

## Annotations - Understanding AI Systems Answer Key

### Passage 1: AI in Medical Imaging

A hospital system scans an X-ray or MRI image and sends it to the AI system (I).

The AI compares the image to thousands of examples in its database to detect patterns linked to disease (P).

The trained diagnostic model predicts whether the scan shows something abnormal (M).

The system provides a report to the doctor that includes possible conditions or concerns (O).

Doctors' corrections and patient outcomes are added back to the system to improve accuracy (F).

### Passage 2: AI in Online Shopping

A customer searches for "running shoes" on an e-commerce site (I).

The AI reviews past searches, clicks, and purchases to identify patterns (P).

The recommendation model predicts which shoes the customer is most likely to buy (M).

The website displays personalized product suggestions on the screen (O).

When customers buy or ignore items, the system adjusts its recommendations in the future (F).

### Passage 3: AI in Smart Farming

Sensors in the soil collect data about moisture levels and nutrient content (I).

The system analyzes the data along with weather forecasts to predict crop needs (P).

The farm's AI model suggests the best schedule for watering and fertilizing (M).

Farm equipment automatically waters and distributes fertilizer based on the schedule (O).

Data on crop yield and farmer adjustments are added back to make the system more reliable (F).