary** **Car Number _____**

| Category | Max Score | Car Rough Score | Car Adjusted Score | Notes to students |
|---|---|---|---|---|
| **Vehicle Level Engineering** | 35 | | | Students will be judged on the creation of design requirements and the ability to meet those requirements, computer aided drafting, analysis, testing and development, manufacturability, serviceability, system integration and how the vehicle works together as a whole. Each of these parts of the engineering product development cycle will be judged within the following subsystems: Suspension, Steering, Brakes, Drivetrain, and Chassis and Ergonomics. |
| **Chassis** | 20 | | | |
| **Ergonomics** | 10 | | | |
| **CVT / Transmission** | 15 | | | |
| **Front drive, prop shaft, front hubs and axles** | 15 | | | |
| **Reduction box, rear hubs and axles** | 15 | | | |
| **Suspension** | 10 | | | |
| **Steering** | 10 | | | |
| **Brakes** | 10 | | | |
| **Innovation (Bonus Points) (Max)** | 15 | | | |
| **Design Finals (Bonus Points) (Max)** | 15 | | | |
| **Design Review Briefing (DRB)** | 10 | | | |
| **Total** | **150** | | | |

**School Name _____**

**Design Evaluation Score Sheet** **Car Number _____**

| | Engineering Product Development Cycle | % | | Comments |
|---|---|---|---|---|
| VEHICLE LEVEL ENGINEERING | Vehicle Goals & Cascaded Requirements | 10% | | |
| | Research/ Development & Component/Subsystem Selection | 15% | | |
| | Full Vehicle Design & CAD | 10% | | |
| | Data Collection for Analysis | 10% | | |
| | Analysis / Calculations / CAE | 15% | | |
| | Testing / Validation | 15% | | |
| | Correlation of Analysis and Testing | 15% | | |
| | Assessment Of Vehicle Goals | 5% | | |
| | Serviceability/ Manufacturability | 5% | | |
| | Score | **35** | | |
| BAY LEADER NOTES FOR SUBSYSTEMS | Chassis | | | |
| | Ergonomics | | | |
| | CVT / Transmission | | | |
| | Reduction box, hubs and axles | | | |
| | Suspension | | | |
| | Steering | | | |
| | Brakes | | | |
| | Other | | | |
| | **Total Score** | **35** | | |

**School Name _____**

**Design Evaluation Score Sheet** **Car Number _____**

| | Engineering Product Development Cycle | % | | Comments |
|---|---|---|---|---|
| CHASSIS | **Requirements** | 5% | | |
| | **Research/ Development** | 5% | | |
| | **Design / CAD** | 15% | | |
| | **Data Collection for Analysis** | 15% | | |
| | **Analysis / Calculations / CAE** | 25% | | |
| | **Testing / Validation** | 15% | | |
| | **Correlation of Analysis and Testing** | 15% | | |
| | **Serviceability/ Manufacturability** | 5% | | |
| | **Score** | **20** | | |
| ERGONOMICS | **Requirements** | 5% | | |
| | **Research/ Development** | 5% | | |
| | **Design / CAD** | 15% | | |
| | **Data Collection for Analysis** | 15% | | |
| | **Analysis / Calculations / CAE** | 25% | | |
| | **Testing / Validation** | 15% | | |
| | **Correlation of Analysis and Testing** | 15% | | |
| | **Serviceability/ Manufacturability** | 5% | | |
| | **Score** | **10** | | |
| | **Total Score** | **30** | | |

**School Name _____**

**Design Evaluation Score Sheet** **Car Number _____**

| | Engineering Product Development Cycle | % | | Comments |
|---|---|---|---|---|
| CVT / TRANSMISSION | Requirements | 5% | | |
| | Research/ Development | 5% | | |
| | Design / CAD | 15% | | |
| | Data Collection for Analysis | 15% | | |
| | Analysis / Calculations / CAE | 25% | | |
| | Testing / Validation | 15% | | |
| | Correlation of Analysis and Testing | 15% | | |
| | Serviceability/ Manufacturability | 5% | | |
| | Score | **15** | | |
| FRONT DRIVE, PROP SHAFT, FRONT HUBS AND AXLES | Requirements | 5% | | |
| | Research/ Development | 5% | | |
| | Design / CAD | 15% | | |
| | Data Collection for Analysis | 15% | | |
| | Analysis / Calculations / CAE | 25% | | |
| | Testing / Validation | 15% | | |
| | Correlation of Analysis and Testing | 15% | | |
| | Serviceability/ Manufacturability | 5% | | |
| | Score | **15** | | |
| REDUCTION BOX, REAR HUBS AND AXLES | Requirements | 5% | | |
| | Research/ Development | 5% | | |
| | Design / CAD | 15% | | |
| | Data Collection for Analysis | 15% | | |
| | Analysis / Calculations / CAE | 25% | | |
| | Testing / Validation | 15% | | |
| | Correlation of Analysis and Testing | 15% | | |
| | Serviceability/ Manufacturability | 5% | | |
| | Score | **15** | | |
| | **Total Score** | **45** | | |

**School Name _____**

**Design Evaluation Score Sheet** **Car Number _____**

| | Engineering Product Development Cycle | % | | Comments |
|---|---|---|---|---|
| SUSPENSION | Requirements | 5% | | |
| | Research/ Development | 5% | | |
| | Design / CAD | 15% | | |
| | Data Collection for Analysis | 15% | | |
| | Analysis / Calculations / CAE | 25% | | |
| | Testing / Validation | 15% | | |
| | Correlation of Analysis and Testing | 15% | | |
| | Serviceability/ Manufacturability | 5% | | |
| | Score | 10 | | |
| STEERING | Requirements | 5% | | |
| | Research/ Development | 5% | | |
| | Design / CAD | 15% | | |
| | Data Collection for Analysis | 15% | | |
| | Analysis / Calculations / CAE | 25% | | |
| | Testing / Validation | 15% | | |
| | Correlation of Analysis and Testing | 15% | | |
| | Serviceability/ Manufacturability | 5% | | |
| | Score | 10 | | |
| BRAKES | Requirements | 5% | | |
| | Research/ Development | 5% | | |
| | Design / CAD | 15% | | |
| | Data Collection for Analysis | 15% | | |
| | Analysis / Calculations / CAE | 25% | | |
| | Testing / Validation | 15% | | |
| | Correlation of Analysis and Testing | 15% | | |
| | Serviceability/ Manufacturability | 5% | | |
| | Score | 10 | | |
| | **Total Score** | **30** | | |

**School Name _____**