

Professional Values and Ethics (HU7801)

Marks: 35

Time: 2hrs

Answer question number 1 and **any two** from the rest.

1. Case Study:

The Backdrop: For the past two decades, Vandana Shiva, the physicist turned environmentalist, has focused her righteous indignation against Big Agriculture and what she calls its weapon of mass destruction (WMD) –pesticides, patented seeds and other genetically modified organisms (GMO). The trouble, for corporations like Monsanto and DuPont, is that Shiva is winning more disciples all the time across the globe.

Criticism: Some of her critics question her views – is it so terrible that rice is genetically engineered to deliver vitamin A to populations blighted with night blindness? Do-gooders like Bill Gates have contributed millions to develop GM foods as profitable enterprise to help lift millions out of poverty and hunger.

Refutation: None of those supposed virtues matter to Shiva, who has called Gates “so totally wrong”, specifically referring to Monsanto’s patented cotton seeds that failed to deliver the promised harvest in peninsular India. “Nature shrinks as capital grows. The growth of the market cannot solve the very crisis it creates”, she writes. In the Occupy age, it is the kind of prophecy many want to hear.

And you: Give your observations on the issue. [15]

2. Portray the advantage of Li-Fi over Wi-Fi from a socio-technical perspective. [10]

3. Is democracy a necessary component in the process of technological development? [10]

4. Briefly explain the dynamics of technological innovation in an imperfect market condition. In this context give examples of corporate takeovers in software sector. [8+2]

5. What is ethics? Can science be ethical? Answer illustratively. [4+6]