**OLIMPIADA NAȚIONALĂ DE BIOLOGIE**

**ETAPA JUDEȚEANĂ/A SECTOARELOR MUNICIPIULUI BUCUREȘTI, 13 martie 2022**

**PROBA TEORETICĂ, CLASA a X-a**

**BAREM DE CORECTARE**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Nr. item** | **Răspuns** | **Nr. item** | **Răspuns** | **Nr. item** | **Răspuns** |
| **1.** | C | **25.** | C | **49.** | C |
| **2.** | A | **26.** | C | **50.** | B |
| **3.** | A | **27.** | C | **51.** | 1p OFICIU |
| **4.** | C | **28.** | D | **52.** | C |
| **5.** | B | **29.** | C | **53.** | C |
| **6.** | D | **30.** | D | **54.** | D |
| **7.** | A | **31.** | B | **55.** | D |
| **8.** | A | **32.** | A | **56.** | D |
| **9.** | C | **33.** | E | **57.** | D |
| **10.** | D | **34.** | B | **58.** | B |
| **11.** | A | **35.** | D | **59.** | D |
| **12.** | D | **36.** | C | **60.** | D |
| **13.** | D | **37.** | B | **61.** | D |
| **14.** | C | **38.** | B | **62.** | C |
| **15.** | D | **39.** | B | **63.** | B |
| **16.** | D | **40.** | A | **64.** | B |
| **17.** | D | **41.** | C | **65.** | D |
| **18.** | C | **42.** | E | **66.** | D |
| **19.** | D | **43.** | A | **67.** | C |
| **20.** | D | **44.** | C | **68.** | D |
| **21.** | A | **45.** | B | **69.** | A |
| **22.** | C | **46.** | C | **70.** | B |
| **23.** | A | **47.** | B |  |  |
| **24.** | C | **48.** | D |  |  |

**OLIMPIADA NAȚIONALĂ DE BIOLOGIE**

**ETAPA JUDEȚEANĂ/A SECTOARELOR MUNICIPIULUI BUCUREȘTI, 13 martie 2022**

**PROBA TEORETICĂ, CLASA a X-a,**

**BAREM DE CORECTARE PENTRU COMISIE**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Nr. item** | **Răspuns** | **Nr. item** | **Răspuns** | **Nr. item** | **Răspuns** |
| **1.** | C (LVS, pg. 4) | **25.** | C (LVS, pg. 8, 32) | **49.** | C (LVS, pg. 9, 10, 44) |
| **2.** | A (LVS, pg. 5) | **26.** | C (LVS, pg. 38) | **50.** | C (LVS, pg. 30) |
| **3.** | A (LVS, pg. 9) | **27.** | C (LVS, pg. 11) | **51.** | B (LVS, pg. 31)  |
| **4.** | C (LVS, pg. 41) | **28.** | D (LVS, pg. 13) | **52.** | C (LVS, pg. 11) |
| **5.** | B (LVS, pg. 43) | **29.** | C (LVS, pg. 5) | **53.** | C (LVS, pg. 31) |
| **6.** | D (LVS, pg. 44) | **30.** | D (LVS, pg. 30) | **54.** | D (LVS, pg. 21) |
| **7.** | A (LVS, pg. 48) | **31.** | B (LVS, pg. 26, 28, 31) | **55.** | D (LVS, pg. 41) |
| **8.** | A (LVS, pg. 31) | **32.** | A (LVS, pg. 18) | **56.** | D (LVS, pg. 29) |
| **9.** | C (LVS, pg. 9) | **33.** | E (LVS, pg. 25) | **57.** | D (LVS, pg.25)  |
| **10.** | D (LVS, pg. 17) | **34.** | B (LVS, pg. 29) | **58.** | B (LVS, pg. 43) |
| **11.** | A (LVS, pg. 5) | **35.** | D (LVS, pg. 30) | **59.** | D (LVS, pg. 24) |
| **12.** | D (LVS, pg. 30) | **36.** | C (LVS, pg.38) | **60.** | D (LVS, pg.36) |
| **13.** | D (LVS, pg. 47) | **37.** | B (LVS, pg. 31) |  |  |
| **14.** | C (LVS, pg. 12)  | **38.** | B (LVS, pg. 37) |  |  |
| **15.** | D (LVS, pg. 41) | **39.** | B (LVS, pg. 31) |  |  |
| **16.** | D (LVS, pg. 18) | **40.** | A (LVS, pg. 27) |  |  |
| **17.** | D (LVS, pg. 17) | **41.** | C (LVS, pg. 25) |  |  |
| **18.** | C (LVS, pg. 9) | **42.** | E (LVS, pg. 30) |  |  |
| **19.** | D (LVS, pg. 47) | **43.** | A (LVS, pg. 16) |  |  |
| **20.** | D (LVS, pg. 30) | **44.** | C (LVS, pg. 20) |  |  |
| **21.** | A (LVS, pg.24) | **45.** | B (LVS, pg. 23) |  |  |
| **22.** | C (LVS, pg.44) | **46.** | C (LVS, pg. 26) |  |  |
| **23.** | A (LVS, pg. 8) | **47.** | B (LVS, pg. 12)  |  |  |
| **24.** | C (LVS, pg. 23) | **48.** | D (LVS, pg. 44) |  |  |

**III. PROBLEME**

**61. D (LVS, pg. 33)**

*REZOLVARE*

25 de tăieturi, 26 de fragmente, 52 de enzime proteolitice

**62. C (LVS, pg. 46)**

*REZOLVARE*

16 $∙$ 500mL=8000mL

10$ ∙ $1500mL/100=150mL

150mL$ ∙ $16=2400mL

5000mL$ ∙ $60’’/2400mL=125’’/2’5’’

**63. B (LVS, pg. 20-21)**

**64. B (LVS, pg. 33-34)**

**65. D (LVS, pg. 5)**

**66. D (LVS, pg. 29)**

**67. C (LVS, pg. 43)**

*REZOLVARE*

760-400=360 grame glucoză

360/180= 2 moli glucoză

1 mol glucoză ....... (formează) .......... 6 moli CO2

2 moli glucoză .......(formează)............x moli CO2

 x = 12 moli CO2

**68. D (LVS, pg. 48)**

**69. A (LVS, pg. 41)**

*REZOLVARE*

1 mol glucoză ............ (conduce la) ............2 moli acid lactic

20 moli glucoză ..........(conduce la) ............x moli acid lactic

 x = 40 moli acid lactic

**70. B (LVS, pg. 46)**

VC – volumul curent

VCcopil = 500 mL

VCcâine = 500 mL : 4 = 125 mL

Vaer consumat de câine/minut = 125 $∙$ 16 = 2000 mL

Vaer consumat de câine în 10 minute = 2000 $∙$ 10 = 20 000 mL = 20 L