End-Semester Examination
HS7.301 Science, Technology and Society

Max Marks: 95

2 May 2025

Instructions:

Answer ONE questions from Section A1 and TWO questions from Section A2 in 400-500 words each (worth 15 marks each) and ANY TWO questions from Section B in 700-800 words (worth 25 marks each).

Section A1

1) What does the evolution of the Euler's theorem in mathematics tell us about the nature of knowledge-making in science? (CO-3)

2) How would you differentiate between soft and hard technological determinisms? Explain. Would you consider Robert Heilbroner a hard determinist? Explain your reasoning in very brief. (CO-3, CO4)

Section A2

1) What is Langdon Winner's position on the 'competing interests' political theory? What weaknesses does he identify in the theory, and what solutions does he propose to tackle the weaknesses? (CO-4)

2) Explain 'reverse adaption', and what, according to Langdon Winner, does 'reverse adaption' do to public discourses around technological choices? (CO-4, CO-5)

3) What are the questions one should ask in order to understand the nature and efficacy of internet activism? Explain with an example. (CO-5)

4) What does Shoshana Zuboff mean by instrumentarianism and how does she compare with the political system of totalitarianism? (CO-5)

Section B

1) What role do interest groups play in influencing the production of scientific knowledge? What is the linkage between systems of power and suppression of scientific research? Explain with examples. (CO-2)

2) What is the nature of networks in Manuel Castells' conceptualization of 'network society'? What does this nature tell us about the potential of the digital space? (CO-5)

3) "*Demanding privacy ... or lobbying for an end to commercial surveillance is like asking...a giraffe to shorten its neck*". Why does Zuboff say this? In particular, what is the role of behavioural surplus in making this argument? (CO-3, CO-4)

4) What does Virginia Eubanks say about the relationship of technology and politics? Explain using examples. (CO-4, CO-5)