JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- 2024

B.Tech- 7th Semester (CSE/IT/ECE/CE/BT/BI)

COURSE CODE (CREDITS): L-24B1WHS731

MAX. MARKS: 25

COURSE NAME: Science Technology and Society

COURSE INSTRUCTORS: Dr. Ranjith Kallyani   MAX. TIME: 1 Hour 30 Minutes

Note: *All clusters are compulsory. Attempt only **one question** (either (A) or (B) from each cluster*

Q.No	Question	CO	Marks
Q1	Below given is a quote from MIT Technology Review about AI by Jeoffry Hinton, this year's Nobel laureate in physics. "These things are totally different from us. Sometimes I think it's as if aliens had landed and people haven't realized because they speak very good English." (A) How would you defend this quote? Or (B) What, according to you, will be the social consequences of people blindly trusting AI because they speak very good English?	CO-3	5
Q2	Many prompts that are potentially dangerous to common social good (eg: how can I create a bomb?) are disallowed in the latest Chat GPT-4 through RLHF. According to Harry Collins, RLHF is a returning of GOFAI. A. How would you justify Collin's argument? Or B. How would you argue that RLHF is a retrospective socialisation?	CO-3	5
Q3	Read the quote below. "All the tokens came from a massive corpus of data written by humans. That includes books, articles, and other documents across all different topics, styles, and genres—and an unbelievable amount of content scraped from the open internet. Basically, it was allowed to crunch through the sum total of human knowledge to develop the	CO-5	5

network it uses to generate text."

The quote is about LLMs by Harry Guinness. Guinness understands that LLMs are allowed to crunch through the sum total of human knowledge on internet.

A. Do you think that what is available on internet a "sum total of human knowledge"? Explain your reasoning.

Or

B. LLMs, unlike a human being, are born into a body of text. However, human knowledge, be it basic ubiquitous expertise or scientific knowledge works in a different way. How would you justify this?

Q4	**Essay Question** (Attempt **only one**) If a human generates wrong content and present it in a convincing format and writing style, we might call that person a psychopath because the person lacks empathy for others and remorse for anti-social actions. However, in the case of hallucinations, the situation is worse: ChatGPT does not know what truth is. It simply does not 'know' the difference between the true and the false—it does not 'know' it is fabricating, and it does not 'realise' that there is anything bad going on. However, as a human being you have a moral compass and you know that there are truth and false. A. How did you develop such a moral compass in your life? What are your suggestions for AI scientists to develop an AI model that carries a human-like moral compass? How would you defend the claim that a sense of moral intelligence is integral to the production of scientific knowledge? Or B. The Nim Chimpsy and Washoe experiments to teach apes humanlike languages failed primarily because they lack the right kind of brain and speech related anatomy. In this respect, computers are more promising. Human-like primary socialisation of computers might not lead to success in moral development and value choice either, but it is hard to see how any other approach could work. As regards AI scientists, it is being argued that an understanding of the first principles of human intelligence must start with an understanding of the social. How would you justify this?	CO-2	10