

Reg No:.....

K24FY 1433 (C)

Name :.....

First Semester FYUGP Computer Science Examination

NOVEMBER 2024 (2024 Admission onwards)

KU1DSCCSC106 (AI IN DAILY LIFE)

(DATE OF EXAM: 6-12-2024)

Time : 90 min

Maximum Marks : 50

Part A (Answer any 6 questions. Each carries 2 marks)

1. What is the Turing Test, and what does it assess? 2
2. What is the importance of training and testing datasets in machine learning? 2
3. What are the key steps involved in the process of image classification in computer vision. 2
4. How is AI used in medical imaging for disease diagnosis? Provide an example. 2
5. What are the benefits of using AI in algorithmic trading? 2
6. Explain how AI can identify learning gaps in education and tailor instruction for individual students. 2
7. What are two key applications of AI in education, and how do they enhance the learning experience for students? 2
8. What is bias in AI, and how does it arise in machine learning models? 2

Part B (Answer any 4 questions. Each carries 6 marks)

9. Explain any 4 milestones in the history of AI. 6
10. Explain the concept of reinforcement learning, including its key components. Discuss its applications in various fields, such as education and business. 6
11. What are some main applications of computer vision and What challenges, like image variability and complex scenes, does computer vision face, and how do these challenges affect its performance? 6
12. Discuss how AI models such as deep learning are used to detect diseases like cancer from imaging data and the benefits of using AI in medical diagnosis and treatment planning. 6
13. Explain how AI is used in personalized learning platforms. Discuss how AI-driven systems adapt content to individual students' learning styles and progress, with examples of intelligent tutoring systems (ITS) and their impact on education. 6
14. How can AI-driven technologies transform the employment sector? 6

Part C (Answer any 1 question(s). Each carries 14 marks)

15. (a) Explain the historical overview and scope of AI. 7
(b) Explain the difference between human intelligence and artificial intelligence. 7
16. (a) Explain how AI can contribute to widening social inequality, particularly in areas such as education, healthcare, and access to technology. Discuss how the digital divide, biased algorithms, and unequal access to AI technologies can exacerbate existing social inequalities. Suggest ways AI can be used to reduce inequality, providing specific examples of AI applications that promote equity in access to services and resources. 7
(b) Analyze the impact of AI and automation on employment across various industries. Discuss both the positive and negative effects of AI on job creation, job displacement, and the transformation of job roles. Provide examples of industries where AI has led to significant workforce changes. 7

