

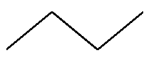


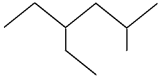
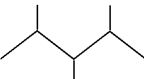

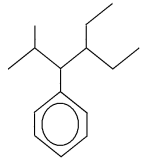
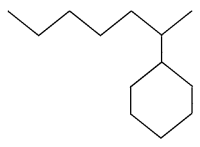
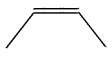
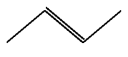
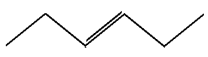
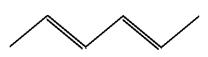
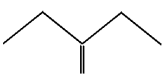
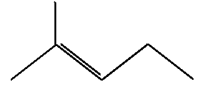
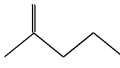
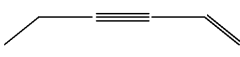
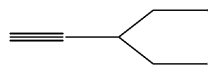
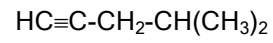


Organic Formulation I

	<u>Skeletal formula</u>	<u>Structural formula</u>	<u>Name</u>
1			
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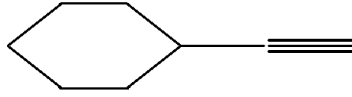
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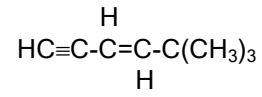
21



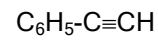
22



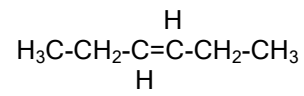
23



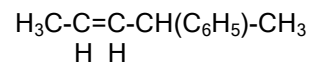
24



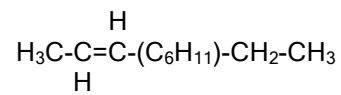
25



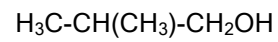
26



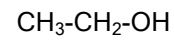
27



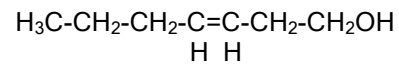
28



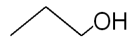
29



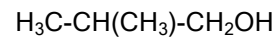
30



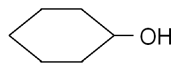
31



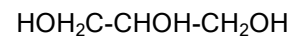
32



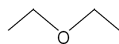
33



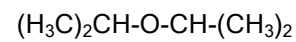
34



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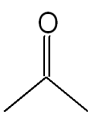
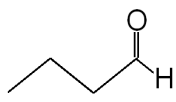
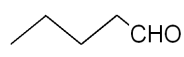
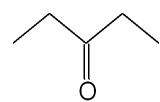
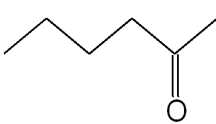
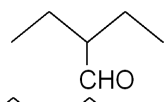
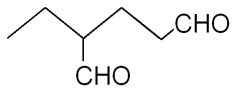
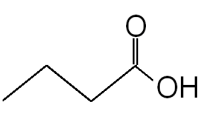
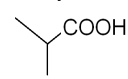
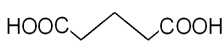
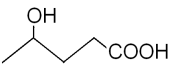

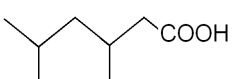
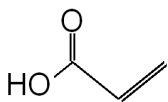
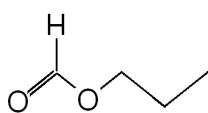


37



Organic formulation II

	<u>Skeletal formula</u>	<u>Structural formula</u>	<u>Name</u>
1			
2			
3			
4			
5			
6			
7			
8		$\text{H}_3\text{C}-\text{CH}_2-\text{COO}-\text{CH}_3$	
9		$(\text{H}_3\text{C})_2-\text{CH}-\text{COO}-\text{CH}_2-\text{CH}_3$	
10		$\text{H}_3\text{C}-\text{CO}-\text{NH}_2$	
11		$\text{H}_3\text{C}-\text{CH}_2-\text{CH}(\text{CH}_3)-\text{CO}-\text{Cl}$	
12		$\text{H}_3\text{C}-\text{CH}_2-\text{C}=\text{C}-\text{COO}-\text{CH}_2-\text{CH}_3$ H H	
13		$(\text{H}_3\text{C})_3\text{N}$	
14		$\text{C}_6\text{H}_5-\text{NH}_2$	
15			
16			
17			
18			<i>cis</i> -9-octadecenoic acid (oleic acid)
19			Butanedihydroxycarboxylic acid (tartaric acid)
20			Sodium isobutanoate

21		$\text{H}_3\text{C}-\text{CH}_2-\text{O}-(\text{CH}_2)_2-\text{CH}_3$
22		$\text{H}_3\text{C}-\text{CH}_2-\text{CHO}$
23		
24		
25		
26		
27		$\text{H}_3\text{C}-(\text{CH}_2)_3-\text{CO}-\text{CH}(\text{CH}_3)_2$
28		
29		
30		
31		$\text{H}_3\text{C}-\text{CHOH}-\text{CH}_2-\text{CHO}$
32		HCOOH
33		$\text{H}_3\text{C}-\text{COOH}$
34		
35		
36		
37		
38		
39		
40		
41		$\text{HCOO}-\text{CH}_2\text{CH}_3$
42		$\text{H}_3\text{C}-\text{COO}-\text{CH}_3$
43		

Solutions:

- 1) a) 1; 2; b) 1; 2; c) 1; a') 1,1; 1,2; 1,3; 1,4; 2,2; 2,3; b') 1,1; 1,2; 1,3; c') 1,1; 1,3;
- 2) Neopentane (or dimethylpropane)
- 3) n-Butane; 2,5-dimethylhexane; 2-methylpentane
- 4) a) 32.5 litres; b) 15.1 g
- 5) Methylbutane
- 6) 58 and C_4H_{10}
- 7) $C_4H_{10}O$
- 8) Butano
- 9) 75% C and 25% H
- 10) Ethanol
- 11) CH_2Br_2
- 12) a) $CH_4 + Cl_2 \rightarrow CH_3Cl + HCl$; b) $2 CH_3Cl + 2 Na \rightarrow CH_3-CH_3 + 2 NaCl$; c) $H-(CH_2)_n-H$; d) $C_8H_{18} \rightarrow C_4H_8 + C_4H_{10}$, for example.
- 14) Propene; 202
- 15) 861.5 L
- 16) 2-Butanol
- 17) a) 182.1 mL; b) 0,52 g; c) 67.0 %

