

End-Semester Examination

HS7.301 Science, Technology and Society

Max Marks: 95

4 May 2023

Instructions:

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

Section A

Community
Universities
CIBOS - organized chapters
Education

- 1) What, according to Robert Merton, are the norms of the scientific community? Explain one of these norms in detail, focusing on its significance for knowledge-making in science.
- 2) Why does Jacques Ellul argue that technique "elicits" social, political, economic change? What according to Ellul are the conditions which lead to this phenomenon?
- 3) How can one differentiate between hard and soft technological determinism? Explain with examples.
- 4) How would you analyse the efficacy of the internet as a tool of social change?
- 5) What are the essential features of the modern 'Network Society', according to Manuel Castells?
- 6) What does Thomas Hughes mean by changes in technological 'style'? What leads to these changes in style, according to him?

Section B

Merton norms
- OS, Kuhn's paradigm - dialectic
Kuhn, dialectic

Gruber's
dialectic

- 1) Why is the process of resolving controversies so central in the making of scientific knowledge? Explain using examples.
- 2) Discuss the contribution of any one of the following to the debate on technological determinism and social constructivism. What is the basic framework through which they look at the relationship between technology and society? What differentiates their ideas from their peers in technology studies? How would they look at the phenomenon of mineral extraction?
- a. Robert Heilbroner
- b. Thomas Misa
- 3) How does Langdon Winner identify the politics in technology? Describe how Winner draws connections between political regimes and technological systems.
- 4) Shoshana Zuboff uses the framework of "surveillance capitalism" to describe the modern digital age. How would you critique this framework? What are the weaknesses and limitations of Zuboff's framework?
- contrasts with old capitalism.
- data is the new oil and the new gold
the ideas reflect this. Social dilemma shows