

Textbook exercise of L - 8 AI in Smart Home

A. Tick the correct answer.

- 1) Smoke Sensors are used in smart homes to detect fire and gas leak incidents.
- 2) Data is the heart of Artificial Intelligence.
- 3) AI gives recommendations from the search initiated by us.
- 4) Smart virtual assistant uses speech recognition technology to interact with users.
- 5) LUIS is an AI Application that controls the lighting system of a house.

B. True and False.

- | | |
|---|-------------|
| 1) Many big organizations are trying to unleash the full potential of AI. | <u>True</u> |
| 2) Regular use of Internet generates enormous amount of data. | <u>True</u> |
| 3) Alexa is an example of smart virtual assistant | <u>True</u> |
| 4) With smart lightning we can control the light remotely. | <u>True</u> |
| 5) Smart Lock is a Wi Fi enable device that uses app or smart voice assistant | <u>True</u> |

C. Fill in the blanks.

- 1) Siri /Alexa is an example of smart virtual assistant.
- 2) Through online shopping consumers directly buy goods or services on Internet.
- 3) Devices installed in a smart home are interconnected through the Internet.
- 4) A smart camera gives us easy ways to access the recorded footage.
- 5) Smart Lock is a Wi Fi enable device that uses app or smart voice assistant

D. Differentiate between the following:

1	Smart Camera	Smart Lock
	A smart camera helps us see and watch what is happening around our home. • It can record videos. • It can help us see visitors. • We can watch its video on a mobile phone.	A smart lock helps us lock and unlock a door without using a normal key. • It can use a PIN or fingerprint. • It helps keep our home safe. • We can lock or unlock it using a mobile phone.

E. Answer the following questions:

Q:1	How do social networking companies make use of Artificial Intelligence?
A:1	With AI, they analyze huge data to find out what is trending and other related patterns which help them understand users' behavior and display the content of their interest.
Q:2	What are the main goals of Artificial Intelligence?
A:2	The main goals of AI are to: • Copy human intelligence • Carry out knowledge-intensive tasks • Learn new things by itself • Build machines which can perform tasks that require human intelligence
Q:3	Name any three smart home products.
A:3	Three smart home products are: 1) Smart Assistant 2) Smart Camera 3) Smart Lock.

F. Application Based Question

Bhaskar's father and mother both are working parents, due to which most of the time he has to stay alone at home. They (Bhaskar's parents) require a smart home device through which they could keep an eye on their home virtually from their office. Can you suggest them the same?

Smart Camera

Activity Section

ACTIVITY REARRANGE:

Rearrange the jumbled-up letters and write the correct words in the given space.

1. S N E O R S **SENSOR**
2. M T R S A O K C L **SMART LOCK**
3. A D T A **DATA**

ACTIVITY MATCHING:

Match the following smart products with their respective functions.

 Smart light	 Smart camera	 Smart lock	 Smart assistant	Smart home surveillance system
				Used for a variety of tasks, i.e. play music, book cab, check bank balance
				Controls the lighting remotely
				Used to lock and unlock the doors through app or voice command