

Flooding, caused by the raised riverbed, and left a thick layer of contaminated mud on the flood plain among plantations including staples of the local diet. About 1300 square kilometres were damaged in this way. The concentration of copper in the water is about 30 times above the standard level, but it is below the World Health Organisation (WHO) standards.

Experts have predicted that it will take 300 years to clean up the toxic contamination.

12

**HUMAN VALUES AND PROFESSIONAL ETHICS  
(HMTS 2001)**

Time Allotted : 3 hrs

Full Marks : 70

*Figures out of the right margin indicate full marks.*

*Candidates are required to answer Group A and any 5 (five) from Group B to E, taking at least one from each group.*

*Candidates are required to give answer in their own words as far as practicable.*

**Group - A  
(Multiple Choice Type Questions)**

1. Choose the correct alternative for the following: **10 × 1 = 10**
- (i) The assumed catastrophe of ecological and economic resources around year 2050 has been warned by \_\_\_\_\_.  
 (a) Abraham Maslow (b) Aurelio Peccei and Alexander King  
 (c) F. Schumacher (d) Daniel Bell and George Ritzer.
- (ii) Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD) are few parameters related to \_\_\_\_\_.  
 (a) air pollution (b) air quality  
 (c) water quality (d) chemical pollution.
- (iii) According to Professional Ethics, which activity by a professional member would be considered UNETHICAL?  
 (a) Not charging a fee for presenting a speech  
 (b) Signing plans prepared by an unknown person without thoroughly reviewing those plans  
 (c) Reviewing the work of another member with that member's consent  
 (d) Providing professional services as a consultant.
- (iv) Match the theorists and their theory towards explaining formation of self and integration of personality:  
 (X) George Mead (A) 'Looking-Glass Self Image'  
 (Y) Sigmund Freud (B) 'Imitation, Play, Game'  
 (Z) Charles Cooley (C) 'Id, Ego, Superego'  
 (a) X-A, Z-B, Y-C (b) Y-A, X-C, Z-B  
 (c) Y-C, X-B, Z-A (d) Y-B, Z-C, XA.

- (v) A situation in which an engineer's loyalty and obligations may be compromised because of self interests or other loyalties and obligations is known as  
 (a) conflict of interest (b) conceptual issue  
 (c) concern of interest (d) rules of interaction.
- (vi) Choose the correct option.  
 Statement A: Carol Gilligan found Kohlberg's theory has strong male bias.  
 Statement B: Theorists find men solve moral dilemma by applying most important moral rule overriding other rules.  
 (a) Only statement A is partially correct  
 (b) Both statement A and B are false  
 (c) Only statement B is partially false  
 (d) Both statement A and B are correct.
- (vii) CO<sub>2</sub>e is an expression of \_\_\_\_\_.  
 (a) Harmful Carbon-dioxide (b) CO<sub>2</sub> in the Environment  
 (c) Carbon footprint (d) Emission of CO<sub>2</sub>.
- (viii) Identify the wrong statement:  
 Industrial Society  
 (a) is driven by the use of technology to enable mass production  
 (b) is characterized by the use of external energy sources  
 (c) is characterized by violence and corruption  
 (d) is a society where urbanization is desirable.
- (ix) SWOT analysis is performed to test \_\_\_\_\_.  
 (a) Skill, Will, Objectivity, Trust  
 (b) Skill, Will, Optimism, Tenacity  
 (c) Strength, Weakness, Opportunities, Threat  
 (d) Strength, Weakness, Objectivity, Tenacity.
- (x) Utilitarianism is a form of which theory?  
 (a) Consequentialism (b) Categorical Imperative  
 (c) Moral Dilemma (d) Non-consequentialism.

### Group - B

2. (a) Explain George Mead's concept of 'self' towards understanding the development of an individual's integrated personality.
- (b) Write a short note on any one:  
 (i) Importance of value education.  
 (ii) Self-Actualization.  
 (iii) Value crisis resulting from flawed socialization.

6 + 6 = 12

the fire fighters about presence of radioactive material stored in the biomedical department, used for treating cancer patients.

It is reported that the hospital authorities did not inform the fire department and it was the local police station that made the call around 4.10 am.

12

### Group - E

8. Write a short essay on the challenges that a developing country like India faces in achieving a balance between development and environmental degradation.
9. Analyse the case on the grounds of Ecological ethics.

12

### Ok Tedi Environmental Disaster (1984)

The Ok Tedi River and the Fly River are located in the Western Province of Papua New Guinea. Between about 1984 and 2013 the lives of 50,000 people have been disrupted as a consequence of the discharge of about two billion tons of untreated mining waste into the Ok Tedi from the Ok Tedi Mine, an open pit mine in the Western Province of Papua New Guinea.

This mining pollution majorly happened due to collapse of the Ok Tedi tailing dam system in 1984 and absence of waste retention facility.

In 1999, it was reported that 90 million tons of mine waste was annually discharged into the river for more than ten years and destroyed downstream villages, agriculture and fisheries. Mine wastes were deposited along 1,000 kilometres (620 mi) of the Ok Tedi and the Fly River below its confluence.

Following heavy rainfall, mine tailings are swept into the surrounding rain forest, swamps and creeks, and have left behind 30 square kilometres of dead forest. Thick gray sludge from the mine is visible throughout the Fly River system.

Chemicals from the tailings killed or contaminated fish, although they are still eaten by the people of the surrounding villages. The massive amount of mine-derived waste dumped into the river exceeded its carrying capacity. This dumping resulted in the river bed being raised 10 m, causing a relatively deep and slow river to become shallower and develop rapids, thereby disrupting indigenous transportation routes.

3. Do you see the following case as an instance of Social and Individual level value crisis? Justify your answer.

**Kolkata Nursing Home: Cradle for Trafficking Newborns**

November, 2016. Owner and a doctor at Shri Krishna Nursing Home, Kolkata along with staffs from a state NGO were arrested in connection with the inter-state newborn trafficking racket busted in Baduria.

Sujit Dutta Memorial Welfare Trust, the NGO would lure childless couples under the guise of facilitating adoptions and sell newborns to them.

According to sources, the NGO would liaise with nursing home staffs, who would either facilitate deliveries of unmarried women or dupe new parents into believing their babies were stillborn and handover the babies to the NGO, where they would sell them to childless couples. Police while investigation rescued two newborns wrapped in cotton and hidden in an unhygienic manner inside a biscuit carton.

The rate of a baby would vary on the basis of gender and complexion. Dark complexion baby girl would be sold for ₹ 1 Lakh, and fair skinned would go for ₹ 1.5 Lakh. Similarly, male babies with dark skin were sold for ₹ 2 Lakh and fairer ones would fetch more than that.

The racket has been operating for the past three years and involved dozens of nursing homes in Kolkata catering to customers from Mumbai and Delhi.

**12**

**Group – C**

4. Discuss how enactment of industrial laws can help in implementing ethical practices in industries. Cite at least two examples.

**6 + 6 = 12**

5. Case:

James is an engineer working for the company AERO that produces aero-engines. The company is developing a new type of aero-engine called the FANX. James is responsible for the testing of the FANX. He is in the middle of conducting a range of crucial tests for the reliability of the new aero-engine. Yesterday, Bill – who is James' boss - has asked James to finish his test reports within a week because an important potential customer will visit AERO next week and wants to have a look at the first test reports. James' first reaction is to refuse Bill's request: he is not able to finish the test report within a week; he first needs to do more tests. James considers these additional tests crucial for gaining good insight in the reliability of the FANX.

Bill tells James to abandon the planned other tests and to start writing his report immediately. Later, there will be more time to do the other tests. Bill also tells James that if James refuses he will ask Eric to write the report. James says that he really needs more time. Moreover, he objects, Eric is not knowledgeable of the tests and will not be able to write a sound report. After the meeting, James contacts Eric who says that he agrees with Bill and that he will write the report if Bill asks him to do so.

Answer the following questions:

- (a) Suppose that James, next day decides to follow Bill's order and to finish the report immediately abandoning the other tests. Can this choice of James be justified in utilitarian terms? Explain why or why not.
- (b) Are there other options than either writing report or letting Eric do it? (e. g. whistle blowing)? What should James do if he would try to apply Kant's categorical imperative to this situation?
- (c) What virtues are relevant for an engineer doing test (like James)? (Mention four virtues which are clearly relevant for a testing engineer).

**(4 + 4 + 4) = 12**

#### **Group - D**

6. (a) In this era of automation energy crisis is a potential danger. Suggest ways to reduce this impending danger.
- (b) Write a note on Industrial Safety, Hazard and Risk.

**6 + 6 = 12**

7. Analyse the following case as breach of safety in Organizational ethics.

#### **Kolkata AMRI Fire Case**

December, 2011. At least ninety people were killed in a fire that ravaged the AMRI, Dhakuria, Kolkata, in the early hours. Most of the victims choked to death as smoke engulfed the building.

Fire broke out around 3 a.m in the basement of the seven-storey building of the AMRI Hospital (Dhakuria) and swept through the top threatening lives of 164 in-patients.

The building is centrally air-conditioned and there is no ventilation channel for the smoke to come out, even desperate fire fighters smashed glass windows to let fumes out. The basement where the fire started housed a pharmacy, a central storeroom and biomedical department, all containing inflammable articles. Trepidations rose when hospital authorities informed