

Hall Ticket Number:

--	--	--	--	--	--	--	--	--	--

IV/IV B.Tech (Regular/Supplementary)DEGREE EXAMINATION

March, 2017

Chemical Engineering

Eighth Semester

Professional Ethics and Human Values

Time: Three Hours

Maximum : 60 Marks

Answer Question No.1 compulsorily.

(1X12 = 12 Marks)

Answer ONE question from each unit.

(4X12=48 Marks)

1 Explain briefly about the following

(1X12=12 Marks)

a.	Moral character: Moral Characteristics like honesty, integrity,
b.	Self-control: Control on temptations which makes an individual unethical.
c.	Confidentiality: Protection of information from unintended subjects
d.	Integrity: Sum and total ethical behavior
e.	Valuing time: Wasting time is unethical is the principle behind valuing time
f.	Codes of ethics: Standards set for ethical behavior which vary with profession
g.	List out the issues in environmental ethics: The Therac-25, Negligent Violation of the RCRA,.....
h.	Hacking: Breaking in to computer systems by computer experts
i.	Spirituality: Oneness in creation
j.	Moral autonomy: One is autonomous in maintaining morality.
k.	How to learn respect for others? Give two suggestions: By training oneself or undergoing training
l.	What are major components of industrial integrity?: However key values are Honesty; Self-respect; Responsibility;Hard work;Fairness;Tolerance of diversity;Vision;Meekness;Respect for others;Mutual assistance;Self-control;Care

UNIT – I

2.a	<p>Write in detail about the human values</p> <p>(SCHEME: ANY SIX VALUES-6 X 1= 6 M)</p> <p>.Integrity: The person of integrity has convictions and commitments, but he is not an obstinate person because the person of integrity needs to get along with others. Integrity involves the discovery and communication of truth to enable others make informed decisions. Honesty and integrity are essential for the development of trust. It leads to consistency of character and operation in different situations and contexts. An individual's personal attributes should remain consistent. He should not behave in a different manner when there is nobody around. Providence is there.</p> <p>.Work ethics: Organizational environment should foster ethical decision making by institutionalizing ethics. This means applying ethical concepts in daily action. This can be accomplished in three ways: (a) by establishing an appropriate company policy or a code of ethics (b) by using a formally appointed ethics committee and (c) by teaching ethics in management development programs. Attention to ethics has substantially improved society. It is true that ethical programmes help maintain a moral course in turbulent times</p> <p>Indian work-ethos of life believe that all works, be it physical or mental, management, leadership, and administration have to be directed towards a single purpose—the manifestation of the essential divinity in man by working for the good of all beings.</p> <p>Service and learning: Service is an act of help or assistance when somebody is</p>	6M
-----	--	----

in distress. May be social service or any assistance at personal level. For some people service-oriented attitude is in-born and others can learn to serve (service). Service could also mean a department of public employment like Civil service. Learning means the act of gaining knowledge by study, instruction or scholarship. Moral concern involves a commitment to obtain and properly assess all available information pertinent to meeting one's moral obligation. Engineers must be well informed at every stage of the project's history.

Civic virtue: Virtue is a quality of character that allows one to succeed at the roles and activities one undertakes. An excellence of character not just for us, or for narrowly defined contexts, but for the larger social scheme of things. Virtues are pervasive traits of character that allows us to fit into a particular society.

Respect for others: People should always be respected as autonomous (self-directing) moral agents. We use people merely as things when we do not let them make their own decisions and when we harm them for our own benefit without respect for their rights. Moral reasons involve respecting persons by being fair and just with them, respecting their rights, keeping promises, avoiding unnecessary offense and pain to them, and avoiding cheating and dishonesty. They also concern with caring for others by being sometimes willing to help them (especially when they are in distress), showing gratitude for favours, and empathizing with their suffering.

Living peacefully: When there is peace in the individual, there will be peace in the family. In order to learn how to lead a peaceful living, self-esteem, calmness and freedom from anxieties are necessary.

Caring and sharing: Caring for other persons (including all living beings) and sharing their sorrows and happiness is the heart of the moral life and that a morality of care leads to a refreshingly new picture of morality as centering on relationships, feelings, and connectedness rather than impartiality, justice, and fairness. The justice-oriented person in a moral dispute will ask what is the fair thing to do and then proceed to follow that course of action, no matter what effect that has on others. The care-oriented individual, on the other hand, will try to find the course of action which best preserves the interests of all involved and which does the least amount of damage to the relationships involved.

Honesty: The quality of trustworthiness—not given to lying, cheating or stealing. It is characterized by sincerity and candor.

Courage: Courage is a virtue necessary to a wide range of human activities and those who lack courage will rarely flourish. Courage is the strength of character to face and overcome what we fear. Fears differ from person to person, but we all have them. Some may fear physical danger; some may fear intimacy and the psychological vulnerability that comes with it; some may fear commitment; some may fear taking risks to gain what they desire.

Value time: Virtues are usually a mean between two extremes. One of the extremes here is clear: cowardice. The other extreme is too much courage (rashness, foolhardiness). To run into a burning building to save a trapped child is courage; to run into the same building to save an old pair of shoes is foolhardy.

Time is viewed as an asset with a perishable value. It is also assumed to be a linear entity which when utilized improperly or inefficiently is wasted. People are socialized to value punctuality and promptness and express strong disapprovals towards tardiness and excessive delays.

Cooperation: Healthy competition is a powerful motive behind all kinds of success. Today's biological scientists have proved that it is cooperation and

striving for excellence that lead to all round success and not mere atavistic competition which suits the sense-bound animals and not mind-thought-based man. The pattern of non-competition is typical of all naturally co-existing species. Peaceful coexistence, not struggle is the rule. Even at the social level too much competition to keep up the higher standard of living have wrought social havoc. The spirit of cut-throat competition for acquiring only wealth has led to accumulation of more and more wealth at the cost of law or ethics. Competition comes between similar performers. It is avoided when one can show natural excellence on others or when one can manifest something unique.

Commitment and empathy: Commitment means strong belief in something, a promise to do something, enthusiasm, duty/responsibility. Empathy means the power of understanding and imaginatively entering into another person's feelings.

Character: A moral demeanor that refers to one's outward demeanor as judged by society. Positive moral character refers to one's ability to know the right and to have the courage to follow the right. Character refers to one's virtue, or how one lives by a set of moral values. A person of character is one who is known to be honest, just, fair, and decent to others. A person of honor and integrity.

Spirituality: Indian ethos asserts that the spirit must lead matter. The awakening of the essential internal man assures all success. India always taught the people to put the spirit above matter to make internal excellence lead the quest for external excellence. The 'left brain' activities of reason, accumulation of wealth and dynamism must be guided by the 'right brain' activities of sacrifice, love and holistic actions. India never lost her grip over spiritual culture. 'Perhaps in return for conquest, arrogance and exploitation, India.

Universal Values: Right conduct is concerned with maintenance of the body to serve us in performing the tasks of life.

Peace: When the will power is sufficiently strong to discern the differences between real needs and superfluous desires, we cease to be driven by the urge to own more and more things. Inner agitation stops and we remain peaceful.

Truth: Learning to speak the truth is a first and vital step in the formation of a strong character. Voicing untruth is an anti-social act and causes confusion in the minds of the both the speaker and listener. Telling lies hurts ourselves and others in a subtle real way.

Love: Love is a spontaneous reaction of the heart. It is the power of love which causes one person to wish happiness for another and take pleasure in this or her wellbeing. Love is unconditional, positive and regard for the good of another. Love is the unseen undercurrent binding all the four values.

Non-Violence: Non-violence can be described as a universal love. This creates harmony with the environment. That is living in a way that causes as little harm as possible to one-self, other people, animals, plants is a sign of a well-integrated and well-balanced personality.

Fundamental values:

1. Essentially divinity is inherent in all life.
2. Presence of divine motherhood in all women.
3. Religion is the manifestation of divinity already in man. Plurality of religion is only on surface. At spiritual core there is essential unity among all religions.

Civilization is the manifestation of divinity in man. The society is the most

	developed where highest truths become practical. The end of the work is to bring out the divine in ourselves by serving the divine in others.	
2.b	<p data-bbox="347 128 902 155">What are the ethical rules of an industrial worker?</p> <p data-bbox="594 201 1078 228" style="text-align: center;">(SCHEME: FOUR POINTS 4X1.5= 6 M)</p> <p data-bbox="347 275 634 302">Relative To Employer</p> <p data-bbox="347 344 1328 579">Most industrial workers, are hired by public and private corporations, governments and small shops. the industrial worker, in accepting a job offer from any of these authorities, has, in essence, agreed to abide by the standards set by the organization. In other words, the worker has agreed to play the game according to the rules. The acceptance of an employment from any employer implies that the member in substantial agreement with the general policies and principles of the employing organization.</p> <p data-bbox="347 621 1328 890">It the obligation, on the part of the industrial worker, to do a job that meets the expectation of his or her employer based on those ethical standards. The worker is expected to devote a specified amount of time doing the work for which he/she was hired. In this regard, if the worker puts in 20 hours into the work when the employer requires that 40 hours be spent, he or she is involved in an unethical practice. This goes for all the job requirements specified in the conditions for that appointment. Commitment to one’s employers demands that the worker be ethical in his/her behavior toward the profession.</p> <p data-bbox="347 932 678 959">Relative to the Profession</p> <p data-bbox="347 1001 1328 1199">Professional and industrial organizations usually require their members to abide by certain ethical standards. An important rationale for this requirement is that professional membership means representation of the organization by its members within the organization. For example, many professional organizations require their members to maintain a professional appearance through their attire and communications.</p> <p data-bbox="347 1241 1328 1476">workers should also be hard working, and strive to contribute to their professions through such activities as volunteer service and leadership. They should strive for higher standard, so that they will be good role models in their professions. It behooves workers to prepare themselves through a constant study and participation in their professional activities, and also by updating their knowledge with the daily innovations in the field of their industry through reading current publications in their fields of specialization.</p> <p data-bbox="347 1518 631 1545">Relative to the society</p> <p data-bbox="347 1587 1328 1959">As one of the stakeholders in industrial organizations, the society is a “customers of the industry. In other words, society (prospective employees, schools, governments, parents/guardians and children of workers, competitors, and so forth), even though an outside environment, still interacts (permeates) with the industry where the industrial worker works. These are the stakeholders who perceive the industry as either moral or immoral. The industrial worker, as a participant within the industry, helps to determine what the image that industry going to look like in the eye of the public. Industrial workers accomplish this through the values they work with in providing goods and services to the company and public, the kind of life they live (law-abiding) and the kind of representation they make for the industry.</p> <p data-bbox="347 2001 1328 2060">Based on the above premises, the society expects industrial workers to not only be experts in the fields that they profess, but also to express their life through</p>	6M

	<p>caring relationship, through moral careful work, and through moral leadership. Society looks on the industrial workers as leaders; Good leaders should have those prescribed characteristics. In this regard, an industrial worker who is involved in a law-breaking behavior within the society is not doing the industry any good. The actions of industrial workers define the image and perception of industry in the minds of society and the general public.</p> <p>Relative to colleagues</p> <p>The industrial worker works in a workplace or department in which other industrial workers work. He or she interacts daily with these colleagues in the company, conferences, departmental businesses, interpersonal relationships, and in planning strategies for bettering the activities of that department. Together, they should work as a team in working to maintain the integrity of their profession. It is immediately apparent that this ideal relationship cannot be achieved if the participants do not ethically involve themselves in the numerous decision-making areas relative to the matters that contribute to the group's well- being. There is the need for fairness of dealing, protection of individual rights, and confidentiality of matters Pertaining to colleagues. There is also the need for self-control, none embarrassing statements about colleagues, evaluation of colleagues without regard to race, creed, color, sex or status, and a concerted effort to safeguard the rights of others.</p>	
--	--	--

(OR)

3.a	<p>Explain the types of inquiry.</p> <p style="text-align: center;">Outside syllabus</p>	6M
3.b	<p>Write a note on Ethics as law</p> <p style="text-align: center;">(SCHEME: 3 POINTS X 2 = 6 M) Ethics, Conscience, and the Law</p> <p>Openly breaking a law to test its constitutionality respects the legal system, but uses part of the legal system, the court system, to test whether the law is consistent with other law, including the constitution of the country (or, in the United States, of the state). Breaking a law to raise some moral objection to either the law one has broken or some other law or policy is called “civil disobedience.” For an act to count as civil disobedience, it must break the law publicly and nonviolently in an attempt to draw public attention to an injustice. Civil disobedience aims to bring about a change, often a change in the law that was broken. It requires a willingness to undergo whatever punishments the law provides for those who break that law. The term “civil disobedience” is applied even when the alleged injustice that a person protests is not the injustice of the law that the person violates, but another law or legally sanctioned activity that one believes to be unjust. Recent examples include trespass on the grounds of nuclear weapons facilities and abortion clinics. Henry David Thoreau’s 1849 essay on civil disobedience is a classic statement on the subject. It is also possible to change a law by a public protest that breaks no laws but attempts to use nonviolent means to draw attention to a perceived injustice, usually injustice in some law. Nonviolent protest, such as the Alabama bus boycotts that protested segregated busing, uses many of the same methods as civil disobedience but may not break any laws.</p> <p>Conscientious refusal is a second related notion. Examples of conscientious refusal include refusal to carry out work or a military order that one believes to be immoral, and the refusal by those concerned with animal welfare to eat or wear the skins of higher animals or use products that have been tested on them. It can occur in work or nonwork situations and may or may not involve breaking</p>	6M

	<p>any law. It may be done either simply from a motive of not participating in what one sees as a moral wrong or it may be done with the hope of making a public protest that will draw attention to the situation one believes is wrong.</p> <p>Finally, there is outright breaking or evasion of the law on grounds of conscience. Those individuals who refused to identify and turn over Jews, homosexuals, or gypsies to the Nazis for extermination broke the law on grounds of conscience. Such law-breaking is covert (as contrasted with the publicity of civil disobedience, nonviolent protest, and conscientious refusal). It is morally justified only under conditions in which public protest would certainly be futile and a grave wrong is done if one complies with the law.</p> <p>Sometimes all of the actions discussed here are loosely referred to as “conscientious objection” or “civil disobedience,” but if this is done, it is still important to distinguish between what are here called nonviolent protest, conscientious refusal, and a conscientious attempt to evade the law, because there are relevant ethical differences in the conditions that justify their performance.</p>	
--	---	--

UNIT – II

4.a	<p>Explain the basis and scope of professional responsibility. (SCHEME: 3 X 2 = 6 M)</p> <p>Rules and obligations specify what <i>acts</i> a professional is ethically required or forbidden to do, such as: “Engineers should not sign off on work unless they have checked and approved it” or “Surgeons should not operate on patients without obtaining their consent.” These express some aspects of the ethics of a profession.</p> <p>The case of Peter Palchinskii illustrates how the extent to which professions have control over the projects they work on affects the ability of their members to exercise judgment and discretion and carry out professional responsibility.</p> <p>The case of Peter Palchinskii appears in Loren Graham’s book, <i>The Ghost of the Executed Engineer: Technology and the Fall of the Soviet Union</i>. Peter Palchinskii was a multifaceted and extremely talented engineer in the U.S.S.R. during the Stalinist era. Palchinskii frequently criticized government policy for such things as inattention to the health and safety of workers, as well as for shortsighted planning. Although he was a committed Marxist, he was charged with treason and executed.</p> <p>Subsequently, engineering education in the U.S.S.R. narrowed significantly. The incident lessened the chance that other engineers would recognize the broader implications of their work. Therefore the engineers didn’t raise criticisms which are unfavorable to government. Palchinskii’s story and the subsequent changes in engineering education in the Soviet Union provide an example of how social and political context affect the character of professional education and the scope of professional competence, and hence the capacity of professionals to recognize problems and act in the public interest.</p> <p>Another example of an engineer who died for his ethical concerns is Benjamin E. Linder.</p> <p>As an <i>undergraduate</i> studying <i>mechanical engineering</i> at the <i>University of Washington</i>, <i>Benjamin Linder</i> became intensely interested in the societal applications of engineering and the introduction of technology to meet human needs in undeveloped areas. <i>After graduation in 1983</i>, he went to <i>Nicaragua</i> to work as a volunteer under the sponsorship of the <i>Nicaraguan Appropriate Technology Project</i>. (The name “appropriate technology” is the term widely</p>	6M
-----	---	----

	<p>used for technology suited to the needs of small producers, rural and urban, especially in the developing world.) In the <i>spring of 1984</i>, Linder joined a project to provide power to a rural area in the <i>mountains of northern Nicaragua</i> that had no reliable source of electric power. Refrigeration for medical supplies and electric lights to hold evening classes both required electricity.</p> <p>A small-scale hydroelectric plant was feasible, but because electricity had not been available, there were neither machine shops nor skilled mechanics. Plans were made to accomplish the construction by teaching local people how to build, operate, and maintain the plant themselves. Linder taught local people how to work with concrete and use hand tools. By May of 1986 when the plant was operational, many peasants had new skills and several were fully competent to run and maintain the plant.</p> <p>The plant was used to run a small machine shop and a refrigerator of a medical center. Future plans were made to run a sawmill, carpentry shop, and facilities to make cement blocks, bricks, and roof tiles for the local area.</p> <p><i>During the 1980s</i>, the <i>contras</i> were working to overthrow the Nicaraguan <i>Sandinista government</i>. Their strategy was to attack farmers, teachers, and medical workers in outlying areas to weaken the government. The <i>contras</i> had been especially active in the area where Linder was working. When an organization of American citizens living in Nicaragua sued in U.S. court to stop the U.S. government from funding the <i>contras</i>, Linder joined the suit. In his affidavit, he said he believed that his life was endangered. The suit was unsuccessful, but Linder continued to be committed to his work. Two years later, he was killed by the <i>contras</i> while making rainfall and flow rate measurements.</p> <p>In 1988, the IEEE SSIT Award for Outstanding Service in the Public Interest was awarded to Benjamin Linder for his “<i>courageous and altruistic efforts to create human good by applying his technical abilities.</i>”</p> <p>The stories of Palchinskii and Linder together vividly illustrate how the larger society may fail to support the responsible actions of engineers. There are no good alternatives to having professionals behave responsibly. Therefore, the general population has a strong interest in fostering legal and other supports for responsible behavior by professionals.</p> <p><i>American Association for the Advancement of Science’s Human Rights Program’</i> monitors human rights abuses against science professionals around the world. According to <i>it</i> engineers significantly outnumber physicians as victims of human rights abuses. Some of these human rights violations are for political actions of the engineers rather than for their practice of engineering.</p>	
4.b	<p>Discuss the relation between employee status and professionalism.</p> <p style="text-align: center;">(SCHEME: 3 Points x 2 = 6 M)</p> <p>Being both a professional and an employee creates some special problems. First, professionals who are employees must answer to their employers, something they would not need to do if they were in private practice. They decide what departures from ideal professional behavior are important enough to object to. Second, they must figure out how to present their arguments on important issues so that others are most likely to appreciate their point. Third, if those within the organization continue to disregard an important matter, professionals must make a judgment about whether and to what extent they should either breach confidentiality or “make trouble” for the organization by taking matters outside the organization. Taking matters outside the organization is known as wistle blowing. Finally, they must decide where to take the matter and how best to raise the issue to get attention to the issue while being fair to those who disagree with them.</p>	6M

Kim Case: Kim is an engineer who works for a large defense company. Part of Kim’s job is to review the work of subcontractors on a large government contract to Kim’s company. Kim discovers that certain subcontractors have turned in submissions with excessive costs, time delays, or deficient work, and advises management to reject these jobs and require the subcontractors to correct these problems.

After an extended period of disagreement with Kim over the subcontractor issue, management placed a warning in Kim’s personnel file about insubordination and placed Kim on three months probation with a warning about the possibility of future termination. Kim continues to insist that the company has an obligation to ensure that subcontractors fulfill the specifications for their work and try to save unnecessary costs to the government. Finally, Kim requests an opinion from the NSPE Board of Ethical Review on the matter.

The Responsibility for Safety and the Obligation to Preserve Client Confidentiality

The owners of an apartment building are sued by their tenants to force them to repair defects that result in many annoyances for the tenants. The owner’s attorney hires Lyle, a structural engineer, to inspect the building and testify for the owner. Lyle discovers serious structural problems in the building that are an immediate threat to the tenants’ safety. These problems were not mentioned in the tenants’ suit. Lyle reports this information to the attorney who tells Lyle to keep this information confidential because it could affect the lawsuit.

Code Violations with Safety Implications

Lee, an engineer, is hired to confirm the structural integrity of an apartment building that Lee’s client, Scotty, is going to sell. Through her agreement with Scotty, Lee will keep the report confidential. Scotty makes it clear to Lee that the building is being sold in its present condition without any further repairs or renovations. Lee determines that the building is structurally sound, but Scotty confides in Lee that electrical and mechanical code violations are also present. Although Lee is not an electrical or mechanical engineer, she realizes that the problems could result in injury and informs Scotty of this fact. In her report, Lee briefly mentions the conversation with Scotty about these deficiencies, but he does not report the violations to a third party.

Summary:

The employee engineer has to decide whether and how to “blow the whistle” in specific circumstances. Whereas a practicing engineer has to decide whether to oblige the professional moral demand/ obligation or obligation to protect clients interest. The employee engineer is somewhat more vulnerable, however, than the engineer in private practice, in that the alienation of a client typically has less severe consequences than the alienation of one’s employer, or even one’s superiors within a company.

(OR)

5.a	<p>Explain some areas of industrial responsibility and their implications.</p> <p style="text-align: center;">(SCHEME: 3 issues x 2 = 6 M)</p> <p>Lee, an engineer, is hired to confirm the structural integrity of an apartment building that Lee’s client, Scotty, is going to sell. Through her agreement with Scotty, Lee will keep the report confidential. Scotty makes it clear to Lee that the building is being sold in its present condition without any further repairs or renovations. Lee determines that the building is structurally sound, but Scotty confides in Lee that electrical and mechanical code violations are also present.</p>	6M
-----	---	----

Although Lee is not an electrical or mechanical engineer, she realizes that the problems could result in injury and informs Scotty of this fact. In her report, Lee briefly mentions the conversation with Scotty about these deficiencies, but he does not report the violations to a third party.

Summary:

The employee engineer has to decide whether and how to “blow the whistle” in specific circumstances. Whereas a practicing engineer has to decide whether to oblige the professional moral demand/ obligation or obligation to protect clients interest. The employee engineer is somewhat more vulnerable, however, than the engineer in private practice, in that the alienation of a client typically has less severe consequences than the alienation of one’s employer, or even one’s superiors within a company.

The emerging consensus on the Responsibility for safety among engineers

Lessons from the 1979 American Airlines DC-10 Crash and the Kansas City Hyatt Regency Walkway Collapse

Two famous accidents in the last decades of the twentieth century – the 1979 DC-10 crash and the 1981 collapse of the walkway at the Kansas City Hyatt Regency – expanded the *scope* of safety considerations still further. They dramatically illustrated that designs that may be safe when constructed or maintained as specified, may nonetheless create hazards indirectly by creating temptations for others to take unsafe shortcuts. In these two instances, the unsafe shortcuts were in maintenance, fabrication of connections, and construction.

DC-10 problem: Rather than separating the engine and the pylons during maintenance, as recommended by the manufacturer, McDonnell Douglas, the crews had been removing and reinstalling the engine and pylons as a unit using a forklift. The heavy aircraft components were liable to be misaligned during the forklift maneuver, resulting in the cracking of the rear bulkhead’s flange.

Regency Walkway collapse problem The original plans had a single rod used at each point of connection, passing through the firstwalkway, fastened with a bolt underneath. Havens proposed to use two separate rods to simplify the assembly task and to eliminate the need to thread the entire length of the rods.

American Society of Civil Engineers (ASCE) urged civil engineers to accept design work *only if they oversee the subsequent fabrication and construction as well.*

5.b	<p>Discuss the theories about right action.</p> <p style="text-align: center;">(SCHEME: 2X3 = 6 M)</p> <p>Principles of right and wrong values in relation to the industrial worker whose initiatives affect productivity and quality of products and services.</p> <p>Many frame works for the definitions of ethics have been put forward. Only two of them are of real value to the industrial worker</p> <ol style="list-style-type: none"> 1. Deontologism: holds that every act is inherently good or evil by itself irrespective of its ramifications. 2. Consequentialism: holds that an act is considered good or bad based on its results or consequences. <p>First view of ethics is held mostly by religious organizations and societies which hold that God is the Author of all laws. Aspects of this view are seen in mot Christian, Islamic and Jewish societies where virtues like hard work and</p>	6M
-----	--	----

	<p>honestly are valued. Believers in this view always hold to what has been defined as the “truth” whether it has any immediate advantage or not.</p> <p>Another way to express the second view is that what favors or brings most happiness to most people should be upheld. This is often called utilitarianism. This view is practiced mostly in democratic societies where a major vote usually dictates the law. For example, if most individuals in a community decide that a certain kind of industry should not be allowed to establish in the area, then that will be upheld.</p> <p>The examination of the two views reveals that both are actually designed for the benefit of mankind. While, agreeably, there are differences of opinions on how and when to apply each view, the two ideologies, for the most part, work for the benefit of man. In the light of its general definition of “principles of moral values”, it then lies on the society to determine what its moral values will be.</p>	
--	--	--

UNIT – III

6.a	<p>Discuss the role of engineers as managers.</p> <p style="text-align: center;">(SCHEME: 3X2 = 6 M)</p> <p>How managers relate to engineers in good companies and in companies that are not good? The Center for the Study of Ethics in the Professions at the Illinois Institute of Technology has carried out research on this issue.</p> <p>The study identified three value orientations of companies depending on whether the company gave first priority to</p> <p>Customer satisfaction – Customer oriented company. The quality of its work/products – quality oriented company The financial bottom line – Finance oriented company</p> <p>In the quality-oriented companies, quality (and of course safety) takes priority over cost and the customer’s desires. Cost comes in only after our quality standards are met.”⁷ Quality-oriented companies listen to their customers, but take pride in being willing to say “no” to them. If a customer wants us to take a chance, these companies won’t go along.” Such companies try to convince customers. but if they fail to convince the customer, will forfeit the business rather than supply a part or a device that will not perform the customer’s job well. Although this strategy does not maximize short-term profits, their reputation for quality seems to have contributed to their long-range success.</p> <p>Even in the quality-oriented companies, managers and engineers had different concerns and priorities. The engineers were likely to see managers as more concerned about cost or more superficial in their judgment, and the managers to view the engineers as likely “to go into too much detail.”</p> <p>In the customer-oriented companies, customer satisfaction was the main objective. They replaced the internal standard of the quality-oriented companies with an external standard of satisfying the customer. Predictably, in such companies, engineers’ quality concerns often conflicted with managers’ desire to please the customer.</p> <p>Study found both engineers and managers to be critical of finance-oriented companies. In finance-oriented companies the desire to maximize the number of units shipped conflicted not only with the engineer’s concern for quality, but in some cases even with other ethical standards, such as when engineers or managers were pressured to adjust test results to make it seem that the product</p>	6M
-----	---	----

	<p>met the customer's specifications. Managers expected engineers to "go to the mat" for both safety and quality concerns.</p> <p>Even in customer oriented companies the engineers studied generally felt their safety judgments were accepted. The managers studied stressed the importance of appreciating the engineers' evaluations to doing their own (managerial) jobs well.</p> <p>Recognizing the importance of heeding the warnings of engineers, many large U.S. companies have instituted complaint procedures or "hot lines" to guard against such failures. Good complaint procedures ensure both that difficulties are recognized and appropriately addressed and that those who raise concerns <i>in good faith</i> are protected from retaliation.</p>	
6.b	<p>Explain the limits on acceptable behavior in large corporations.</p> <p style="text-align: center;">(SCHEME: 3X2 = 6 M)</p> <p>The essence of above topic is 1. What standards of behavior are considered to be ethical in the company/ies in you are considering working 2. What resources for addressing employees ethical concern are available.</p> <p>Large organizations encourage their employees to know their ethical rights and further them so long as it is consistent with other values of the organization.</p> <p>The responses to ethical problems that are favored by organizations are</p> <ol style="list-style-type: none"> 1. Promptly getting to the root of any difficulty 2. Preparing/educating managers to prevent difficulty 3. Protecting the public's interest, especially in health and safety 4. Respecting the law 5. Keeping the company honest 6. Protecting the company's <i>reputation</i> for honesty and fairness 7. Promoting trustworthiness and good working relationships among people in the company 8. Making appropriate use of organizational channels 9. Minimizing the aggravation that attends measures taken to meet the other criteria <p>Pursuit of these practical goals helps a company flourish.</p> <p>Organizational standards of behavior considered to be ethical are often set through ethical materials like "Gray Matters Game". George Sammet originally authored it for Martin Marietta, now Lockheed Martin</p> <p>Other high-tech companies such as Boeing, Honeywell, McDonnell Douglas, and General Electric have since used the <i>Gray Matters</i> game. Lockheed Martin now uses that same content in a board game called "The Dilbert Game."</p> <p>Lockheed Martin's Gray Matters Ethics Game</p> <p>The game consists of more than one hundred mini-cases that very briefly present ethically significant situations that call for a response. These range from observing a coworker snorting cocaine, observing a coworker to be communicating with subcontractors.</p> <p>The point of the game is</p> <ol style="list-style-type: none"> a) to make employees aware of ethical problems that can arise in their day-to-day responsibilities, b) enable them to think through the consequences of their decisions and actions, c) and teach them what resources and company channels are best used in a large company to resolve the problem. <p>Each mini-case is accompanied by four potential answers. (Usually the game is played in groups. The group discusses the case and comes to a decision about which answer is the best course of action.) The answers are scored (from -20 to +15) and an explanation or a rationale for the score is provided. The potential</p>	6M

answers and evaluations of those answers inform employees about the company's values and standards on business ethics, develop their skills in applying company standards, and help employees find the best procedures for addressing a variety of ethical concerns within their company.

You have been assigned to work on a proposal to the government. The proposal manager tells you and several other non-exempt workers that he'd like you to stay home Thursday and Friday and then come in and work Saturday and Sunday, but report that you worked on Thursday and Friday. That way, you would work 40 hours for the week, but the company would not have to pay you overtime for the weekend. "After all," he says, "proposal money is short."

What do you do?

The answers offered are:

- A. Grudgingly comply thinking these days a job is a job.
- B. Check with Human Resources to see if company policy permits this.
- C. Call the ethics officer and allege unfair treatment.
- D. Speak up immediately and question the manager's right to impose such a condition.

Multiple answer	Marks	Comment
A	-5	To go grudgingly along with a company imposition is not conducive to good morale. Isn't there a better way?" The negative points indicate that this is a mildly bad answer and the comment discourages employees from allowing themselves to be exploited.
B	10	This is a sensible approach. If company policy doesn't permit this, it will be corrected. If it does, you have the facts needed to make a decision. Most companies and the government would consider this falsifying your timecard, thus denying the manager's right to ask you to do it. will get you information most quickly and with a minimal risk to yourself.
C	+5	Call the ethics officer and allege unfair treatment. This

		response will take longer, but will eventually arrive at the same answer as 'B.'”
D	+5	that is, a moderately good answer, with the comment, “Certainly you are within your rights to do this.”

A coworker is injured on the job. You are a witness and could testify that the company was at fault. What do you do?

The answers provided are:

- A. Don't get involved.
- B. Contact the injured coworker and offer to appear on her behalf.
- C. Report to the company what you saw to ensure that the safety hazard is corrected.
- D. Protect the company by refusing to appear as a witness for the injured.

Multiple answer	Marks	Comment
A	-10	Answer A is termed a “cop-out.”
B	+5	showing compassion but faulted for not addressing the unsafe condition.
C	+10	Gets at the cause of the injury. Whatever happens after that, happens. If the injured wants you as a witness that is [within] both your rights.” The company here clearly says that it wants hazards removed and employees treated fairly. Removing hazards and treating employees fairly encourage an atmosphere of trust, which in turn fosters cooperation necessary for a productive work environment. Fairness to other employees is put ahead of the company's short-term financial interest.
D	-10	Unfairness to the coworker is cited in the comment on D. you are within your rights to do this.”

7.a	<p>Briefly describe worker oriented values. (SCHEME: 3X2 = 6 M)</p> <p>a) care, fairness, safety,....</p> <p>Careful work; Caring relationships; and through moral leadership – Kolb (1988). Careful work is meant for avoiding mistakes, repetitions, avoiding everyday unexpectations and surprises.</p> <p>Caring relationship: Leader should care for all he is leading. Otherwise the led feel that their leader is uncaring. That leads to unsatisfaction, which inturn leads to social problems. For a caring leader, subordinates are loyal and hence productive. Real impact doesn't come from being boss, but treatment of employees.</p> <p>A major aspect of caring is Motivation. To motivate means to inspire, encourage, impel, stimulate, activate or spur. Motivating employees has a direct bearing on a company's productivity. Often it results in better productivity and and better employee-supervisor relationship. Lack of proper employee motivation can result in increased employee absence from work, theft of company's property, and sheer disrespect of those in authority.</p> <p>Industrial leaders employ different techniques to motivate employees. Techniques are towards the needs of the employee.</p>	8M
7.b	<p>Write about the four team oriented values. (SCHEME: 3X2 = 6 M)</p> <p>Tolerance of diversity, Respect for others, fairness, meekness, mutual assistance,</p>	4M

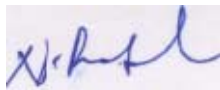
UNIT – IV

	Write short notes on the following	
8.a	<p>Integrity and organization. (SCHEME: 2X3 = 6 M)</p> <p>Components of Industrial Integrity: Every ethical value is a component of Industrial integrity. Integrity is sum and total of all values that effect the productivity and quality of service of industry. Explanation of any two integrity components</p>	6M
8.b	<p>Exploring the learning process of integrity. (SCHEME: 3X2 = 6 M)</p> <p>Outside Syllabus</p>	6M

(OR)

9.a	<p>Explain the epitome of industrial success. (SCHEME: 3X2 = 6 M)</p> <p>Explaining any three points of integrity</p>	6M
9.b	<p>Discuss the consequences of lack of integrity. (SCHEME: 2X3 = 6 M)</p> <p>Any two case studies in brief or one in detail</p>	6M

Detailed Scheme with solutions: By



Dr.N.Rama Gopal

Mobile: 9963 10 6450