

### Quiz 1:

## HS7.301 Science, Technology and Society

31 January 2025

Max Marks: 30

### SECTION A (15 marks)

Read the following passage:

Tom went on whitewashing – paid no attention to the steamboat. Ben stared a moment and then said: “Hi- yi ! *You’re* up a stump, ain’t you!”

...Tom contemplated the boy a bit, and said:

“What do you call work?”

“Why, ain’t *that* work?”

Tom resumed his whitewashing, and answered carelessly:

“Well, maybe it is, and maybe it ain’t. All I know, is, it suits Tom Sawyer.”

“Oh come, now, you don’t mean to let on that you *like* it?”

The brush continued to move.

“Like it? Well, I don’t see why I oughtn’t to like it. Does a boy get a chance to whitewash a fence every day?”

That put the thing in a new light. Ben stopped nibbling his apple. Tom swept his brush daintily back and forth – stepped back to note the effect – added a touch here and there – criticised the effect again – Ben watching every move and getting more and more interested, more and more absorbed. Presently he said:

“Say, Tom, let *me* whitewash a little.”

Tom considered, was about to consent; but he altered his mind:

“No – is that so? Oh come, now – lemme, just try. Only just a little – I’d let *you*, if you was me, Tom.”

Now lemme try. Say – I’ll give you the core of my apple.”

“Well, here – No, Ben, now don’t. I’m afeard – ”

“I’ll give you *all* of it!”

Tom gave up the brush with reluctance in his face, but alacrity in his heart. And while [Ben] worked and sweated in the sun, the retired artist sat on a barrel in the shade close by, dangled his legs, munched his apple, and planned the slaughter of more innocents. There was no lack of material; boys happened along every little while; they came to jeer, but remained to whitewash.

By the time Ben was fagged out, Tom had traded the next chance to Billy Fisher for a kite, in good repair; and when *he* played out, Johnny Miller bought in for a dead rat and a string to swing it with – and so on, and so on, hour after hour. And when the middle of the afternoon came, from being a poor poverty-stricken boy in the morning, Tom was literally rolling in wealth. He had besides the things before mentioned, twelve marbles, part of a jews-harp, a piece of blue bottle-glass to look through, a spool cannon, a key that wouldn’t unlock anything, a fragment of chalk, a glass stopper of a decanter, a tin soldier, a couple of tadpoles,

six fire-crackers, a kitten with only one eye, a brass door-knob, a dog-collar – but no dog – the handle of a knife, four pieces of orange-peel, and a dilapidated old window sash.

Tom said to himself that it was not such a hollow world, after all. He had discovered a great law of human action, without knowing it – namely, that in order to make a man or a boy covet a thing, it is only necessary to make the thing difficult to attain. If he had been a great and wise philosopher, like the writer of this book, he would now have comprehended that Work consists of whatever a body is *obliged* to do, and that Play consists of whatever a body is not obliged to do. And this would help him to understand why constructing artificial flowers or performing on a tread-mill is work, while rolling ten-pins or climbing Mont Blanc is only amusement. There are wealthy gentlemen in England who drive four-horse passenger-coaches twenty or thirty miles on a daily line, in the summer, because the privilege costs them considerable money; but if they were offered wages for the service, that would turn it into work and then they would resign. [END]

*Based on the above passage, answer.*

Whose ideas does the above passage remind you of? Why are you reminded of these ideas? Explain using instances from your passage. In the process, tell us how theories explaining the evolution of scientific knowledge serve a wider purpose.

#### SECTION B (15 marks)

Explain, with examples, how the 'social' and the 'scientific' come together in the production of scientific knowledge.