BIOLÓGIA
ANGOL NYELVEN
BIOLOGY

KÖZÉPSZINTŰ ÍRÁSBELI
ÉRETTSÉGI VIZSGA
INTERMEDIATE LEVEL
WRITTEN EXAM

JAVÍTÁSI-ÉRTÉKELÉSI
ÚTMUTATÓ
KEY AND GUIDE FOR
EVALUATION

OKTATÁSI ÉS KULTURÁLIS
MINISZTÉRIUM
MINISTRY OF EDUCATION
AND CULTURE
Instructions – How To Mark The Standard Level Paper

1. Always use red ink.
2. Tick correct answers. Each tick is equivalent to 1 point. You can not give half the point. Indicate with two ticks, if the candidate answered correctly an assignment of two points.
3. Please accept the answer, if it is correct, but not mentioned in the Answer Key. The same procedure should be applied in the case of synonyms (e.g.: platelets–thrombocytes).
4. In the Answer Key equally acceptable answers are separated with backslash (/) from one another.
5. At the end of the assignment add the points up in the grey-coloured chart.
6. At the end indicate the detailed points for each assignment in the final summary chart and add them up to indicate the total score.
7. The total point multiplied by 1.25 will give the total point for the written part of exam. The final evaluation is the total point for the written part of the exam expressed in percentage. If the calculated total point is not an integer, please round it according to the rules of rounding.
8. If the candidate was asked to compose whole sentences (e.g.: giving reasons or explanations) – only grammatically correct sentences are acceptable. Please, do not deduct points for spelling mistakes, yet do not accept misleading compositions.

We wish you a successful work.
I. **Living organisms and ways of life**  
5 points  

This assignment is based on the following chapters of the Detailed Requirements: 2.2.1, 2.2.3, 3.2.1, 3.3.1 and 3.3.3  

Each number written in the correct circle is awarded by 1 point. One number should be placed only in one circle. No points for numbers put in more circles.

![Diagram of living organisms and ways of life]

II. **Mushroom poisoning**  
8 points  

This assignment is based on the following chapters of the Detailed Requirements: 3.3.1; 3.3.3; 4.4.2.  

Source of text: Index, 22 July 2005

1. Thalloid body structure
2. Heterotrophs/ no chloroplasts/ chitin cell wall, etc. (*1 reason is sufficient*)
3. (Spore-bearing) gills of the death cap are always white/ those of the horse mushroom are (or will be) brown
4. Death cap has volva (a cup around the base)/ thickened base of its stalk/ cap is often greenish (*any of these*)  
(3. and 4. can be inverted)
5. It can not help, because the toxin / poison had already been absorbed by the time symptoms appeared
6. The liver (organ of detoxification, toxins get into the liver at first)
7. Production of antibiotics/ alcoholic fermentation
8. Baking industry/ cheese-making/ kefir (kephir)  
(7. and 8. can be inverted and other good examples are also acceptable)
III. The structure and function of a leaf  
This assignment is based on the following chapters of the Detailed Requirements: 2.2.2, 2.2.3 and 3.4.3

1. 
A) Cuticle 1 point 
B) Epidermis/ Epidermal tissue 1 point 
C) Palisade parenchyma 1 point 
D) Spongy parenchyma 1 point 
E) Guard cell (stoma can also be accepted) 1 point

2. guard cells of stoma 1 point
3. spongy parenchyma 1 point
4. cuticle 1 point
5. parenchyma (palisade, spongy)/ ground tissue/ mesophyll/ guard cells (any of these) 1 point
6. parenchyma (palisade, spongy)/ ground tissue/ mesophyll/ guard cells (any of these) 1 point
7. the undersurface of leaves is heated to a lesser extent, so water loss caused by evaporation is reduced, too. 1 point
8. the necessary oxygen and carbon-dioxide can reach the palisade layer through the spongy tissue and the produced gases can leave similarly (but in the opposite direction) 1 point

IV. Dragonflies 
This assignment is based on the following chapter of the Detailed Requirements: 3.4.2

1. Heat / warm (high temperature) 1 point
2. Water 1 point
3. C 1 point
4. D 1 point
5. B 1 point
6. Larva: insect larvae, tadpole, newt (larvae) 
Imago: (flying) insects (only a full list can be awarded) 1 point
7. 
• 3 pair of (jointed) legs 
• wings (2 pairs) 
• head, thorax, abdomen (any two of these) 1 point 
(Mentioning only “jointed leg” or “segmented abdomen” is not acceptable)
8. 
• compound/ image-forming eyes - detecting and following the prey 1 point
• wings of large surface area - fast flying ability 1 point
Any other proper combinations are acceptable, for instance: chewing mouth parts – predatory way of life, strong, muscular thorax – fast flying, long abdomen – copulation and laying eggs in water. Mentioning only one relationship is awarded by 1 point only.
9. B 1 point
V. The cycle of matter and flow of energy through an ecosystem 10 points

This assignment is based on the following chapter of the Detailed Requirements: 5.4.1

<table>
<thead>
<tr>
<th></th>
<th>The flow of organic material including its chemical energy content.</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Oxygen</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>Light energy</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>Water</td>
<td>B</td>
</tr>
</tbody>
</table>

If all four letters are put in the correct cells: 2 points
If three letters are put in the correct cells: 1 point
If two or less letters are in the correct cells: 0 point

<table>
<thead>
<tr>
<th></th>
<th>Elements of ecosystem (name of the group of organism)</th>
<th>Letters of case species</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Producers</td>
<td>H</td>
</tr>
<tr>
<td>Y</td>
<td>Herbivores / Plant-eaters/ Plant parasites</td>
<td>F, G</td>
</tr>
<tr>
<td>Z</td>
<td>Saprophytes/ Decomposers/ Omnivores</td>
<td>E, I</td>
</tr>
</tbody>
</table>

5. 1 point for the correct filling of each cell in the second column of the table, altogether 3 points
6. 1 point for each letter put in the appropriate cell in the third column of the table, altogether 5 points

No point for a letter written in more than one cell.

VI. Water balance in our body 8 points

This assignment is based on the following chapters of the Detailed Requirements: 2.1.2; 2.2.3; 4.4.2; 4.7.1. Each correct answer is awarded by 1 point

1. B
2. D
3. YES IT IS. Gain and loss are equally 2800 cm³. (only with explanation!)
4. D
5. Sweating and exhalation/ expiration increase (Point can be given only if two correct answers are present)
6. AE
7. C
8. CD

VII. The human nervous system 10 points

This assignment is based on the following chapters of the Detailed Requirements: 4.5.4 and 4.8.1. Each correct answer is awarded by 1 point.

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<tr>
<td>B</td>
<td>C</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>D</td>
<td>A</td>
<td>B</td>
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</tbody>
</table>
VIII. Human body height  

This assignment is based on the following chapter of the Detailed Requirements: 6.2.2.

1. X= body height (in cm, inch or feet)  
   Y= frequency, number of individuals (% or person)  
   (Point can be given only if both correct answers are present)  
2. 66+ 6.6 = 72.6 inches (or 5.5+0.55 = 6.05 feet)  
3. A Gauss-curve (bell curve) positioned right of the original one. (No point can be given, if the curve is not in contact with axis X.)

Each correct answer: 1 point

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<tbody>
<tr>
<td>4.</td>
<td>Result of the combined effects of many genes</td>
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<td>5.</td>
<td>The environment strongly influences gene expression</td>
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<td>6.</td>
<td>The effects of single genes and alleles are added up</td>
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<td>7.</td>
<td>People of different genotypes (regarding their body height) will differ in their phenotypes</td>
<td>F</td>
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<td>8.</td>
<td>People of identical genotypes (regarding their body height), such as identical twins, will be phenotypically identical</td>
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<td>9.</td>
<td>Its distribution can be typical of a closed human community (population, ethnic group)</td>
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<td>10.</td>
<td>The typical sexual differences in its distribution are inherited</td>
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IX. Advices to first-aid  

This assignment is based on the following chapters of the Detailed Requirements: 4.2.3, 4.3.4, 4.6.1 and 4.6.5

Each correct answer is awarded by 1 point

1. nose-bleed
2. forward
3. serious external bleeding
4. fracture of bone
5. pressure bandage
6. bacteria
7. burn