

Textbook Exercise of L-9 Domsin of Artificial Intelligence

A. Tick the correct answer.

- 1) Many healthcare facilities have adopted AI Technology to reduce work pressure.
- 2) Artificial Intelligence Technology promotes integrated learning.
- 3) Artificial Intelligence Technology is made up of three domain.
- 4) Semantris is a word association game powered by AI.
- 5) Alexa is the application of NLP.

B. State true or false.

- 1) Clinical trial matching system has been developed by IBM Watson. **True**
- 2) AI machines are driven by emotions and can be biased. **False**
- 3) AI robots can work endlessly without taking a break. **True**
- 4) AI cannot be creative in its approach. **True**
- 5) Face recognition app is an example of computer vision. **True**

C. Fill in the blanks.

- 1) Amazon's Alexa, a voice assistant, is an example of Artificial Intelligence that many of us use frequently.
- 2) Facebook uses AI technology to recognize faces.
- 3) AI-driven robots work endlessly without taking break.
- 4) Machines cannot experience human emotions and moral values.

D. Differentiate between the following:

Computer Vision (CV)	Natural Language processing (NLP)
• This domain of AI enables machines to identify objects in images and videos in the same way as humans do. • Ex. Driver-less car, face recognition app, etc.	• This domain of AI is concerned with giving computers the ability to understand text and spoken words in much the same way as human beings do. • Ex. Chatbots, Alexa, Siri, Google Assistant etc.

AI in Education	AI in Manufacturing Industries
• AI is used to help doctors, nurses, and patients. • It can help doctors detect diseases. • It can help doctors choose the right treatment for patients.	• AI is used to help workers and machines in factories. • It can help workers find damaged or defective products. • It can help machines work faster and more accurately

E. Answer the following questions:

Q:1	What is the Clinical Trial Matching?
A:1	Clinical Trial Matching (CTM) system developed by IBM Watson uses AI technology to read patients' data from a larger system with right clinical study to help doctors in selecting the correct, individually customized treatment plan for every patient.
Q:2	What is the use of AI in Social Networking?
A:2	• AI in social networking helps us find interesting posts, connect with friends, and communicate easily. • It also helps keep social media safe and enjoyable.
Q:3	List two advantages of Artificial Intelligence?
A:3	Two advantages of AI are: 1) Minimizes Error: AI significantly reduces errors and increases accuracy and precision. 2) Non-stop Work: AI-driven machines can work endlessly without breaks and perform multiple tasks at a time with accurate results.
Q:4	List two disadvantages of Artificial Intelligence?
A:4	Two disadvantages of AI are: 1) Less Creative: AI cannot work or think outside the box. 2) Emotionless: Machines cannot experience human emotions and moral values.
Q:5	Name three domains of Artificial Intelligence.
A:5	Three domains of Artificial Intelligence are: 1) Data 2) Computer Vision (CV) 3) Natural Language Processing (NLP)

F. Application Based Question

PMP bank has launched its digital assistant (chatbot) to assist customers with loan related queries. This assistant take customers' written or spoken language as input and answers accordingly. Can you tell which domain of Artificial Intelligence has been used in creating this digital assistant?

NLP (Natural Language Processing)