



Scoring instructions VSBO PKL 2025

period 1
Wednesday May 21
7.30 -10.00

Biology

Submitting scores

Process scores of all candidates in the online AWP program.

The scores must be posted no later than Monday June 2, 2025 at 12.00 midday.

The scoring instructions comprise:

- 1 Assessment standards
- 2 General rules
- 3 Subject-specific rules
- 4 Appraisal model

1 Assessment standards

The candidate's work is assessed with due observance of articles 30, 31 and 32 of the National Examination Decree vwo-havo-vsbo of 23-06-2008, PB 2008 no 54.

The following passages from the articles of the National decree mentioned above are of essence:

- 1 The school principal submits the completed exam assignments including a copy of the exam questions, the scoring instructions and the official report of the exam to the examiner. The examiner evaluates the work and submits it to the principal along with his/her evaluation. The examiner applies the assessment standards and the appraisal model decreed by ETE (the Examination Bureau).
- 2 The principal immediately submits the deposited exams, including a copy of the exam questions, the scoring instructions and the official report of the exam to the external examiner.
- 3 The external examiner promptly evaluates the work, applying the appraisal model and the assessment standards decreed by ETE (Examination Bureau).
- 4 The examiner and the external examiner confer and jointly determine the score totals for the national exam.
- 5 If they cannot reach a consensus, the score totals are determined by way of a mathematical average of the scores proposed by each of them, rounded off upwards if so required.

2 General rules

As far as evaluation of the exam goes, the following stipulations apply:

- 1 The examiner declares on a list, the candidate names and/or numbers, the scores awarded to each candidate for each question and the total score acquired by each candidate.
- 2 The examiner and the external examiner award scores to the answer to a question in accordance with the appraisal model. Scores are represented by the numbers 0, 1, 2, ..., n, whereby n represents the maximum score attainable for a question. Additional scores, not being a whole integer, or a score being less than 0, are not legitimate.
- 3 Scores are awarded in compliance with the following rules:
 - 3.1 If a question is answered correctly in full, the maximum score attainable is awarded;
 - 3.2 If an answer to the question is partially correct, a portion of the score attainable is awarded, in compliance with the appraisal model;

- 3.3 If the answer to an open-end question does not appear on the appraisal model, while said answer may be deemed correct or partially correct by virtue of demonstrable arguments with regard to subject matter content, scores must be awarded on the analogy or in the spirit of the appraisal model;
- 3.4 If solely one example, reason, elaboration, quote or answer of a different nature is required, then only (and exclusively) the first-offered answer is evaluated;
- 3.5 If more than one example, reason, elaboration, quote or answer of a different nature is required, then only (and exclusively) the first-offered answers are evaluated, up to a maximum of the number of answers asked for;
- 3.6 If a required statement or explanation or derivation or calculation is missing or wrong in an answer, then a score of 0 is awarded, unless the appraisal model indicates otherwise;
- 3.7 If various options separated by the symbol / appear in the appraisal model, then said options are valid as different phrasings of the same answer or part of the answer;
- 3.8 If a portion of the answer is bracketed in the appraisal model, then said portion is not absolutely required in the candidate's answer.
- 4 The correct answer to a multiple-choice question is the capital letter that matches the correct choice. For a correct answer to a multiple-choice question, the number of points listed in the appraisal model is awarded. For each other answer, no points are awarded. If more than one answer is given, no points are awarded either.
- 5 An error in the elaboration of a question may be charged but once, unless said error simplifies the question significantly and/or unless the appraisal model states otherwise.
- 6 A same-like error in the response to different questions must be charged consistently for each individual case, unless the appraisal model states otherwise.
- 7 If the examiner or the external examiner is of the opinion that there is an error or discrepancy in an exam or in the appraisal model of said exam, then he evaluates the work as if the exam and its appraisal model were correct. He should, however, report the error or discrepancy to ETE. It is not allowed to deviate independently from the appraisal model. Such errors, if any, will be taken into account when the final marking of the exam is determined by ETE.
- 8 Points are awarded on the basis of answers given by the candidate to each question. No points shall be awarded in advance.
- 9 The grade for the national exam is arrived at in the following fashion: The first and second corrector determine the score of each candidate. Said score is conveyed to the principal. The principal determines the grade of the national exam on the basis of standards with regard to converting score to grade. Said grade may be read from conversion tables that are made available by ETE after the final marking of the exam has been established.

3 Subject-specific rules

For this Central Written Exam Biology PKL first period 2025, a maximum of 76 points can be scored. The exam consists of 48 questions.

4 Appraisal model

Question	Answer	Scores
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The correct answer to a multiple-choice question is awarded 1 point.

- 1 **maximum score 2**
 Letter **P** points to a cell nucleus. 1
 Letter **R** points to cytoplasm. 1

2 **C**

3 **maximum score 2**

<u>letter</u>	<u>name of the system</u>
P	nervous system
Q	vascular system
R	digestive system

For Q, also mark blood vessel system as correct.

Three names correct, 2 points.

Two names correct, 1 point.

Fewer than two names correct, 0 points.

4 **maximum score 2**

function	<i>is</i>	<i>is not</i>
Give shape to the body.	x	
Give firmness to the body.	x	
Create impulses.		x
Provide protection to some organs.	x	

Four rows correct: 2 points.

Three or two rows correct, 1 point.

Fewer than two rows correct, 0 points.

- 5 **maximum score 2**
 Organ system A is the **nervous system**. 1
 Organ system B is the **skeletal system/muscular system**. 1

- 6 **maximum score 2**
 The spider is **Bic** because it has **8 legs**. 1
 The insect is **Tak** because it has **6 legs**. 1

Question	Answer	Scores
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7 maximum score 2

Color of skin, long legs, long antennae and body size

For each correctly mentioned adaptation, award 1 point.

8 maximum score 2

characteristic	<i>is</i>	<i>is not</i>
The plant has no leaves.	x	
The plant has a green color.		x
The plant has a thick layer of wax.	x	

Three rows correct: 2 points.

Two rows correct, 1 point.

Fewer than two rows correct, 0 points.

9 D

10 maximum score 2

Leaves, stem and roots.

If other names, such as branches, are written down, regard that as wrong.

Three names correct, 2 points.

Two names correct, 1 point.

Fewer than two names correct, 0 points.

11 D

12 B

13 maximum score 2

sentence	true	false
The root contains reserve food.	x	
Photosynthesis takes place in the root.		x
The plant is attached to the ground by the root.	x	
The plant absorbs carbon dioxide through the root.		x

Four rows correct: 2 points.

Three or two rows correct, 1 point.

Fewer than two rows correct, 0 points.

Question	Answer	Scores
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14 C

15 maximum score 2

- (1) carbon dioxide
- (2) closed
- (3) evaporation

Three words correct, 2 points.

Two words correct, 1 point.

Fewer than two words correct, 0 points.

16 maximum score 2

Words that should be underlined are:

Fourth

1

Consumer

1

17 B

18 maximum score 2

sentence	true	false
The digestive system kills bacteria in the stomach.	x	
Organs of the digestive system make enzymes.	x	
The blood absorbs nutrients in the esophagus.		x

Three correct, 2 points

Two correct, 1 point

Fewer than two correct, 0 points

19 maximum score 2

organ	corresponding number
gall bladder	2
liver	1
pancreas	7

Three numbers correct, 2 points.

Two numbers correct, 1 point.

Fewer than two numbers correct, 0 points.

20 B

Question	Answer	Scores
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21 A

22 maximum score 2

Words that should be underlined are:

Colon

1

Water

1

23 maximum score 2

Calcium is a (1). **building material** that is necessary for (2). **strong bones**.

1

Fat is a (3). **fuel** that is necessary for (4). **combustion**.

1

24 maximum score 1

sugar / glucose/ carbohydrates / protein

25 B

26 maximum score 2

condition	do	do not
brittle bones		x
blindness		x
heart attack	x	

Three rows correct: 2 points.

Two rows or one row correct, 1 point.

Zero rows correct, 0 points.

27 maximum score 1

During inhalation, the diaphragm muscles are **tense**.

During inhalation, the intercostal muscles are **tense**.

28 maximum score 2

blood vessel	name
P	pulmonary artery
Q	(inferior) vena cava
R	pulmonary vein
S	aorta (body artery)

Four rows correct: 2 points.

Three or two rows correct, 1 point.

Fewer than two rows correct, 0 points.

Question	Answer	Scores
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29 maximum score 2

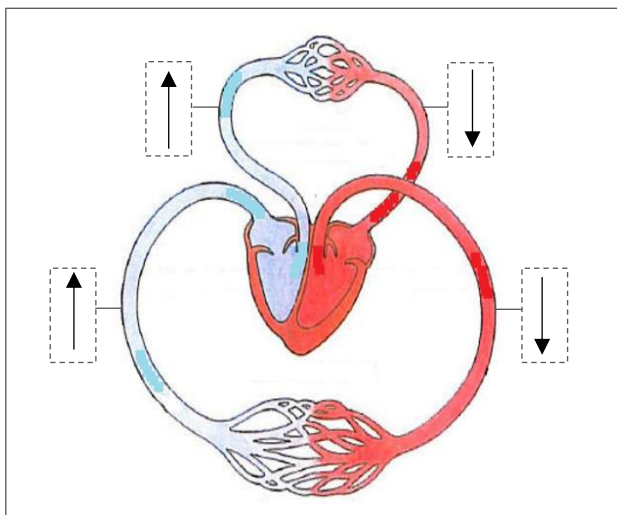
name	number
vein	5 or 6 or both.
lymphatic vessel	3 or 9 or both. Also mark 1 as correct.
artery	2 or 4 or both.

Four rows correct, 2 points.

Three or two rows correct, 1 point.

Fewer than two rows correct, 0 points.

30 maximum score 2



The arrows for the small blood circulation correct, 1 point.

The arrows for the large blood circulation correct, 1 point.

31 B

32 maximum score 1

Word(s) to be underlined is: **white blood cells**.

33 maximum score 2

Letter P

1

Name: kidney

1

Question	Answer	Scores
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34 maximum score 2

layer	name
P	epidermis
Q	dermis
R	subcutaneous tissue / connective tissue / subcutaneous connective tissue /subcutaneous tissue

Three names correct, 2 points.

Two names correct, 1 point.

Fewer than two names correct, 0 points.

35 maximum score 2

statement	true	false
Layer P protects against heat.		x
Layer P protects against damage.	x	
Layer P protects against infections.	x	

Three rows correct, 2 points .

Two rows correct, 1 point.

Fewer than two rows correct, 0 points.

36 maximum score 2

Words that should be underlined are:

Sentence 1: external

1

Sentence 2: external

1

37 maximum score 2

Joshua's action	sensory nerve cell	movement nerve cell
Feeling something strange in his pocket.	x	
Turning around.		x
Seeing that the man runs away.	x	

Three rows correct, 2 points

Two rows correct, 1 point

Fewer than two rows correct, 0 points

38 D

Question	Answer	Scores
----------	--------	--------

39 maximum score 2

statement	true	false
The thyroid hormone is produced in Q.	x	
Glucagon is produced in R .		x
Islets of Langerhans are located in S.	x	

Three rows correct, 2 points.

Two rows correct, 1 point.

Fewer than two rows correct, 0 points.

40 maximum score 2

part	letter
cochlea	
Eustachian tubes	T
eardrum	R
hammer	P
sense of balance	Q
ear canal	

Four rows correct: 2 points.

Three or two rows correct, 1 point.

Fewer than two rows correct, 0 points.

41 C

42 maximum score 2

part	name
P	oviduct
Q	uterus
R	vagina

Three letters correct, 2 points.

Two letters correct, 1 point.

Fewer than two letters correct, 0 points.

Question	Answer	Scores
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43 maximum score 2

- (1) sperm duct
- (2) prostate
- (3) urethra

Three filled in and correct, 2 points.

Two or one filled in and correct, 1 point.

Zero correct, 0 points.

44 maximum score 1

Phase 4 is called: **ovulation**

45 maximum score 1

Q → S → P → R

46 C

47 maximum score 1

S → P → T → Q → R

48 C