



Univerzitet u Beogradu - Hemijski fakultet  
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Rešenja zadataka i ključ za bodovanje testa

| Zadatak        | Tačan odgovor   | Broj poena      |
|----------------|---|-----------------|
| 1.             | Broj protona: 9, Broj neutrona: 10  | 2 + 2 = 4       |
| 2.             | $\text{Ca}_3(\text{PO}_4)_2$ , +5   | 2 + 2 = 4       |
| 3.             | e)  | 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.             | Smanjiti 2 puta   | 1 x 4 = 4       |
| 6.             | 80 mg   | 1 x 4 = 4       |
| 7.             | 0,08 mol/dm <sup>3</sup>  | 1 x 4 = 4       |
| 8.             | d)  | 1 x 4 = 4       |
| 9.             | $2 \text{KMnO}_4 + 5 \text{H}_2\text{S} + 3 \text{H}_2\text{SO}_4 \rightarrow 2 \text{MnSO}_4 + \text{K}_2\text{SO}_4 + 5 \text{S} + 8 \text{H}_2\text{O}$<br>16 g  | 2 + 2 = 4       |
| 10.            | a) $\text{CH}_2=\text{C}(\text{CH}_3)\text{CH}=\text{CH}_2$<br>b) $\text{HCOOCH}_2\text{CH}_3$<br>c) 4,4-dimetil-2-penten<br>d) 3-metil-2-butanol   | 4 x 1 = 4       |
| 11.            | a) $\text{CH}_3\text{CH}=\text{C}(\text{CH}_3)\text{CH}_2\text{CH}_3 + \text{HBr} \rightarrow \text{CH}_3\text{CH}_2\text{CBr}(\text{CH}_3)\text{CH}_2\text{CH}_3$<br>b) $\text{CH}_3\text{CH}_2\text{COCl} + \text{CH}_3\text{OH} \rightarrow \text{CH}_3\text{CH}_2\text{COOCH}_3 + \text{HCl}$ | 2 + 2 = 4       |
| 12.            | b)  | 1 x 4 = 4       |
| 13.            | a) NE; b) NE; c) NE; d) DA  | 4 x 1 = 4       |
| 14.            | c)  | 1 x 4 = 4       |
| 15.            | d)  | 1 x 4 = 4       |
| <b>Ukupno:</b> |   | <b>60 poena</b> |