**American International University- Bangladesh (AIUB)**

**Faculty of Engineering**

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| **Course Name:** | Engineering Ethics | **Course Code:** | EEE 3107 |
| **Semester:** | Spring 2020-21 | **Section:** | L |

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| **Item:** | **Demonstrates individual responsibilities based on norms of engineering practice (CO4)** |
| **Report Title:** | Engineers act in professional matters as faithful agent or trustee and avoid conflict of interest (10) |
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| **Student Name:** | **DIPU HASAN** | **Student ID:** | **18-36364-1** |

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| **Student’s Department** | **Bsc. CSE** | **Submission Date:** | **4/18/2021** |

**Rubrics:**

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| Category | Proficient [6] | Good  [5] | Acceptable [4] | Unacceptable [2] | Secured Marks |
| **Explanation of issues** | Issue/problem to be considered critically is stated clearly and described comprehensively, delivering relevant information necessary for full understanding. | Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions. | Issue/problem to be considered critically is stated, but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, | Issue/problem to be considered critically is stated without clarification or description. |  |
| **Influence of context and assumptions** | Thoroughly (systematically and methodically) analyzes own and others’ assumptions and carefully evaluates the relevance of contexts when presenting a position. | Identifies own and others’ assumptions and several relevant contexts when presenting a position. | Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others’ assumptions than one’s own (or vice versa). | Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position. |  |
| **Student’s position**  **(perspective, thesis/ hypothesis)** | Specific position  (perspective, hypothesis) is imaginative, considering the complexities of an issue.  Limits of position  (perspective, hypothesis) are acknowledged. Others’ points of view and assumptions are synthesized within position (perspective, hypothesis). | Specific position (perspective, thesis/hypothesis) considers the complexities of an issue. Others’ points of view and assumptions are acknowledged within position (perspective, hypothesis). | Specific position  (perspective, hypothesis) acknowledges different sides of an issue. | Specific position  (perspective, hypothesis) is stated, but is simplistic and obvious. |  |
| **Innovative**  **Thinking or uniqueness (of idea, claim, question etc.)** | Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries. | Creates a novel or unique idea, question, format, or product. | Experiments with creating a novel or unique idea, question, format, or product. | Reformulates a collection of available ideas. |  |
| **Conclusions and related outcomes**  **(implications and consequences)** | Conclusions and related outcomes (consequences and implications) are logical and reflect student’s informed evaluation and ability to place evidence. | Conclusion is logically tied to a range of information, including opposing  viewpoints; related outcomes  (consequences and implications) are identified clearly. | Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are not clear. | Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified. |  |
| Comments: |  |  |  | Total Marks (Out of **30**): |  |

*Overview*

**This final examination is a chance for you to research a topic based on an ethical code statement that is interesting to you. You will choose one from a given list of engineering code of ethics statements, conduct research on the statement, present a case study by putting yourself in the main role (Imaginary or taken from any source with reference), analyze the situations presented in the case by you as the concerned Engineer, and then present your analysis to the class in a report format.**

*Technical Report Details:*

The following is a detailed layout of the process leading up to the report writing on chosen engineering ethics statement:

# Selection of Possible Ethics statement and Case study

students are required to choose ONE ethics case study based on your chosen code from below (it may be real life case or an hypothetical/imaginary case study) from the code of ethics that are provided at the end of this document. The chosen cases should be those that are of most interest to you (individual assignment); consider the related engineering field(s). **The main important thing is that in the case study you put yourself in the main Actor (i.e. in the position of the Engineer).**

# Ethics Case study Analysis

After you have selected the case, you are required to complete an analysis of your ethical case study. The information in the completed analysis should provide the base of the content for your report. Make sure to include as much detail as possible, including assumptions you may have made. You will be evaluated based on your individual ability as an engineer to:

* Address each of the issues and points of ethical conflict presented in the case or problem (i.e. Identify the primary “ethical dilemma (or question) in the case). Include any assumptions made about this case.
* Identify what engineering field(s) this ethics case is related to.
* **Identify the stakeholders in the case (and try to identify an important “right” of each stakeholder). Describe the general duties or obligations of the Main Role (You as an Engineer), which are grounded in moral considerations.**
* Identify all possible actions and recognize the positive and negative consequences of each action. List and describe alternative courses of action that may be taken and determine the likely consequences of each proposed action for each stakeholder.
* Provide a selected action and rationale.

Your writing should reflect your analysis of the case. Because you have already completed the analysis, creating the report should just require documenting your existing work and focus on layout of material. When preparing your report, make sure your presentation clearly convey your information to the audience.

*Ethics Cases:*

This section of the document contains the ethics statements you can choose to research. **Please choose ONE statement according to your choice and choose a case study that directly reflects the application of your chosen code where you act as the main engineer of the case study.**

***Topics of Report writing (****Individual topics should be chosen by individual students****)***

1. The role of the engineers when his professional judgment is overruled under circumstances where safety, health and welfare of the public are endangered.
2. The role of the engineers for a safe design conforming accepted engineering standards ensuring public health and welfare.
3. The role of the engineers when he has knowledge and reason to believe that the activities of a person or firm will cause harm public health and safety and endanger environment.
4. The role of the engineers in sustainable development and improving environment to enhance the quality of life.
5. The negative effects of computer use on the environment and risk of health and safety and the role of engineers in reducing risk of health and safety.
6. The role of the engineers against embezzlements, abuse, theft and fraud in the use of computer to protect public interest.
7. The role of engineers’ issues concerning theft of software and information safeguarding protection against public interest.
8. The theft of privacy, inappropriate access, data bank errors, hacking and your role as a computer engineer dealing with these issues.
9. The engineer performs service only in areas of his/her competence and shall issue public statement only in an objective and truthful manner.
10. Engineers act in professional matters as faithful agent or trustee and avoid conflict of interest.
11. Engineers build their professional reputation on the merit of their services and not compete unfairly with others.
12. Engineers do not pay nor offer to pay either directly or indirectly any commission, political contribution or a gift or other consideration in order to secure work or any other benefit.
13. Engineers shall not falsify nor permit misrepresentation or allow any fraudulent or cohesive activities.
14. Engineers’ role and responsibility to maintain high standards of professional quality.
15. Engineers’ role and responsibility to uphold ethical values of the society.
16. Engineers’ obligation to maintain high standard of personal behavior in responsible manner.
17. The issue of professional ideals, virtues, responsibilities, obligations and duties, honesty and trustworthiness.
18. Engineers as responsible experimenters and responsibility of engineering as society and moral responsibility for their actions.
19. Engineers shall not disclose confidential information concerning business affairs or technical process of any present or former client or employer without his consent.
20. Engineers shall not attempt to injure maliciously or falsely, directly or indirectly, the professional reputation or shall not accept unethical or illegal practice.
21. Engineers shall not use equipment supplies, laboratory or office facilities of an employer to carry on outside private work without consent.
22. Engineers shall give credit for engineering work to those to whom credit is due and will recognize the proprietary interests of others.
23. Engineers shall treat information coming to them in the course of their assignments as confidential and shall not use such information as a means of personal gain if such action is adverse to the interest of their clients, their employers or the public.
24. Engineers shall disclose all known or potential conflicts of interest to their employers or clients by promptly informing them of any business association, interest or other circumstances which could influence judgment in quality of services.
25. Giving and receiving bribes are forbidden by professional engineering codes.
26. Engineers shall admit and accept their own errors when proven wrong and refrain from distorting and altering the facts to justify their decisions.
27. Engineers to continue their careers and to provide opportunities for the professional development of those engineers under their supervision.
28. Engineers’ professional obligation: uphold integrity, honor and dignity of profession by using their knowledge, skill and enhancement of human welfare.
29. Engineers shall accept responsibility for their professional activities, be accountable, consciences and committed.

# **Beware of Plagiarism**

A report on Engineers act in professional matters as faithful agent or trustee and avoid conflict of interest.

ANSWER :

Engineering is a vital and well-studied area. They have to maintain an important role with a learned profession. Engineers are required to uphold the highest level of honesty and competence as members of this profession.Because if somehow they lost this level of honesty they have to faces different types of problems with theirwork hold members. So they have to maintain this stages carefully and very efficiently. Engineering has a strongand significant effect on everyone's quality of life. Not everyone can maintain the same quality in their everydaylife. As a result, engineers' services must be based on integrity, impartiality, justice, and equality, as well as acommitment to the public's health, safety, and welfare. These are the main facts that an engineer must have to maintain to avoid conflict of interest. Engineers must adhere to a professional code of ethics that allows them to follow the highest ethical standards.

Engineers must serve as faithful agents for each employer. By acting the most faithful agents they can achieve many good things between each other. This can become an impressive result in future. This honesty should maintain between every employee. Engineers must report any known or possible conflicts of interest that could appear to sway their decisions or the quality of their work. By disclosing all the known or potential conflicts of interest engineers can improve their quality of work.

Now comes the main topic about this report that how engineers shall act for each employer or client as faithful agents or trustees. In my opinion when an engineer is influenced or appear to influence themselves for conflict it damages their quality of work and also the relationship between other work holders. Engineers should not accept financial or other compensation from more than one party for services on the same project, or for services relating to the same project, unless the circumstances are completely reported and agreed to by all involved parties. By accepting financial or other compensation from more than one party on the same project can break the trust among every employee. Maintaining all these rules an engineer can avoid conflict. Engineers should not accept financial or other beneficial consideration from outside agents in connection with the work for which they are responsible, either directly or indirectly. They also do not accept any wrong decision for the project they are doing. If they accept these beneficial consideration directly or indirectly conflict must happen.

Engineers serving in the public sector as members, consultants, or employees of a governmental or non –

governmental body or agency are not permitted to vote on services solicited or rendered by themselves or their organizations in private or public engineering practice. Engineers are prohibited from soliciting or accepting a contract from a governmental body on which a principal or officer of their company is a member.

Engineers must not be affected by competing interests in their professional duties. Engineers must not

accept financial or other incentives from material or equipment suppliers, including free engineering designs, in exchange for specifying their product. Engineers may not accept fees or allowances from contractors or other parties dealing with the engineer's clients or employers in connection with work for which the engineer is responsible, either directly or indirectly. By maintaining all these rules an engineer can avoid conflict.