### 2018 Manual A Chapter 4 Formulations Quiz

### 1. The name "Sevin 5G" on a pesticide label indicates:

- A. A granular pesticide with 5 percent inert ingredients
- B. A gel pesticide with 5 percent active ingredients
- C. A granular pesticide with 5 percent active ingredients
- D. A gel pesticide with 5 percent inert ingredients

## 2. Which is the pesticide formulation process by which solid particles are dispersed in a liquid?

- A. ULV solvents
- B. Solution
- C. Suspension
- **D.** Emulsion
- 3. Which liquid pesticide formulation consists of a small amount of active ingredient (often 1 percent or less per unit volume) dissolved in an organic solvent?
  - A. Emulsifiable concentrate (EC)
  - B. Ready-to-use low-concentrate solutions (RTU)
  - C. Ultra-low volume (ULV)
  - D. Flowables (F)/liquids (L)

#### 4. Which liquid pesticide formulation may approach 100 percent active ingredient?

- A. Emulsifiable concentrate (EC)
- B. Ready-to-use low-concentrate solutions (RTU)
- C. Ultra-low volume (ULV)
- D. Aerosols (A)

#### 5. Which is a disadvantage of both EC and ULV formulations?

- A. Solvents may cause rubber or plastic hoses, gaskets, and pump parts and surfaces to deteriorate
- B. Contribute to abrasive wear of nozzles and pumps
- C. Require constant agitation to keep in suspension
- D. Difficult to handle, transport, and store

## 6. Which dry/solid formulation is mixed in water and reduces the risk of inhalation exposure during mixing and loading?

- A. Dusts (D)
- **B.** Wettable powders (WP)
- C. Soluble powders (SP)
- D. Water-dispersable granules (WDG) or dry flowables (DF)

# 7. Which type of dry/solid pesticide formulation consists of particles that are the same weight and shape?

- A. Dusts
- B. Granules
- C. Pellets
- **D.** Baits

### 8. Which is an advantage of microencapsulated materials?

- A. They pose few hazards to bees
- B. Delayed or slow release of the active ingredient prolongs its effectiveness
- C. Their pesticidal activity is independent of weather conditions
- D. They usually require only short restricted- entry intervals

# 9. Which type of adjuvant functions as wetting agents and spreaders (i.e., they physically alter the surface tension of spray droplets)?

- A. Surfactants
- B. Stickers
- C. Extenders
- D. Buffers

### 10. Which type of adjuvant increases the viscosity of spray mixtures?

- A. Stickers
- **B.** Extenders
- C. Plant penetrants
- D. Thickeners

## **KEY: 2018 Manual A Chapter 4 Formulations Quiz**

- 1. C. A granular pesticide with 5 percent active ingredients
- 2. C. Suspension
- 3. B. Ready-to-use low-concentrate solutions (RTU)
- 4. C. Ultra-low volume (ULV)
- 5. A. Solvents may cause rubber or plastic hoses, gaskets, and pump parts and surfaces to deteriorate
- 6. D. Water-dispersable granules (WDG) or dry flowables (DF)
- 7. C. Pellets
- 8. B. Delayed or slow release of the active ingredient prolongs its effectiveness
- 9. A. Surfactants
- 10. D. Thickeners