**Academic Prompt with Rubric**

**Make Informed Judgments**

**ME 418 Mechanical Lab III**

**Assignment Steps**

1. Identify a social problem (with the guidance of your supervisor), which needs to be solved by Engineering/Technology.
2. Understand and analyze the problem among your group (minimum of 2/maximum of 3) and list out various possible solutions, keeping the direct/indirect stakeholders tradeoff in mind.
3. List out possible alternatives on ethical grounds.
4. Ensure that your solutions fit within the rules of professional conduct.
5. Check the economic feasibility and practical viability for the chosen solution.
6. Carry out the procedures to arrive at the solution to the problem as designed and discussed.
7. Figure out errors if any, and find the reason behind such errors and explain with justification.
8. Tabulate your results, record, and prepare them for a neat presentation.

**Rubric for the Assignment**

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| **Performance indicators** | **(1)**  **Emerging** | **(2)**  **Developing** | **(3)**  **Proficient** | **Scores & comments** |
| Stakeholder identification | Students can recognize most direct stakeholders; however, they have difficulty identifying indirect stakeholders. There may be some errors in separating direct and indirect stakeholders. | Students can identify direct stakeholders and most indirect stakeholders. Moreover, they are able to properly rank stakeholders in terms of impact. | Students can identify all direct and indirect stakeholders, and they are able to rank stakeholders by impact. They can evaluate the magnitude of alternative courses of action on various stakeholders. |  |
| Recognizing unethical situations | Students can recognize basic ethical issues; however, they fail to grasp all of the relevant aspects of the scenario at hand. | Students show a proficient grasp of the ethical points of a given scenario, and they can accurately evaluate the tradeoffs  between direct stakeholders. | Students demonstrate a complete grasp of the ethical points of a given scenario. There is a proper understanding of all the relevant trade- offs between direct and indirect stakeholders. |  |
| Action choices | Students can present a valid rationale for choosing among alternative actions; however, there are some clear errors regarding the perceived consequences of their actions. | Students present a well-reasoned rationale for their chosen alternatives; and, they can defend  their choices in a logical manner. Some of their reasoning, however, may be less than persuasive. | Students demonstrate precise judgment in  selecting among the alternative courses  of action in ethically  complex situations. They are able to  defend their actions with persuasive reasoning. |  |
| Professional Codes of Conduct | Students know most of the rules of professional conduct and can apply them in case scenarios. There are some erroneous perceptions regarding rule justifications. | Students know the rules of professional  conduct, can apply them in case scenarios, and understand most of the reasoning underlying the rules. | Students know the  factual requirements of the rules of conduct and can apply them  accurately. They can provide persuasive explanations of the  logic behind the rules. |  |
| **Overall point and comments** | | | | |

**Scale:** 12/11=A, 10/9=B, 8/7=C, 6/5=D, 4 or less=F