

**REŠITVE**

Pri računskih nalogah mora biti jasno in korektno predstavljena pot do rezultata z vsemi vmesnimi računi in sklepi. Računske naloge, v katerih tekmovalec ne prikaže postopka reševanja, se točkujejo z 0 točkami!

**1. NALOGA**

1.1	127	1 T	
	<i>(Upoštevamo tudi odgovor 126,9. Odgovor z dodano enoto se točkuje z 0 točkami.)</i>		
1.2	A: amino	1 T	
	B: jodo	1 T	
	C: propan	1 T	
1.3	13	1 T	
1.4	1	1 T	<b>Skupaj: 6 T</b>

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**2. NALOGA**

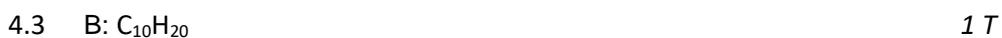
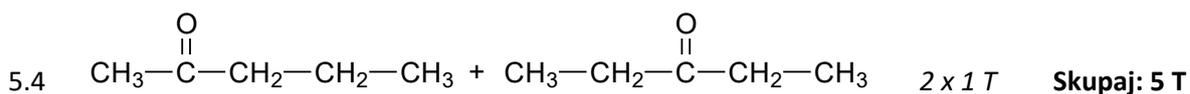
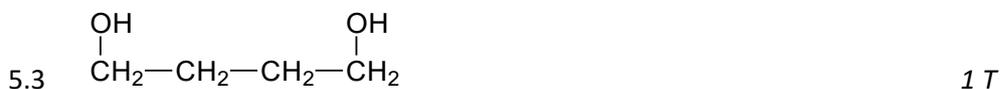
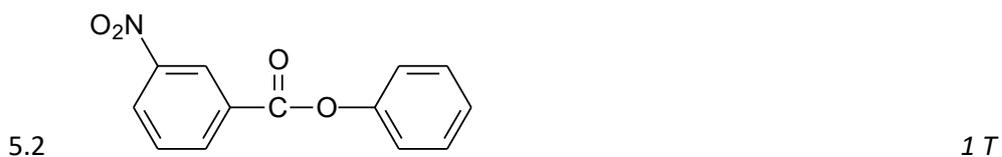
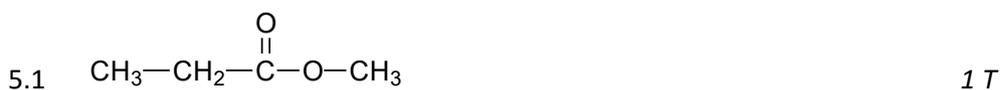
2.1	C <sub>7</sub> H <sub>7</sub> NO <sub>2</sub>	1 T	
	<i>(Upoštevamo tudi drugačno zaporedje elementov.)</i>		
2.2	Č	1 T	
2.3	elektrofilna substitucija	1 T	
2.4	para	1 T	
2.5	2-bromo-4-nitrotoluen <i>ali</i> 2-bromo-1-metil-4-nitrobenzen	1 T	<b>Skupaj: 5 T</b>

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**3. NALOGA**

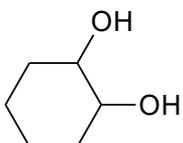
3.1	2-metilcikloheksan-1-on <i>ali</i> 2-metilcikloheksanon	1 T	
3.2	Č < A < C < B	1 T	
3.3	eter / etri	1 T	
3.4	$\begin{array}{ccccccc} & & \text{CH}_3 & \text{O} & \text{CH}_3 & & \\ & &   &    &   & & \\ \text{CH}_3 & - & \text{CH} & - & \text{C} & - & \text{CH} & - & \text{CH}_3 \end{array}$	1 T	<b>Skupaj: 4 T</b>

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**4. NALOGA****5. NALOGA**

**6. NALOGA**

6.1  $C_6H_{12}O_2$  1 T  
 (Upoštevamo tudi drugačno zaporedje elementov.)

6.2 A:  1 T

B:  $\begin{array}{ccccccc} & \text{OH} & & & & \text{O} & \\ & | & & & & || & \\ \text{CH}_2 & - & \text{CH}_2 & - & \text{CH}_2 & - & \text{CH}_2 & - & \text{CH}_2 & - & \text{C} & - & \text{H} \end{array}$  1 T

C:  $\begin{array}{ccccccc} & & \text{CH}_3 & & \text{CH}_3 & & \text{O} & \\ & & | & & | & & || & \\ \text{CH}_3 & - & \text{CH} & - & \text{CH} & - & \text{C} & - & \text{OH} \end{array}$  1 T

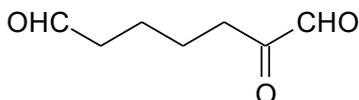
Č:  $\begin{array}{ccccccc} & & \text{O} & & \text{CH}_3 & & \\ & & || & & | & & \\ \text{CH}_3 & - & \text{CH}_2 & - & \text{C} & - & \text{O} & - & \text{CH} & - & \text{CH}_3 \end{array}$

6.3 karboksilna kislina 1 T

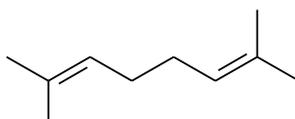
6.4 2,3-dimetilbutan-1-ol 1 T **Skupaj: 7 T**

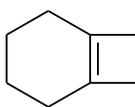
**7. NALOGA**

7.1  $\begin{array}{ccc} & \text{CH}_3 & \text{O} \\ & | & || \\ \text{CH}_3 & - & \text{CH} & - & \text{C} & - & \text{H} \end{array}$  1 T

7.2  1 T

$\text{CH}_3 - \text{CH}_2 - \overset{\text{O}}{\parallel} \text{C} - \text{H}$  1 T

7.3  1 T

7.4  1 T **Skupaj: 5 T**

**8. NALOGA**

8.1 butan-2-ol 1 T

8.2  $H_3PO_3$  (Upoštevamo tudi drugačno zaporedje elementov.) 1 T

8.3 5 1 T

8.4 B 1 T

8.5 3 1 T **Skupaj: 5 T**

**9. NALOGA**

9.1	A: $\text{HOOC}-\text{CH}=\text{CH}-\text{COOH}$	1 T	
	B: $\text{HOOC}-\text{CH}=\text{CH}-\text{COOC}_2\text{H}_5$	1 T	
	C: $\begin{array}{c} \text{OH} \\   \\ \text{HOOC}-\text{CH}-\text{CH}_2-\text{COOH} \end{array}$	1 T	
	Č: $\text{HOOC}-\text{CH}_2-\text{CH}_2-\text{COOH}$	1 T	
	D: $\text{HOCH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2\text{OH}$	1 T	
9.2	$2 \text{C}_4\text{H}_{10} + 7 \text{O}_2 \rightarrow 2 \text{C}_4\text{H}_2\text{O}_3 + 8 \text{H}_2\text{O}$	1 T	<b>Skupaj: 6 T</b>

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**10. NALOGA**

10.1	Z: $\text{CH}_2\text{OH}$ (upoštevamo tudi $\text{CH}_3\text{O}$ v poljubnem zaporedju elementov)	1 T	
	M: OH	1 T	
10.2	C : H : O : N = 2 : 4 : 1 : 1	1 T	
10.3	D	1 T	
10.4	celuloza	1 T	
10.5	B	1 T	<b>Skupaj: 6 T</b>

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**Vse skupaj: 55 T**