5. The prescription requests two capsules to be taken every 4 hours for 1 week. Therefore, you will need to dispense  $(2 \times 6 \times 7) = 84$  capsules.

**Answer**: d (84)

**6.** The prescription is for 56 days' supply. For the first 14 days, the patient is to take 1 capsule three times a day. This is  $14 \times 3 = 42$ .

For the remaining time (56 - 14 = 42 days), the patient is to take 1 capsule four times a day. This is  $42 \times 4 = 168$ .

Therefore, you need to dispense 168 + 42 = 210.

Answer: d (210)
7. Answer: c (To mix)
8. Answer: d (Size 3)

- **9. Answer**: c (Dusting powders must be labelled 'Not to be taken'.) They should be labelled 'For external use only'.
- 10.  $10 \text{ mg} \times 10 = 100 \text{ mg}$ , which is below the accepted minimum weighable quantity of a Class II balance, which is 150 mg. All the other quantities, when multiplied by 10, are greater than 150 mg.

Answer: a (10 mg)

**11.** A mix for 10 powders will contain  $3 \times 10 = 30$  mg Ephedrine BP.

This will be contained in a 200 mg portion of mix X. Therefore, the proportions of ingredients in mix X are:

Ephedrine BP 30 mg Lactose BP 170 mg

Multiplying both by 5 will produce weighable quantities:

Ephedrine BP  $30 \text{ mg} \times 5 = 150 \text{ mg}$ Lactose BP  $170 \text{ mg} \times 5 = 850 \text{ mg}$ **Answer**: b (Ephedrine BP 150 mg Lactose BP 850 mg)

- 12. Answer: d (Verapamil BP 20 mg Lactose BP 180 mg)
- **13.** Bendroflumethiazide 2.5 mg powders
  - 1. The product is used to treat oedema and hypertension (*British National Formulary* 51st edn, p 72).
  - 2. This is an unofficial preparation, therefore the formula will need to be checked to ensure that it is safe and suitable for use. Bendroflumethiazide is used at a dose of 5–10 mg in the morning daily or on alternate days; maintenance 5–10 mg 1–3 times weekly for oedema and 2.5 mg in the morning for hypertension (higher doses rarely necessary) (*British National Formulary* 51st edn, p 72). Lactose BP is a suitable diluent unless the patient is lactose-intolerant. Therefore the preparation is safe and suitable for the intended purpose.
  - 3. Prepare 5 bendroflumethiazide 2.5 mg powders.

## Calculations

	One powder	10 powders	
Bendroflumethiazide BP	2.5 mg	25 mg	
Lactose BP	to 200 mg	to 2000 mg	

We need to make a concentrated powder where every 200 mg of this concentrate (mix X) contains 25 mg of Bendroflumethiazide BP (mix X = 25 mg/200 mg).