B.TECH/AEIE/BT/CSE/ECE/EE/IT/ME/3RD SEM/HMTS 2001/2019

#### Group - E

- Discuss two advantages and disadvantages of corporate social (a) 8. responsibility from the ethical point of view.
  - Write short notes on *any two* of the following:
    - (i) Water Pollution
    - (ii) Eco-friendly Technology
    - (iii) Appropriate Technology
    - (iv) Sustainable Development.

$$6 + (3 + 3) = 12$$

9. Explain the case in the light of Intermediate Technology model.

Case Study: (Sept. 2019, Karnataka). Bengaluru Man Turns Castor Stems into Eco-Straws, Gives Them to Vendors For Free.

Shiva Manjesh, a Civil Engineer and member of Bangalore Political Action Committee (B.PAC), a non-political native's and citizen's gathering group that works to resolve civic issues is the brain behind the Eco-straws.

The fresh castor straws can be stored in the fridge reused for up to ten times and the sun-dried ones can be reused for a period of six months. Both the types are biodegradable and can decompose within a day. It is a step to do away with the menace of plastic straw.

Bamboo and paper straws are very expensive for small-time vendors. The good news is that the castor stem straws are cheaper than their counterparts in the market according to Shiva. Farmers too can benefit from the castor straws, "It is a win-win model for farmers, vendors and the environment. Usually, the farmer discards the stem as it carries no value. But if castor straws are introduced in the market, the vendors can start purchasing them from the farmers," says Shiva.

**12** 

#### B.TECH/AEIE/BT/CSE/ECE/EE/IT/ME/3RD SEM/HMTS 2001/2019

## **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)

l.	Choos	Choose the correct alternative for the following:			
	(i)	(a) Norms, Roles, V	of Parson's Social Co alues, Sanction Roles, Sanction	(b) Sanction, Values,	
	(ii) The pleasure seeking seat of desire in human psyche is also kno				also known as
		(a) ego	(b) id	(c) superego	(d) me
	(iii)		acher and friends volusly. Which stage Id this represent?  (b) Interpreting		elf personality
	(iv)	Poka-Yoke is a Japanese approach to mistake proofing, where device would pause if a part or step in putting things together malfunctions. The technique is specifically associated with  (a) machine supervision (b) assembly line (c) machine analysis (d) energy saving			
	(v)	Gro Harlem Brund (a) Energy Crisis I (c) 'Small is Beauti	_		rowth'
	(vi)	World Earth day is (a) 22 <sup>nd</sup> April (c) 5 <sup>th</sup> June	s celebrated on	 (b) 5 <sup>th</sup> Septem (d) 5 <sup>th</sup> July	ber

#### B.TECH/AEIE/BT/CSE/ECE/EE/IT/ME/3RD SEM/HMTS 2001/2019

(vii) Two most cost-efficient sources of renewable energy are

(a) Tidal and Solar

(b) Solar and Wind

(c) Geothermal and Wind

(d) Tidal and Solar.

(viii) Appropriate technology movement was propounded by \_\_\_\_\_

(a) McGregor

(b) Schumacher

(c) Freud

(d) Gilligan

(ix) The ozone layer is a shield on the earth's \_\_\_

(a) Thermosphere

(b) Atmosphere

(c) Mesosphere

(d) Stratosphere

(x) What are the five parameters used by Club of Rome's 'Limits of Growth' graph?

- (a) Energy Resources, Particulate Matter, Industrialization, Mortality rate
- (b) Pollution, Population, Food per capita, Industrial output per capita, Resources
- (c) Non-renewable resources, Population Density, Manufacturing Industries, Carbon footprint, CSR
- (d) Global warming, Eco-friendly Technology, CSR, Alternative Energy Resources, Population Density.

### Group - B

- 2. Write short notes on any two of the following:
  - (i) Organizational values.
  - (ii) Freud's Superego and Mead's theory of self development (imitation, role, play, game stage).
  - (iii) Societal values and Socialization.
  - (iv) Cooley's idea on Perception and Self-image.

(6+6) = 12

3. In this competitive job market it becomes pertinent for young people to prioritize mental health during periods of change, phases of juggling through multiple projects, success & performance, work stress that comes with employment and which can aggravate with neglect of wellbeing.

Further, to shape company's future projects employees are often allocated with targets to achieve, directed to develop on skill sets, think progressively, be futuristic & profit oriented with ideas. The pressure is immense with the added urge in a young employee to meet his/her materialistic rewards in the form of incentives, promotion and recognition. A cumulative effect of all can take a toll on employee's performance as well as health.

(i) Suggest how mental health is a value in an era solely focused on achievement and material gains?

2

#### B.TECH/AEIE/BT/CSE/ECE/EE/IT/ME/3RD SEM/HMTS 2001/2019

(ii) If mental health is a need, in which hierarchy of Maslow's Need-Priority Theory will you incorporate it and why?

(6+6) = 12

# Group - C

4. (a) Give an example of professional disagreements that an engineer may encounter in the execution of a project and discuss the strategies you would adopt in that situation.

(b) (i) What do you understand by the term 'Professional Code of Ethics'?

(ii) Discuss how enactment of industrial laws can help in implementing ethical practices in industries.

$$5 + (3 + 4) = 12$$

5. Read the following case and answer how Rao's son will interpret his father's professional ethics. Also connect the son's idea on the incident as Consequentialism.

**Case Study**: (Sept. 2019. Times of India). Navi Mumbai, C. N. Rao (50 yrs), the ONGC General Manager-Production at the Uran processing plant, helped avert a major disaster, but ended up paying with his life.

On smelling gas, Rao went to find out more and tried to close the main gas pipeline valve and succeeded. But the blast and fire that followed while trying to find other leaking spots charred Rao to his death. Colleagues and officials remember him as a very helpful, dedicated and sincere person, who risked his life to save the life of others.

$$(6+6) = 12$$

## Group - D

6. (a) Ruler of the world, man or machine. Justify, how intelligent automation aids and challenges human dexterity? Use suitable examples.

(b) What is Industrialization? State at least four social and ecological impacts of Industrialization with examples.

$$6 + (2 + 4) = 12$$

7. Problem-Drilling Machine-Drill-Left thumb severed.

Mention briefly the three different ways in which accidents in an industry can be categorised and studied. Based on the above situation identify the nature of accident and draw up a guideline to ensure safety at workplace. What are the rights of an employee in terms of industrial safety?

$$(4+4+4)=12$$