g.

The Lotion		**50 ml**
Apply when required for itching.		
Discard after (2 weeks)		
For external use only		
Shake the bottle		
Each 50 ml contains:		
Zinc Oxide BP	25%	
Purified Talc BP	25%	
Glycerin BP	5%	
Bentonite BP	2%	
Freshly boiled and cooled purified water	to 100%	
Mr Edward Smith		Date of dispensing

7. The patient would be advised to apply the lotion when required for itching. In addition, the discard date, the need to shake the bottle before use and the fact that the product is for external use only would be highlighted to the patient.

Chapter 4: Emulsions

1. An emulsion is essentially a liquid preparation containing a mixture of oil and water that is rendered homogeneous by the addition of an emulsifying agent.

2. It is important to include a preservative in an oral emulsion to prevent microbial growth as emulsions are particularly susceptible to microbial growth.

3. As emulsions are particularly susceptible to microbial contamination, freshly boiled and cooled purified water is used to minimise the risk of contamination.

4. The complete table is:

	Proportion in primary emulsion		
Type of oil	**Oil**	**Aqueous**	**Gum**
Fixed oil	4	2	1
Volatile oil	2	2	1
Mineral oil	3	2	1

5. **Answer**: d (Liquid Paraffin BP) (see Example 4.3)

6. **Answer**: b (Chlorocresol BP)

7. **Answer**: c (Peppermint Oil BP)

8. **Answer**: a (4:2:1)

9. **Answer**: a (A creamed emulsion will reform on shaking.)

10. Liquid Paraffin BP is a mineral oil. Therefore, the proportions of oil to aqueous to gum is 3:2:1. 36% v/v of 100 ml is 36 ml. Therefore, within the primary emulsion, 3 parts is equal to 36. Therefore 1 part of Acacia BP is equal to 12 g (36 ÷ 3).
Answer: c (12 g)

11. If the final volume of emulsion is 100 ml, the master formula of the product will contain 50 ml of Double Strength Chloroform Water BP (i.e. 50% of the final volume). (Please note that 'b' (24 ml) is the amount of aqueous phase (i.e. Double Strength Chloroform Water BP) that will be used in the primary emulsion.)
Answer: d (50 ml)