

47th BCS (Written) Examination

হালদা

ENGLISH

Subject Code: 003

Time: 04 Hours

Full Marks: 200

[N.B.: Marks are indicated in the right margin.]

Read the text below and answer the questions that follow:

Artificial Intelligence (AI) epitomizes a transformative leap in technological paradigms, delineating systems or machines imbued with the faculty to emulate human cognitive processes such as learning, reasoning and problem-solving. This intricate domain amalgamates algorithms, voluminous data and computational dexterity to undertake tasks historically reliant on human intellect. Its ubiquitous influence permeates industries, reconfiguring economic frameworks and societal dynamics, thus warranting a comprehensive appraisal of its merits and demerits.

The historical trajectory of AI commenced in the mid-20th century with seminal contributions from Alan Turing, who conceptualized machines intelligence via the "Turing Test". The discipline gained momentum at the 1956 Dartmouth Conference, where John McCarthy christened it "Artificial Intelligence". Process was intermittent, constrained by technological limitations, until the proliferation of advanced hardware and expansive datasets in the 21st century revitalized AI research.

Several luminaries and corporations have catalyzed AI's evolution. Google harnessed its data troves to pioneer machine learning, while open AI, initiated by Elon Musk and Sam Altman, redefined natural language processing with ChatGPT. DeepMind, led by Demis Hassabis, showcased AI's progress with AlphaGO's triumph over human Go champions illustrating its strategic sophistication. These endeavours have significantly augmented AI's global prominence. In daily existence, AI chatbots have become indispensable conduits, particularly in education and research. Tools like ChatGPT, Grok and Bard provide real-time education of intricate subjects and aid in synthesizing extensive data sets for academic inquiries. Students leverage these platforms to enhance learning, while researchers

utilize them to expedite literature reviews and hypothesis formulation.

AI's utility extends beyond academia into scientific research. It accelerates drug discovery by simulating molecular interactions, refines climate models for precise environmental forecasting, and enhances astronomical analyses through pattern recognition. These applications underscore AI's pivotal role in addressing humanity's most formidable challenges.

However, AI's ascendancy precipitates concerns. Over-reliance on automated solutions may attenuate human creativity, as individuals might eschew original ideation. Additionally, job displacement in sectors like manufacturing and customer service threatens socio-economic stability, potentially widening income disparities.

The prospect of existential perils intensifies with AI's unchecked proliferation. Scholars and ethicists ponder whether super intelligent systems could evade human control, posing catastrophic risks. This debate accentuates the urgency of instituting regulatory mechanisms to align AI with ethical imperatives and safeguard human interests. Moreover, the psychological impact on society cannot be overlooked. As AI assumes roles traditionally held by humans, it may engender a sense of obsolescence among workers, necessitating robust re-skilling initiatives to mitigate alienation and foster adaptability in technology-driven milieu.

Cultural ramifications also emerge as AI integrates into global societies. It risks homogenizing diverse cultural expressions by prioritizing standardized algorithms, potentially eroding linguistic and artistic heritage. Policy makers must therefore advocate for culturally sensitive AI development to preserve societal diversity.

In conclusion, AI's dichotomous nature-bestowing prodigious benefits alongside substantial challenges demands sagacious deployment. Its capacity to bolster productivity and scientific progress can be harnessed for human advancement if underpinned by ethical governance and equitable dissemination. Through synergistic efforts between technologists and policy makers, AI can be steered to augment rather than undermine human potential.

1. **Answer the following questions in your own words. Copying from the above text may affect your marks.** 5 × 6 = 30

a) How does AI integrate various elements to perform tasks traditionally done by humans?

- b) Mention the key milestones in the historical development of AI.
 c) What are the potential negative effects of AI on human life?
 d) What is proliferation of AI? Who contributed to its proliferation?
 e) What do you understand by the term "dichotomous native" of AI? Explain briefly.
 f) How does AI contribute to 'cultural ramifications'?
2. **Write the contextual meaning of the following words and phrases in English. (Words are underlined in the text.)** $1 \times 10 = 10$
 a) epitomize b) technology-driven milieu
 c) ubiquitous influence d) appraisal
 e) intermittent f) harnessed g) indispensable conduits h) a sense of obsolescence
 i) sagacious j) synergistic efforts
3. **Mark the following statements as true or false according to the text. If false, provide the correct information.** $1 \times 5 = 5$
 a) AI systems work in the same way as the thinking process of humans.
 b) The initial development of AI was fast.
 c) Advanced AI tools leverage its users.
 d) Humans might give up creative thinking due to their dependance on AI.
 e) The advent of AI is postulated to accentuate psychological strain among the workforce.
4. **Change the following words as directed and make meaningful sentences with the changed words.** $2 \times 5 = 10$
 a) Dissemination (verb)
 b) Dexterity (adj)
 c) Delineate (noun)
 d) Permeate (adj)
 e) Ascendancy (v)
5. **Write a synonym or an antonym (as directed) for each of the following words.** $1 \times 5 = 5$
 a) Attenuate (synonym)
 b) Augment (Antonym)
 c) Eschew (Synonym)
 d) Expedite (Antonym)
 e) Indispensable (Antonym)
6. **Give a suitable title for the above passage. Write a brief summary of it in 100 words. Add your comments on the use of AI in 50 words.** $3 + 10 + 7 = 20$
7. **Write a feature for the post editorial page of an English daily expressing your opinions on the following with a forwarding letter to the editor.** 20
 a) Is AI a threat to humanity?
 b) Do you think AI is a colonial tool?
 c) Do we need to decolonize AI? How can we do it?
8. **Write 2 (two) essays in 500 words each, on the following topics:** $25 + 25 = 50$
 a) Digital Divide: Causes and Consequences
 b) Labour Migration as a Human Right.
9. **Translate the following passage into English:** 25
 গণতন্ত্রের উৎস প্রাচীন গ্রিসে অনুসন্ধান করা যায়, যেখানে নাগরিকগণ শাসনাধিকার অর্জনের মাধ্যমে সমাজে সমতা ও স্বাধীনতার প্রতিষ্ঠা ঘটান। এই ব্যবস্থা জনসাধারণের অংশগ্রহণের ওপর নির্ভরশীল ছিল, যা তৎকালীন সমাজে একটি পরিবর্তন এনে দেয়। অথচ প্লেটো এই ব্যবস্থাকে তীব্রভাবে সমালোচনা করেছিলেন, কারণ তিনি বিশ্বাস করতেন যে, গণতন্ত্র অশিক্ষিত জনসাধারণের এভাবে রাষ্ট্রে অস্থিরতা ও অপ্রতিহত স্বৈরাচার প্রতিষ্ঠা করে, যা দার্শনিক শাসনের তুলনায় ত্রুটিপূর্ণ। তিনি উচ্চশিক্ষিত ব্যক্তিদের নেতৃত্বকে প্রাধান্য দিতে চেয়েছিলেন, কারণ তিনি মনে করতেন যে, শিক্ষিত নেতৃত্ব রাষ্ট্রের স্থিতিশীলতা নিশ্চিত করতে পারে। বর্তমানে গণতন্ত্রকে কেউ মৌলিক অধিকারের প্রতীক হিসেবে গ্রহণ করেন, অপরদিকে কেউ বা রাজনৈতিক দ্বন্দ্ব, দুর্নীতি ও শক্তিসম্পন্ন ব্যক্তিদের প্রভাবের প্রধান উৎস বলে অভিহিত করেন। তথাপি, নির্বাচনমূলক প্রক্রিয়া, মত প্রকাশের স্বাধীনতা ও ন্যায়বিচার গণতন্ত্রের উল্লেখযোগ্য সুফল। তবে অস্থির রাজনীতি, ভোটের অপব্যবহার, সামাজিক ভেদাভেদ ও অর্থনৈতিক অসমতা এর প্রবীণ কুফল। অতীতের ত্রুটিসমূহ অতিক্রম করে গণতন্ত্র বিশ্বের শ্রেষ্ঠ শাসন ব্যবস্থা হিসেবে প্রতিষ্ঠিত হয়েছে বলে মনে করা হয়, কারণ এটি জনগণের কর্তৃত্ব রক্ষা করে এবং কাক্ষিত উন্নতির পথ প্রশস্ত করে। অধিকন্তু এই ব্যবস্থা জনগণের সচেতনতা, শিক্ষাগত উন্নয়ন ও রাজনৈতিক শৃঙ্খলার ওপর নির্ভরশীল, যা এর কার্যকারিতা নিশ্চিত করতে পারে। অতএব, গণতন্ত্রের সুফল-কুফলের সামঞ্জস্য রক্ষা ও ধারাবাহিক উন্নয়ন নিশ্চিত করা প্রয়োজন।
10. **Translate the following text into Bangla:** 25
 Philosophy represents a profound exploration of existence, knowledge, and moral principles serving as a foundation for intellectual discourse. It engages human mind in questioning the nature of reality, the validity of knowledge and the ethical

boundaries of human action. Science, by contrast, emerges as a disciplined investigation of natural phenomena through meticulous observation and rigorous experimentation. The inception of scientific thought can be traced to philosophical curiosity, where early thinkers, such as the ancient Greeks, pondered the mysteries of the universe, thus laying the ground work for empirical study that would later define modern science. For instance, during the Enlightenment, thinkers like John Locke advanced rational inquiry which profoundly influenced the development of scientific methodologies. Similarly, the contributions of Immanuel Kant provided a critical framework that shaped modern scientific paradigms, integrating metaphysical considerations into scientific process. This intellectual synergy persists across eras, as philosophy offers ethical guidance and logical coherence to scientific endeavors, preventing them from veering into uncharted or unethical territories. Without this philosophical underpinning, scientific progress might lack depth, direction or moral grounding, potentially leading to unintended consequences. Hence, the enduring alliance between philosophy and science not only fosters innovation but also addresses existential dilemmas and ethical challenges, affirming philosophy's pivotal role in the evolution and refinement of scientific knowledge.

people from banking sector to ensure its integrity.