FIFTH SEMESTER

B.Tech. (Mrng)

MID- SEMESTER EXAMINATION   Nov-2017

HU-303 Professional Ethics &Human Values

Time: 3 Hours

Max. Marks :50

> Note :There are two sections in this question paper.
> Attempt both the questions (1.a and 1.b) from Section A.
> Attempt any four questions from Section B.

SECTION-A

(5x2=10Marks)

Q.1. Study the given cases carefully and answer the following questions.

(a) Mo and Jo are employees of Zip, Inc. and are zealous users of the computer network there. One evening after hours, in a spirit of fun, they begin writing comic phrases into the other's computer files. This "game" becomes a mutual challenge. They then tire of the game and decide to try accessing corporate files not normally open to them.

Mo and Jo then collaborate, Mo at the computer terminal and both suggesting commands to try. Through a relatively short sequence of simple attempts they finally succeed in entering the confidential files. Proud of their "computer virtuosity," they decide to leave a cartoon message in the files: "The Phantom was here." To their horror, part of the sequence of commends for this causes the files to be jumbled! Moreover, the chaotic action occurs over the entire network files.

At great cost to the company the system files must be purged and reloaded from backup sources. Mo and Jo are discovered and admit their act, but argue that it was not their intent. Both are fired.

   (i)   Is Zip justified in the firings? Mo and Jo did not mean to do this; it was a prank that misfired.
   (ii)   Mo argues that: It was ridiculously easy to access the files, the company should do a better job of protecting them. And Jo further argues that: They violated no law, because the act was internal to the company. Therefore, at most they should be disciplined and allowed to keep their jobs. Comment on this argument.

Q.1.(b) You are working as an Executive Engineer in the construction cell of a Municipal Corporation and are presently in-charge of the construction of a flyover. There are two Junior Engineers under you who have the responsibility of day-to-day inspection of the site and are reporting to you, while you are finally reporting to the Chief Engineer who heads the cell. While the construction is heading towards completion, the Junior Engineers have been regularly reporting that all construction is taking place as per design specifications. However, in one of your surprise inspections, you have noticed some serious deviations and lacunae which, in your opinion, are likely to affect the safety of the flyover. Rectification of these lacunae at this stage would require a substantial amount of demolition and rework which will cause a tangible loss to the contractor and will also delay completion. There is a lot of public pressure on the Corporation to get this construction completed because of heavy traffic congestion in the area. When you brought this matter to the notice of the Chief Engineer, he advised you that in his opinion it is not a very serious lapse and may be ignored. He advised for further expediting the project for completion in time. However, you are convinced that this was a serious matter which might affect public safety and should not be left unaddressed.

What will you do in such a situation? Some of the options are given below. Evaluate the merits and demerits of each of these options and finally suggest what course of action you would like to take, giving reasons.

(i) Follow the advice of the Chief Engineer and go ahead.

(ii) Make an exhaustive report of the situation bringing out all facts and analysis along with your own viewpoints stated clearly and seek for written orders from the chief Engineer.orCall for explanation from the Junior Engineers and issue orders to the contractor for necessary correction within targeted time.

SECTION- B

(Attempt any four questions)   **(10x4=40 Marks)**

Q.2Whatis professionalism? Explain any four characteristics and four responsibilities of a professional?
Q.3What are codes of ethics for Engineers? Explain the importance of following these codes.
Q.4 What do you understand by risk-benefit analysis in engineering project? How far should ethical considerations become part of it?
Q.5Explain the following:
(i) Life skills that an Engineer should possess
(ii) Different roles of an Engineer
Q.6 Compare and explain major ethical theories (utilitarianism, deontology, virtue ethics)
Q.7What are the major problems in Environmental ethics/ Computer ethics? What steps can be taken up to overcome ethical issues related to concerned field?
(Explain any one of the field either environmental ethics or computer ethics.)
Q.8What are the rights of professionals? Explain the concept of 'whistle blowing"and IPR (intellectual property right).
Q.9 "The indirect and subtle effects of present day trends in technology are difficult to measure and qualify."- Explain the benefits and potential harm science and technology can have on society.
Q.10 What is engineering ethics? What are the issues and ethical obligations in engineering ethics? .

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