

Mid-Semester Examination

HS7.301 Science, Technology and Society

Max Marks: 50

25 February 2025

Instructions:

Answer ANY TWO of the following questions from PART A and ANY ONE question from PART B (In 700-800 words each). Each question in PART A is worth 15 marks and each question in PART B is worth 20 marks.

PART A

- We accept*
- 1) What are scientific community's values, rules and norms? Explain the central guiding principles for the scientific community and their relevance. (CO-1, CO-2)
 - 2) What are the specific socio-economic and cultural conditions, according to Ellul, that push for social and political adaptations around technologies? (CO-1, CO-3) *RADS WUA*
 - 3) What is Lewis Mumford's conceptualisation of the 'megamachine'? What are the characteristics of the megamachine? (CO-1, CO-3)
 - 4) What are the major takeaways from David Noble's work on industrial automation in the US? (CO-3)

PART B

- 5)* What methodology and ideological framework do you think Mumford uses in his classification of various technological phases (3 marks)? Explain how this methodology works, in detail, using the transition of any one phase to the other (7 marks). Explain the changes that occur during the transition and the reasons Mumford identifies for these changes (10 marks).
- 6)* If you were to use the framework of social construction, how would you go about studying the evolution of motor vehicles? Describe the basic methodology you would use (8 marks), as well as the broad contours of your analysis (12 marks). (CO-1, CO-3)
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