



**Univerzitet u Beogradu - Hemijski fakultet**  
**Prijemni ispit iz hemije, 27. jun 2022. godine**  
**Rešenja zadataka i ključ za bodovanje testa**

Zadatak	Tačan odgovor	Broj poena
1.	Broj protona: <b>19</b> , Broj elektrona: <b>18</b>	$2 + 2 = 4$
2.	<b>Ca(HSO<sub>4</sub>)<sub>2</sub>, +6</b>	$2 + 2 = 4$
3.	<b>d)</b>	$1 \times 4 = 4$
4.	<b><math>3 \text{Ca(OH)}_2 + 2 \text{H}_3\text{PO}_4 \rightarrow \text{Ca}_3(\text{PO}_4)_2 + 6 \text{H}_2\text{O}</math></b>	$1 \times 4 = 4$
5.	<b>Povećati 4 puta</b>	$1 \times 4 = 4$
6.	<b><math>[\text{H}^+] = 0,1 \text{ mol/dm}^3</math>, <math>\text{pOH} = 13</math></b>	$2 + 2 = 4$
7.	<b>7,5 g kalijum-sulfata, 42,5 g vode</b>	$2 + 2 = 4$
8.	<b>b)</b>	$1 \times 4 = 4$
9.	<b><math>2 \text{KMnO}_4 + 16 \text{HCl} \rightarrow 2 \text{MnCl}_2 + 2 \text{KCl} + 5 \text{Cl}_2 + 8 \text{H}_2\text{O}</math></b> <b>560 cm<sup>3</sup></b>	$2 + 2 = 4$
10.	a) <b>CH<sub>3</sub>CH=C(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub></b> b) <b>CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>COOH</b> c) <b>4-metil-2-pentanol</b> d) <b>2-metil-1,3-butadien</b>	$4 \times 1 = 4$
11.	a) <b><math>(\text{CH}_3)_2\text{CHCH}=\text{CH}_2 + \text{H}_2\text{O} \xrightarrow{\text{H}^+} (\text{CH}_3)_2\text{CHCH}(\text{OH})\text{CH}_3</math></b> b) <b><math>\text{CH}_3\text{Cl} + \text{CH}_3\text{CH}_2\text{CH}_2\text{ONa} \rightarrow \text{CH}_3\text{CH}_2\text{CH}_2\text{OCH}_3 + \text{NaCl}</math></b>	$2 + 2 = 4$
12.	<b>c)</b>	$1 \times 4 = 4$
13.	<b>a) NE; b) DA; c) DA; d) NE</b>	$4 \times 1 = 4$
14.	<b>c)</b>	$1 \times 4 = 4$
15.	<b>e)</b>	$1 \times 4 = 4$
<b>Ukupno:</b>		<b>60 poena</b>