**American International University- Bangladesh (AIUB) Faculty of Engineering (EEE)**

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| **Course Name:** | Engineering Ethics | **Course Code:** | EEE 3107 |
| **Semester:** | Summer 2019 | **Sec:** | F |
| **Faculty:** | DR. M. TANSEER ALI |  |  |

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| **Case No:** | 2 |
| **Case Title:** | Professional Codes of Ethics |

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| **Student Name:** | Sultan, Md Tawhid | **Student ID:** | 16-32275-2 |
| **Department:** | CSE | | |

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| **Submission Date:** | 20.6.19 | **Due Date:** | 20.6.19 |

**Marking Rubrics (to be filled by Faculty)**

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| --- | --- | --- | --- | --- | --- |
| Category | Proficient [4] | Good [3] | Acceptable [2] | Unacceptable [1] | Secured Marks |
|  | Issue/problem to be | Issue/problem to be | Issue/problem to be | Issue/problem to be |  |
|  | considered critically is stated | considered critically is | considered critically is | considered critically is stated |
| **Explanation of issues** | clearly and described comprehensively, delivering  relevant information | stated, described, and clarified so that  understanding is not | stated, but description leaves some terms undefined,  ambiguities unexplored, | without clarification or description. |
|  | necessary for full | seriously impeded by | boundaries undetermined, |  |
|  | understanding. | omissions. |  |  |
|  | Thoroughly (systematically | Identifies own and others’ | Questions some | Shows an emerging |  |
| **Influence of context and assumptions** | and methodically) analyzes own and others’ assumptions and carefully evaluates the relevance of contexts when  presenting a position. | assumptions and several relevant contexts when presenting a position. | assumptions. Identifies several relevant contexts when presenting a position.  May be more aware of others’ assumptions than | awareness of present assumptions (sometimes labels assertions as assumptions). Begins to  identify some contexts when |
|  |  |  | one’s own (or vice versa). | presenting a position. |
|  | Specific position | Specific position | Specific position | Specific position |  |
|  | (perspective, hypothesis) is | (perspective, | (perspective, hypothesis) | (perspective, hypothesis) is |
|  | imaginative, considering the | thesis/hypothesis) considers | acknowledges different sides | stated, but is simplistic and |
| **Student’s position (perspective, thesis/ hypothesis)** | complexities of an issue. Limits of position (perspective, hypothesis) are acknowledged. Others’  points of view and | the complexities of an issue. Others’ points of view and assumptions are acknowledged within  position (perspective, | of an issue. | obvious. |
|  | assumptions are synthesized | hypothesis). |  |  |
|  | within position (perspective, |  |  |  |
|  | hypothesis). |  |  |  |
| **Innovative Thinking** | 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. |  |
| **or uniqueness (of** |  |
| **idea, claim,** |  |
| **question etc.)** |  |
|  | Conclusions and related outcomes (consequences and implications) are logical and reflect student’s informed evaluation and ability to place evidence. | Conclusion is logically tied | Conclusion is logically tied | Conclusion is inconsistently |  |
| **Conclusions and related outcomes (implications and consequences)** | to a range of information, including opposing viewpoints; related outcomes (consequences and  implications) are identified | to information (because information is chosen to fit the desired conclusion); some related outcomes  (consequences and | tied to some of the information discussed; related outcomes (consequences and  implications) are |
|  | clearly. | implications) are not clear. | oversimplified. |
| Comments: |  | | Total Marks (Out of 20): | |  |

1. From the Web site of an engineering professional society, select a code of ethics of interest to you, given your career plans; for example, the Association for Computing Machinery (ACM), or the Institute of Electrical and Electronics Engineers (IEEE). Compare the code with the National Society of Professional Engineers (NSPE) code, selecting three or four specific points to discuss. Do they state the same requirements with the same emphasis?
2. Regarding the same two codes you used in question 1, list three examples of responsibilities that you believe would be obligatory on engineers even if the written code did not exist, and explain why. Also, list two examples, if any, of responsibilities created (entirely or in part) because the code was written as a consensus document within the profession.

**Question No: 1**

As a Computer Science student it is always very important to understand and follow the code of ethics of the organization named ACM (Association of computing Machinery). So for that I will discuss some code of ethics that are similar to the ACM and NSPE organizations:

1. Both of organizations code of ethics emphasize on the welfare and health of the public. Because without the welfare of the public health organizations cannot conduct the other activities of their parts. They sometimes think it is the first and foremost code that everybody should follow
2. Both of these organizations ' code of ethics states that technicians entrusted with private information such as customer data, business strategies, study results, etc. should not reveal this information to anyone else without the approval of all stakeholders. However, if this data is disclosed and if it breaks the rule of the code of ethics, it should be disclosed to suitable officials by an engineer.
3. Both codes require full acceptance of the assigned responsibility by engineers. An engineer should always be transparent to the suitable parties about the capacities, abilities and issues created by a specific scheme. An engineer should not do any kinds of deceptive acts, spreading wrong information’s, calculating wrong issues and showing to others. If an engineer can do his work honestly the reputation of this profession will be in upward. These two organizations ' code of ethics emphasizes this point.

**Question No: 2**

By reading some of the organizations code of ethics, I Think there are certain duties that the engineers would have to fulfill even if they are not written in the code of ethics. Those are discussed below:

1. Any work/project of the institutions that needs to be checked at first if there is any sensitive issue over it. Because in the advancement of technology people sometime wants to misuse it in the wrong way. An engineer should not done anything that can create problem. If any organization force to do this type of activities engineers should notify appropriate authorities about the misconduct.
2. Another important thing that needs to be follow is to stop the discrimination among the organizations’ people. Sometimes it can be seen that for the promotion activities some people of the organization try to hide something from everyone, He/she may think by hiding this he/she can go to the topmost position but that is not correct. If an engineer creates something useful, he should make it accessible to everyone so that people from all over the world can use it when they need it.

I think that, even if the written code did not exist, the above-mentioned characteristics would be mandatory for the engineers to follow. Regardless of their profession, the characteristics indicated in these points should be present in every human being. No matter what code of ethics, each individual should have these characteristics.

**2(b)**

There are some responsibilities created because the code was written as a consensus document. These is discussed below:

1. The development of technology has made it very simple and cheap to collect, monitor and exchange user data. An engineer creating an application that gathers user data has certain duties to safeguard these confidential information’s against hacker or the attacker. He should prevent this anonymous data. He himself shouldn’t use this data to serve his personal activities.
2. When integrated with daily works, computer systems have the ability to affect society. When managing these systems, the experts responsible for these systems should be cautious because these systems have an impact on many people's life.

I think these responsibilities are created because the code was written as a consensus document within the profession.