

### 3. Data and Fairness in AI



- A.** 1. b)      2. a)      3. b)      4. a)      5. c)
- B.** 1. balanced    2. biased    3. historical    4. review    5. decisions
- C.** 1. T      2. F      3. F      4. T      5. T
- D.** 1. Bias      2. Supervised    3. Patterns    4. Examples    5. Accuracy
- E.** 1. The importance of ensuring diversity in training data avoid errors and ensure fairness in AI systems.
2. It is important because unbalanced data can cause AI systems to make biased or incorrect decisions, favouring certain groups over others.
3. The AI system was biased because it was trained mostly on images of light-skinned men, which caused it to make more errors when identifying women and people with darker skin tones.
4. Some datasets do not represent everyone equally and this is called bias. Bias means the data is unbalanced or unfair, leading to unequal performance across different groups.
5. AI systems can be tested for fairness by checking if the system treats all groups or categories equally, without favouring one over another. Two methods to check for bias in AI are:
- Bias check: It's important to test AI programs to ensure they do not treat different groups or categories unfairly. AI should be evaluated to see if it favours certain groups over others.
  - Human supervision: Human beings should review AI decisions rather than trusting the system blindly. This ensures that any errors or biases in AI can be caught and corrected.

#### THINK & APPLY

Do it Yourself