# 2023 Bi H1 Q20

Section: Sustainability and Interdependence

**Topic: Crop Protection** 

### **Question Summary**

You are asked which features from the list — (1) Storage organs, (2) Vegetative reproduction, (3) Short life cycle — belong to perennial weeds (weeds that survive for many years).

#### **Worked Solution**

- Annual weeds complete their life cycle in one season and spread mainly by seeds.
- They grow rapidly, flower early, and produce many seeds.
- Their key feature is a short life cycle (feature 3).
- Perennial weeds, in contrast, survive year after year.
- They have storage organs (feature 1) such as bulbs, rhizomes, or tubers that allow them to regrow.
- They also reproduce by vegetative means (feature 2), e.g.
  runners or root fragments forming new plants.
- They do not have short life cycles.
- Therefore, the correct features of perennial weeds are 1 and 2 only.

#### **Final Answer**

### ■ Option A — 1 and 2 only

## **Revision Tips**

- Annual weeds:
- Complete life cycle in one season
- Rapid growth, early flowering, seed dispersal
- Example: chickweed, groundsel
- Perennial weeds:
- Live for several years
- Have storage organs and vegetative reproduction
- Harder to control can regrow after cutting or herbicide
- Key strategy:
- Annual → seeds + short life cycle
- Perennial → storage + vegetative reproduction