Register Number									

Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam – 603 110

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Department of Computer Science and Engineering

Continuous Assessment Test – II

Question Paper

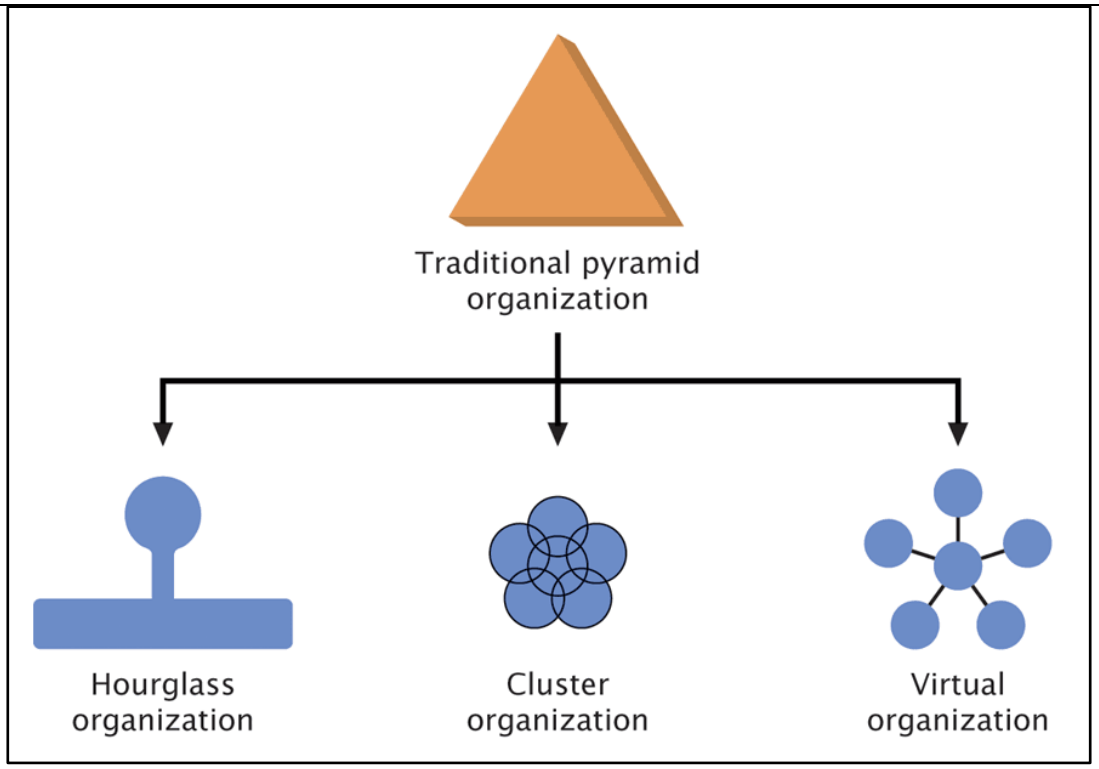
Degree & Branch	B.E. Computer Science and Engineering				**Semester**	VII
Subject Code & Name	UCS1704 – Management and Ethical Practices				**Regulation:**	**2018**
Academic Year	2023 – 2024 (ODD)	**Batch**	2020 - 2024	**Date**	**16/10/2023**	**FN**
Time: 08:10 – 09:40 AM (90 Minutes)	**Answer All Questions**				**Maximum: 50 Marks**	

(K1: Remembering, K2: Understanding, K3: Applying, K4: Analyzing, K5: Evaluating)

CO1:	Describe basic and applied fields of Management (K2)
CO2:	Describe and practice Managerial skills (K3)
CO3:	Describe and practice Engineering Ethics and Human Values (K3)
CO4:	Describe and use safety, responsibility, and rights (K3)
CO5:	Describe ethical issues in cybersecurity (K2)

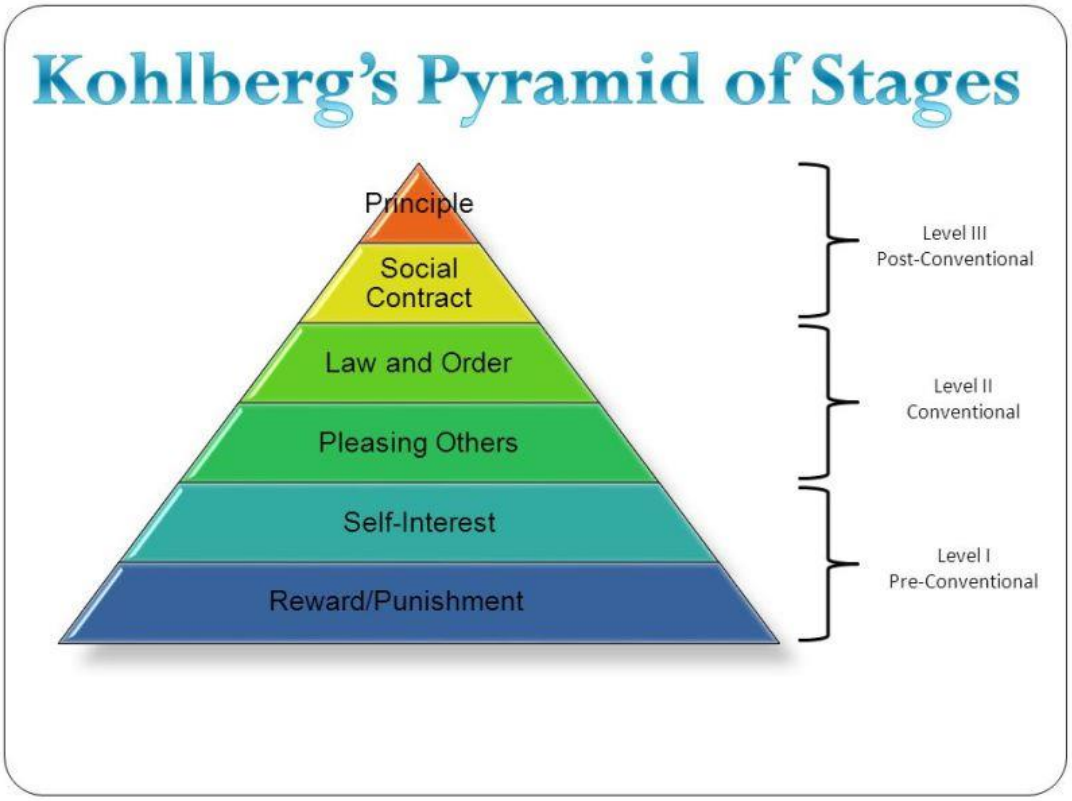
Part – A (6×2 = 12 Marks)

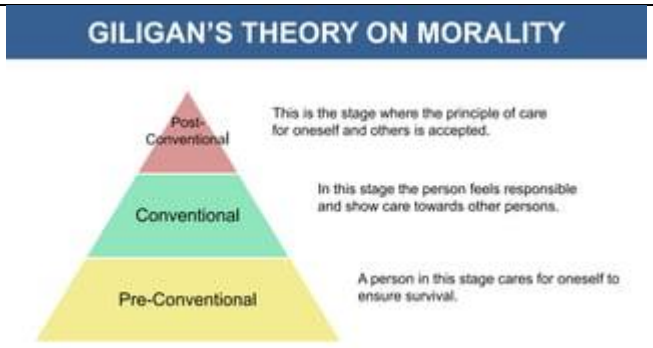
K2	1. Explain the need for motivation in an organization Ans : Motivation will improve the performance of the employee Empower employees Better decision making Less attrition rates Build confidence in one person.	CO2	10.1.2
K2	2. Elaborate the various senses of engineering ethics. In one sense, ethics is synonymous with morality. It refers to moral values that are sound or reasonable, actions or policies that are morally required (right), morally permissible (all right), or otherwise morally desirable (good). Accordingly, engineering ethics consists of the responsibilities and rights that ought to be endorsed by those engaged in engineering, and also of desirable ideals and personal commitments in engineering. In a second sense, the one used in the title of this book, ethics is the activity (and field) of studying morality; it is an inquiry into ethics in the first sense. It studies which actions, goals, principles, policies, and laws are morally justified. Using this sense, engineering ethics is the study of the decisions, policies, and values that are morally desirable in engineering practice and research. Normative and descriptive sense	CO3	10.1.3, 8.2.2
K2	3. Illustrate the new organizational configurations.	CO2	10.1.2

			
K2	4. Compare and contrast consensus and controversy. Consensus means „agreement" and „controversy" means disagreement. The consensus and the controversies are playing the vital roles while considering the moral autonomy. When an individual exercises the moral autonomy, he cannot get the same results as others get in applying moral autonomy. Surely there must be some moral differences i.e. the results or verdicts will be of controversy. This kind of disagreements is unavoidable. These disagreements require some tolerances among individuals those who are autonomous, reasonable and responsible. As per the principle of tolerance, the goal of teaching engineering ethics is not merely producing an agreed conformity on applying moral principles among engineers but also to reveal the ways of promoting tolerances to apply moral autonomy. Both the goals of engineering ethics and the goals of engineering courses have some similarities. These similarities have to be extended with the help of exercising authority. For example, in the class room, the teachers are having the authority over students and in the work place, the managers are having the authority over engineers.	CO3	10.1.3, 8.2.2
K1	5. Which are the differing views of professionals? ● Only consulting engineers who are basically independent and have freedom from coercion can be called as professionals." -Robert L.Whitelaw ● "Professionals have to meet the expectations of clients and employers. Professional restraints are to be imposed by only laws and government regulations and not by personal conscience." -Samuel Florman	CO3	12.1.1
K2	6. Differentiate moral dilemma and moral autonomy. • Dilemmas are certain kind of situations in which a difficult choice has to be made. • Moral dilemmas have two or more foldings - moral obligations, duties, rights, goods or ideals come into disagreement with each other. • One moral principle can have two or more conflicting applications for a particular given situation. • Autonomy means self-governing or self-determining i.e act independently.	CO3	12.1.1

	• **Moral autonomy is concerned with the independent attitude of a person related to ethical issues**.		

Part – B (3×6 = 18 Marks)

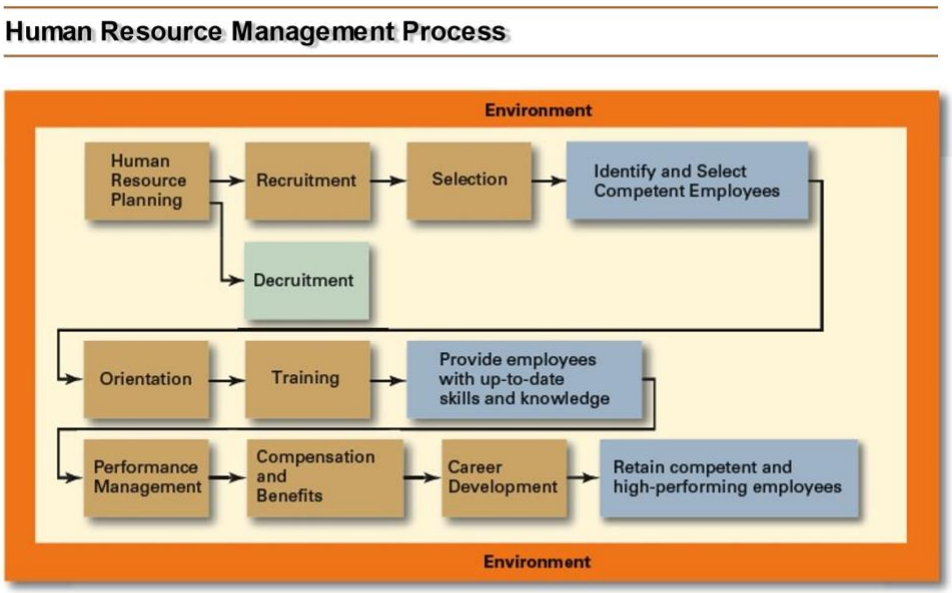
K2	7. Outline the various senses of responsibility. ● Obligations. Responsibilities are obligations—types of actions that are morally mandatory ● Accountable. Being responsible means being morally accountable. ● Conscientious, integrity. Morally admirable engineers such as LeMessurier accept their obligations and are conscientious in meeting them. They diligently try to do the right thing. ● Blameworthy/Praiseworthy. In contexts where it is clear that accountability for wrongdoing is at issue, "responsible" becomes a synonym for blameworthy.	CO3	10.1.3
K2	8. Give the pictographic representation and highlight the Kohlberg and Gilligan theories of moral development. Summarize the criticisms for both theories.  • Criticism: Research has not supported Kohlberg's belief that the development of abstract thinking in adolescence invariably leads people to the formation of idealistic moral principles • Some cross-cultural psychologists argue that Kohlberg's stories and scoring system reflect a **Western emphasis on individual rights, harm, and justice that is not shared in many cultures.** • **Kohlberg's early research was conducted** entirely with male subjects, yet it became the basis for a theory applied to both males and females.	CO3	8.2.2

	 Criticism: Not many researches was done based on Gilligan's ideas and existing research only partially supported her ideas. Gilligan's overemphasis on gender differences and her ignorance of sociocultural context are major criticisms (Jaffe & Hyde, 2000; Lins-Dyer & Nucci, 2007; Puka, 1991; Skoe & Marcia, 1991; Steinberg, 2007; Thomas, 1997; Turiel, 2002; Walker, 1989)		
K3	9. Interpret the following scenario and give your opinion to prevent this from happening. A doctor terminated a female staff member who had been working for him for nine months. She then claimed that her civil rights were violated and that she was discriminated because of her age. She was 46 years old. During an investigation, the doctor was asked to provide copies of her performance evaluations to justify the contention that the termination was based on her performance, not her age. However, no performance evaluations had been done to any employees. This claim led to an out-of-court settlement. Considerations The employee had been working with the doctor for nine months and had not received a performance appraisal. She claimed that she was not aware that her performance was not satisfactory and was surprised when she was terminated. She alleged that the sole reason for her termination was her age — that the doctor wanted to hire a younger person. The doctor said she had been warned on several occasions, but nothing had been documented. Ans: Make sure that a discharge does not come as a surprise to an employee. One way to prevent this is to conduct written performance appraisals on a regular basis and provide ongoing, constructive feedback as close to the notable work behavior as feasible. A good performance review program should: (1) Provide data for use in wage adjustments, promotions, reassignments, disciplinary actions, and/or discharge. (2) Provide objective, factual evaluations of an employee's performance, rather than a snap judgment. (3) Improve employees' job satisfaction and morale by communicating interest in their progress and personal development. (4) Provide information regarding an employee's need for training. (5) Provide a forum for setting goals and performance standards for the next year or appraisal period. (6) Provide an opportunity for each employee to discuss job problems and interests. How often should you do performance appraisals?	CO3	10.1.3, 8.2.2

	We recommend that a new employee be given a performance appraisal after approximately four weeks and again eleven weeks from the date of hire. Committing to this forces you to more closely observe a new employee's performance during the first few weeks, recognizing that it is safer to let someone go during the orientation and training period rather than later. Using a form such as our "New Employee Progress Report" covering a few essential performance factors will serve this purpose and the meeting with the employee should take very little time. The employee should be evaluated on how well he or she has performed key duties and accountabilities. Performance factors usually are derived from the employee's job description. A more complete review, using a standard format for consistency like our "Performance Appraisal Form" covering such items as quality and quantity of work, job knowledge, and staff and patient relations, should be conducted approximately once a year. Each of these items may have some subsections that record levels of performance. For example, you might have a range of one to five, with a three denoting satisfactory performance and a one equating to "understands all facets of the work and has complete mastery of duties — carries them out effectively." A score of five would equate to "lacks sufficient understanding and skills of job functions to perform duties in a satisfactory manner." A note of caution: Many employers arrive at an overall rating of satisfactory, even though the performance is far from acceptable in one category. This is a mistake! Do not provide an overall rating. If you do — and later have to justify why you discharged an employee — the authorities will only look at the overall satisfactory rating and wonder why you discharged a satisfactory employee. Evaluations must be job-related, balanced, and candid in presenting constructive guidance regarding performance deficiencies. Contact our office to obtain a copy of the staff performance reports and forms mentioned in this column. Bent Ericksen is the founder and Tim Twigg is the president of Bent Ericksen and Associates. For over 25 years, the company has been a leading authority in human resources and personnel issues, helping dentists successfully deal with the ever-changing and complex labor laws. Both authors are members of the Academy of Dental Management Consultants.		

Part – C (2×10 = 20 Marks)

K4	10. Having a car to get to work is a necessity for many workers. When two crucial employees of Vurv Technology in Jacksonville, Florida, had trouble getting to work, owner Derek Mercer decided to buy two inexpensive used cars for the employees. He said, “I felt that they were good employees and a valuable asset to the company.” One of the employees who got one of the cars said, “It wasn’t the nicest car. It wasn’t the prettiest car. But it is an overwhelming feeling of worry replaced by enlightenment. The 80-hour weeks we worked after that never meant anything. It was “give and take”. I was giving and the company was definitely giving back. a. Examine what motivated the employees. b. Infer which motivational theory well suits the above mentioned scenario. Maslow’s hierarchy of needs theory. 8 Maslow was a psychologist who proposed that within every person is a hierarchy of five needs: 1. Physiological needs: A person’s	CO2	10.1.2

	needs for food, drink, shelter, sex, and other physical requirements. 2. Safety needs: A person's needs for security and protection from physical and emotional harm, as well as assurance that physical needs will continue to be met. 3. Social needs: A person's needs for affection, belongingness, acceptance, and friendship. 4. Esteem needs: A person's needs for internal esteem factors such as self-respect, autonomy, and achievement and external esteem factors such as status, recognition, and attention. 5. Self-actualization needs: A person's needs for growth, achieving one's potential, and self-fulfillment; the drive to become what one is capable of becoming		
	(OR)		
K4	11. You are appointed as a Human Resource Manager to Qubitnew Company. It is a well-established organization. Design a suitable HR Management Process with a suitable diagram for recruiting new employees in the company. 	CO2	10.1.2
K4	12. Smith and Tom work in an experimental testing laboratory for Acme Corp. Smith has been the main testing engineer for five years and is up for promotion to laboratory supervisor (includes the testing laboratory and several other laboratories). Tom is being trained as a potential replacement as the testing engineer. The laboratories division supervisor is Brown who is retiring soon. The company's latest development project is an OEM control module for a well water pump. The pump manufacturer has promised an important contract if the module meets their approval. The original module prototype met the desired specifications with the exception of the temperature test. The prototype was sent back to the development engineers for rework. The next iteration of the module was sent to the testing laboratory for testing, but the temperature test was delayed since the needed equipment was out for recalibration. Tom wrote the report for the original prototype and the draft report for the reworked prototype. At the weekly laboratory's division meeting, Smith reports to Brown that the latest module "meets all tests" and that the report has "good number of " equipments for temperature test. Tom questions Smith privately after the meeting since his draft report indicated that temperature testing was delayed. Smith says that the development team fix should be satisfactory, i.e. it was confirmed through simulation, and that they can do	CO3	10.1.3, 6.1.6, 8.2.2

	further testing later to confirm the simulation numbers once the needed testing equipment is returned. Smith says that a positive report to the manufacturer cannot be delayed or their testing laboratory "looks bad" and the contract could be at risk. Then, Tom privately speaks to Brown about the situation including his concern that his (Tom) name is on the overall testing report. Brown tells him that Smith is responsible for the details in the report and that he (Tom) should learn to work with Smith if he wants to take over the testing laboratory. a. Examine the ethical questions in this situation. b. Analyze the scenario and give your insights about Tom's behaviour. c. After the private conversations with Smith and Brown, examine whether Tom has an ethical responsibility to speak to Smith again or not. The listed questions encourage a discussion regarding Jones' initial efforts to address his concerns privately and his options for the next ethical step. The recommendations for the best ethical responses to the immediate issues could include ethical options regarding modifying the report's listed authors, documenting the actual testing, and pursuing formal dissent avenues within the company. A larger ethical issue is introduced regarding the ethical culture of the company and an explicit question is posed as to how this incident should guide the dissenting engineer's career choices. Consider the hypothetical case described in Table 3. An engineer feels that data reporting was mishandled and he attempts to handle the perceived issue with his supervisors. The potential ethical content includes the proper handling and reporting of data, the appropriate procedure for dissenting on ethical grounds, responsibilities of authorship, relationships among managers and the test engineers, and potential safety concerns. Also, possible consequences for the company and for the parties can easily be projected. The case statement guides the analysis by including several ethical issues. The case analysis should discuss the severity of the mishandling of the data and the report and the actions of the various parties during the progression of events. The analysis for this case should conclude that the data reporting was mishandled and was misleading. A reference to code regarding highest standards of professional work is appropriate here. However, the more challenging issues are how to dissent and how dissent was handled. The test engineer is faced with a choice between formally responding on ethical grounds (such as formally objecting to the report or to his authorship of the report) and becoming a party to the ethical failure. The possible personal consequences are the threat to his promotion and the risk to his reputation, respectively. (An insightful analysis might note that this choice is not an "ethical dilemma" since some form of response is the ethical choice as opposed to the expedient choice.) The challenging judgments are if further dissent is needed, how formal and forceful such dissent should be, and how he should remove himself from the situation. The case does not give sufficient information to evaluate the safety aspects, but an analysis should note safety as a potential concern and perhaps discuss how the recommendations might change depending on the significance of this consideration, e.g. the appropriateness of informing the manufacturer.		
	(OR)		
K4	13. Bart Matthews, a robot operator at Cybernetics, Inc., has been killed by an out-of-control robot named Robbie. The creator of the robot, Silicon Technologies, is also in a tight financial position and had hoped that the robot would put the company back on its feet. It has been determined that several situations contributed to the death of Matthews: ● Improper methodology was used in developing the software. ● Testing of the software was faked.	CO3	10.1.3, 6.1.6, 8.2.2

- The company pressured Robbie's creators to bypass testing.
- Part of the software used in the robot was stolen from another vendor's application.
- The programmer did not understand or know the code which he used.
- Security measures used were illegal, and therefore all information gathered in regard to the case might not be permissible in court.
- The project leader did not understand or use proper design methodologies.
- The end-user interface was designed improperly.

a. With suitable justification, inspect who is at fault.
b. Analyze the situations that are unethical.
c. From the given situation, give your inference regarding the major contributor/s to the death of Bart Matthews.

Division chief Ray Johnson, who told the Robbie CX30 project manager Sam Reynolds to finish Robbie CX30 project by the first of January or the entire division will be terminated and told Cindy Yardley, to make fraudulent results of software testing. 2.Cindy Yardley, a software tester at Silicon Techtronics, who created the fraudulent "killer robot" software tests. 3.Mike Waterson, CEO of Silicon Techtronics, who didn't accused division chief Ray Johnson for finishing the Robbie project in hurry without proper testing the robots, and telling Cindy Yardley, to make fraudulent results of software testing. 4.Robbie CX30 project manager Sam Reynolds, who followed the wrong orders of Division chief Ray Johnosn.
5.Randy Samuels, who worked in rush and made mistake in codes of "killer robot".

Ethical Issue 1: Finishing the Robbie project in Rush and under pressure. The Division Chief Ray Johnson took the wrong decision to finish Robbie project in rush and didn't think about the safety procedures of using robots, didn't conduct the proper software testing on robots.

Ethical issue 2: Hiding the truth. Cindy Yardley and Ray Johnson Who modified the results of software testing and presented the fraudulent results for their personal benefits. The CEO of Silicon.
Ethical issue 3: Stealing the software.

individuals, within that system, acted unethically and irresponsibly, and actually caused the accident.
Reynolds, lacked experience with robots and modern user interface

---