

12. Peppermint Oil BP is a volatile oil. Therefore, the formula for the primary emulsion is 2:2:1. The final product will contain 20% v/v Peppermint Oil BP, i.e. 20 ml of Peppermint Oil BP per 100 ml of final product. If the volume of product required is 50 ml, you will require 10 ml of Peppermint Oil BP. Therefore, within the primary emulsion, 2 parts is equal to 10. Therefore 1 part of Acacia BP is equal to 5 g ( $10 \div 2$ ). **Answer:** b (5g)
13. **Answer:** c (4 weeks)
14. **Answer:** c (Shake the bottle)
15. Maize oil 30% v/v emulsion
- Used as a high-calorie nutritional supplement (*Martindale* 33rd edn, p 1371).
  - The product is being used as a food supplement and so is safe and suitable for use.
  - Prepare 100 ml of maize oil emulsion 30% v/v.

### Product formula

Maize Oil BP	30 ml
Acacia BP	qs
Double Strength Chloroform Water BP	50 ml
Freshly boiled and cooled purified water	to 100 ml

The quantity of emulsifying agent (Acacia BP) required to produce 100 ml of the emulsion must be calculated.

### Formula for primary emulsion

Maize oil is a fixed oil. Therefore the primary emulsion ratio is:

<b>Oil</b>	<b>:</b>	<b>Water</b>	<b>:</b>	<b>Gum</b>
4	:	2	:	1

30 ml of Maize Oil BP is required, therefore 4 parts = 30 ml.

1 part will therefore be  $30 \div 4 = 7.5$ .

Therefore:

The amount of freshly boiled and cooled purified water needed  
 $= 2 \times 7.5 \text{ ml} = 15 \text{ ml}$ .

The amount of acacia required = 7.5 g.

Therefore the product formula for 100 ml of maize oil 30% emulsion is:

	<b>100 ml</b>
Maize Oil BP	30 ml
Acacia BP	7.5 g
Double Strength Chloroform Water BP	50 ml
Freshly boiled and cooled purified water	to 100 ml

### Interim formula for Double Strength Chloroform Water BP

Concentrated Chloroform Water BPC 1959	2.5 ml
Freshly boiled and cooled purified water	to 50 ml

- 4.
- No solids will need to be dissolved during the preparation of this product.