

Declaration and Statement of Authorship

I, bearing Registration Number 114119026, agree and acknowledge that:

* The assessment was answered by me as per the instructions applicable to each assessment, and that I have not resorted to any unfair means to deliberately improve my performance.

* I have neither impersonated anyone, nor have I been impersonated by any person for the purpose of assessments.

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1. a) Moonlighting

Moonlighting questions the idea of knowing oneself.

When an individual becomes a part of a company, they take on the company's ethics in addition to their own.

Thus, as a professional they must consider both their personal self as well as the company self.

b) Code

A code is a statement of policies, principles or rules that guide behaviour. A code should guide the behaviour of persons in all organizations and in every life.

c) Intellectual Property Right

Intellectual Property Rights are legal rights that protect creations and/or inventions resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

d) Human Rights

- * Right for liberty

- * Freedom of Opinion and Expression

e) Globalization

Globalization refers to the interdependence of countries resulting from increasing business or integration of trade, finance, people and ideas in Global marketplace.

f) Uses of Ethical theories

- * Ethical theories are helpful in understanding and solving moral dilemmas.

- * Ethical theories are useful in justifying professional obligations and ideals

g) Features of MNCs

- * Huge assets and turnover

- * International Operations through a network of Branches

b) Engineers have to possess the qualities, such as a) honesty, b) competence (skills and expertise) c) diligence and (e) public trust and respect the common good, rather than serving only the interests of the clients or the political interests.

i) Whistle blowing

A process by which an employee conveys information about a moral problem to a person in a position to take action on the problem outside the approved organizational channel.

(j) Reasons for Risk-Benefit Analysis:

- * To decide on designs, advisability of product / project.

- * To suggest and modify the design so that the risks are eliminated.

k) Sexual Harassment in Work Place

Physical contact or advances, A demand or request for sexual favours, making sexually coloured remarks, showing pornography etc in workplace is a Sexual harassment.

2. Safety lessons from 'The Challenger':

The safety lessons one can learn in the Challenger case are as follows:

- * Negligence in design efforts. The booster rocket casing recovered from earlier flights indicated the failure of filed-joint seals. No design changes were incorporated. Instead of two O-rings, three rings should have been fixed. But there was no time for testing with three rings. At least three rings could have been tried while launching.
- * Tests on O-rings should have been conducted down to the expected ambient temperature i.e., to 20°F. No normalization of deviations should have been allowed.
- * NASA was not willing to wait for the weather to improve. The weather was not favourable on the day of launch. A strong wind shear might have caused the rupture of the weakened O-rings.
- * The final decision making of launch or no-launch should have been with the engineers and not on the managers. Engineers insisted on 'safety' but the managers went ahead with the 'schedule'!

● Informed consent: The mission was full of dangers.

The astronauts should have been informed of the probable failure of the O-rings (field joints). No informed consent was obtained, when the engineers had expressed that the specific launch was unsafe.

● Conflict of interest (Risk Vs Cost): There were too criticality-1 items, which included the field joints.

A failure of in any one of them would have caused the tragedy. No back-up or stand by had been provided for these criticality-1 components.

● Escape mechanism or 'safe exit' should have been incorporated in the craft. McDonnell Douglas the engineer, designed an abort module to allow the separation of the orbiter, when triggered by a field-joint leak. Unfortunately such a 'safe exit' was rejected due to the increase in the cost, simultaneously with reduction in payload.

● Ethical engineers should have been given awards and encouraged to hold their direction (moral autonomy) in risky situations and to report to appropriate agency their views, in the interest of public safety.

3. Choice of Ethical Theory to study a Problem

A chemical plant near a small town is discharging hazardous wastes into the fields nearby. The ground water gets contaminated and significant health problems surface in the community. Harm is caused to the residents.

This action is unethical as per rights ethics. The effects of polluted water and the cost to purify the water by the municipality may outweigh the economic benefits of the plant. Hence, the utilitarian ethics tells the same.

The groundwater harms the people and caused health problems. Hence discharging the pollutants is unethical as per duty ethics.

The agriculturists who have the agrarian right of water supply have been overlooked. The pollutants may endanger their profession and welfare. Ethical rights concludes this as unethical.

Rights of the individuals weigh stronger
stronger than the needs of the society as a whole,
rights and duty ethics take precedence over
utilitarian considerations.