



**Univerzitet u Beogradu - Hemijski fakultet**  
**Prijemni ispit, 24. septembar 2018. godine**  
**Rešenja zadataka i ključ za bodovanje testa**

Zadatak	Tačan odgovor	Broj poena
1.	Broj protona: 16; Broj elektrona: 18	2 + 2 = 4
2.	$\text{Al}_2(\text{SO}_4)_3$ ; +6	2 + 2 = 4
3.	b)	1 x 4 = 4
4.	$\text{Mg}(\text{OH})_2 + 2 \text{HNO}_3 \rightarrow \text{Mg}(\text{NO}_3)_2 + 2 \text{H}_2\text{O}$	1 x 4 = 4
5.	a) udesno; b) udesno	2 + 2 = 4
6.	pH = 14; pOH = 0	2 + 2 = 4
7.	16 g kalijum-sulfata; 64 g vode	2 + 2 = 4
8.	d)	1 x 4 = 4
9.	$2 \text{KMnO}_4 + 5 \text{H}_2\text{S} + 3 \text{H}_2\text{SO}_4 \rightarrow 2 \text{MnSO}_4 + \text{K}_2\text{SO}_4 + 5 \text{S} + 8 \text{H}_2\text{O}$ 320 mg	2 + 2 = 4
10.	a) $\text{CH}_2=\text{C}=\text{CHCH}_3$ b) $\text{CH}_3\text{COCH}_2\text{CH}_2\text{CH}_3$ c) 3-metil-pentan d) butanska kiselina	4 x 1 = 4
11.	a) $\text{CH}_3\text{CH}_2\text{COCl} + \text{CH}_3\text{OH} \rightarrow \text{CH}_3\text{CH}_2\text{COOCH}_3 + \text{HCl}$ b) $\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}=\text{CH}_2 + \text{H}_2\text{O} \xrightarrow{\text{H}^+} \text{CH}_3\text{CH}(\text{CH}_3)\text{CH}(\text{OH})\text{CH}_3$	2 + 2 = 4
12.	$\text{CH}_3\text{CHO} + 2 \text{CH}_3\text{OH} \xrightarrow{\text{H}^+} \text{CH}_3\text{CH}(\text{OCH}_3)_2 + \text{H}_2\text{O}$	1 x 4 = 4
13.	a) DA; b) DA; c) DA; d) NE	4 x 1 = 4
14.	c)	1 x 4 = 4
15.	c)	1 x 4 = 4
<b>Ukupno:</b>		<b>60 poena</b>