Q-EXAM® INSTITUTION AUTHORS' MANUAL

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IQUL Digital Assessment

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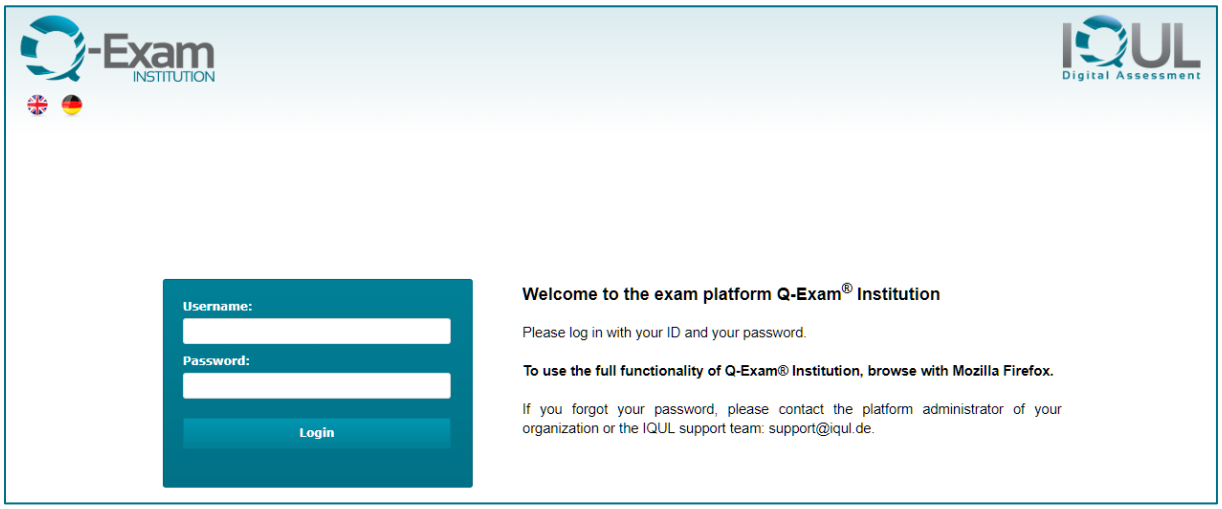
1. General Overview

1.1. Login



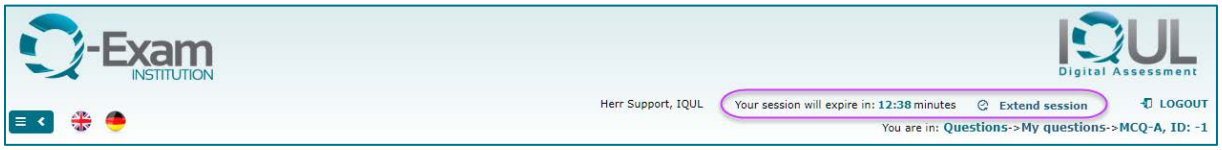
Exam questions are created in the online exam administration platform Q-Exam® Institution.

Link to the platform: https://institution.q-exam.com

Your access data has been sent to you by separate email. If you have any questions, contact the Q-Exam® contact person for your organization or the IQUL Support Team:

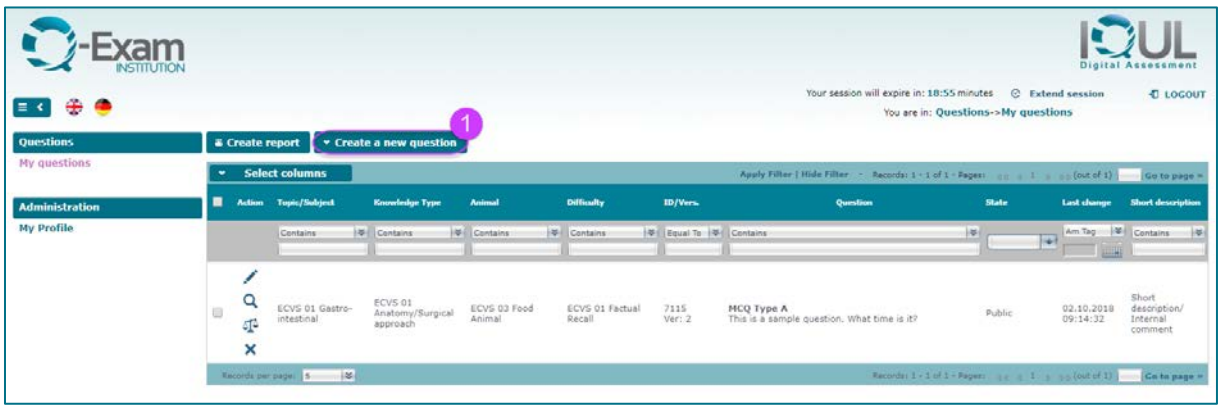
Email: support@iqul.de

Phone: +49 2204 585-0



For security reasons, your session automatically expires after 20 minutes of inactivity. Your session time is displayed at the top right of the screen. It will automatically lengthen by each click in the platform. The session time can also be extended manually.

1.2. Section: My Questions



The section "My questions" shows all your personal exam questions. It also displays any questions shared with you by other authors.

Symbols:

- Pen: Edit question.
- Magnifier: Display question preview. The question preview will be generated below the table.
- Scales: Rights management. Share question with people or groups.
- X: Delete question.

Key button:

- Create a new question (1): Creates a new exam question.

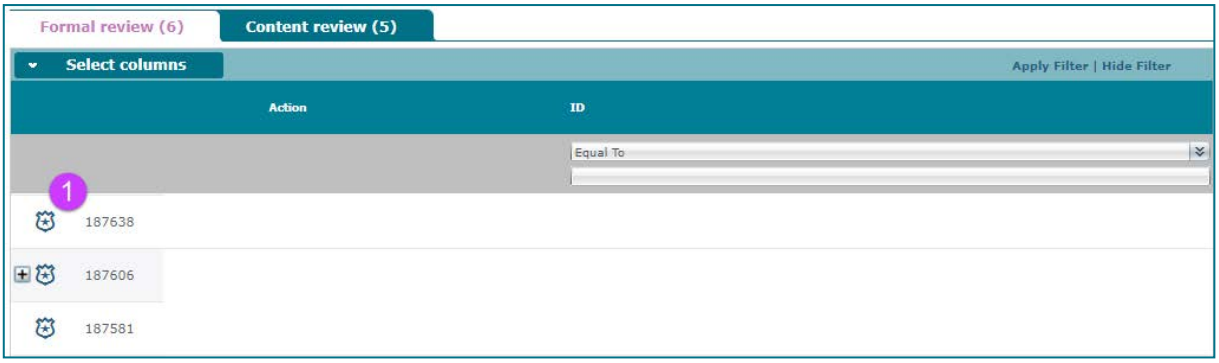
1.3. Section: My Review

The section "My reviews" shows all exam questions shared with you to review. The review process in general takes two separate steps:

After the author has reassigned a question to the “public pool”, the review process starts with a formal review of the question. At that stage, the reviewer is advised to look for superficial, as well as methodical, exam-didactical or systematical errors. The formal review does not have to be done by a content expert in the knowledge area of this question. If the reviewer thinks that the question needs to be revised, the question will be send back to the author with a feedback from the reviewer and the request to rework it. The author will receive an email.

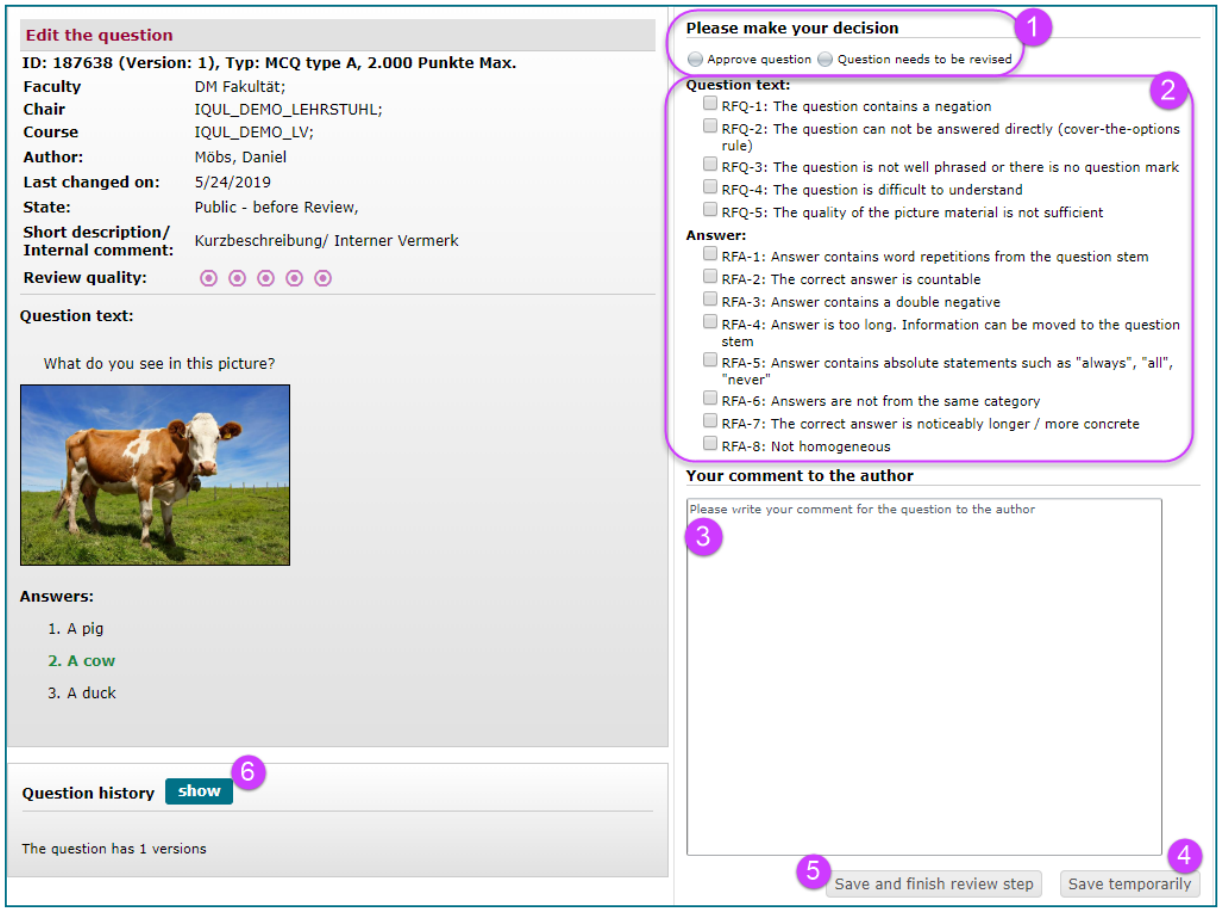
Once the formal reviewer has approved the question, it will be forwarded to a content reviewer. During the content review the question is checked for logical, content-related errors. This stage of the review process needs to be done by an expert in the knowledge area of this question!

If the reviewer thinks that the question needs to be revised, the question will be send back to the author with a feedback from the reviewer and the request to rework it. The author will receive an email. Every time after editing the question, the review process starts over again beginning with a formal review.



Select the question you want to review by clicking on the batch symbol (1).

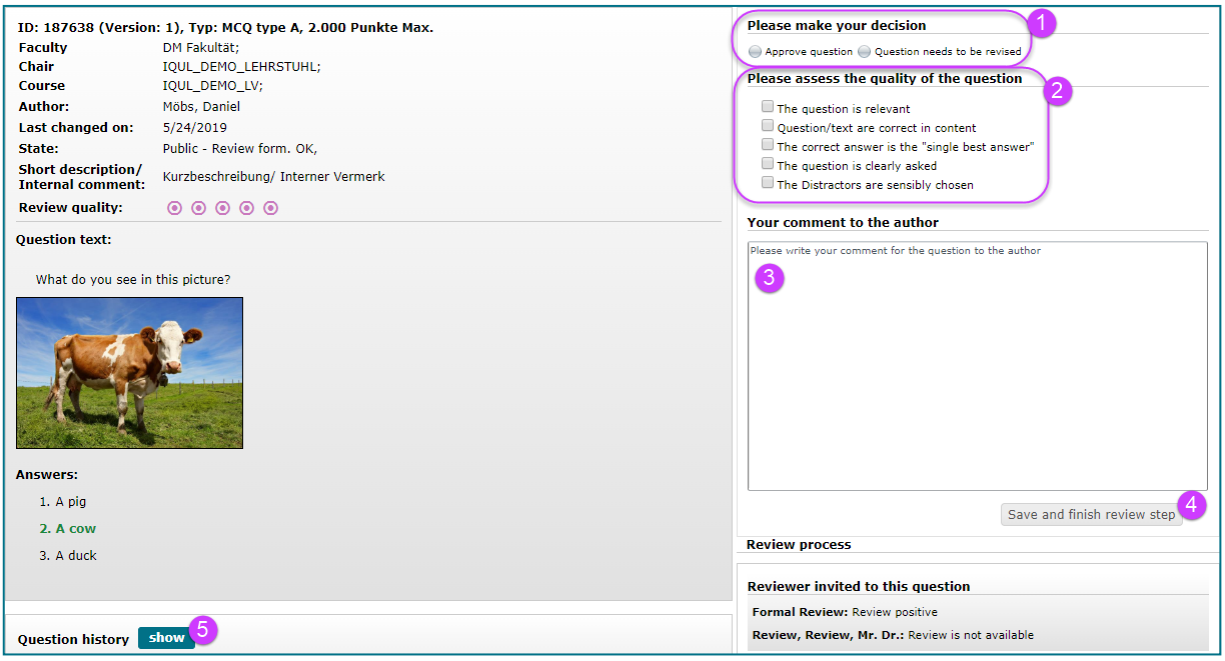
1.3.1. Formal Review



Key settings:

1. Approval / disapproval: Decide, whether you approve the question or not.
2. Decision aid: Please check the boxes, if the statement fits the given questions/answers.
3. Comments: Leave a comment to the author of the question.
4. Save temporarily: Save your progress and come back to the question later.
5. Save and finish: Conclude this step of the review process.
6. Question history: Look up previous versions of this question.

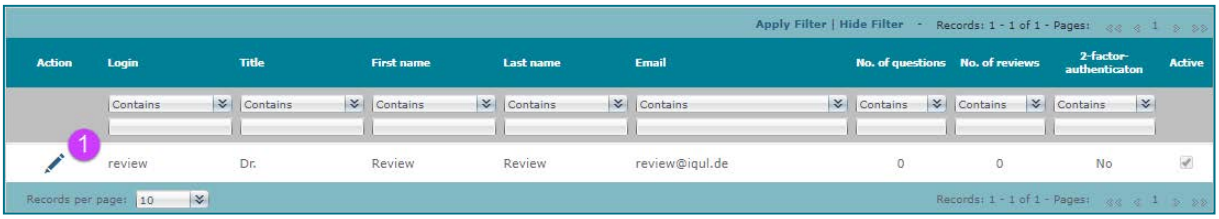
1.3.2. Content Review



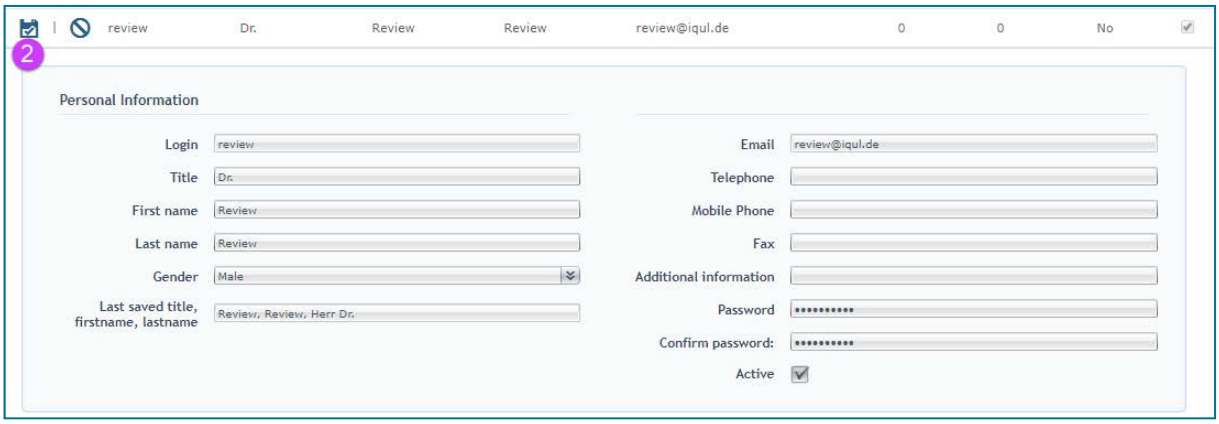
Key settings:

1. **Approval / disapproval:** Decide, whether you approve the question or not.
2. **Quality check:** Please check the boxes, if the statement fits the given questions/answers.
3. **Comments:** Leave a comment to the author of the question.
4. **Save and finish:** Conclude the review process.
5. **Question history:** Look up previous versions of this question.

1.4. Section: My Profile

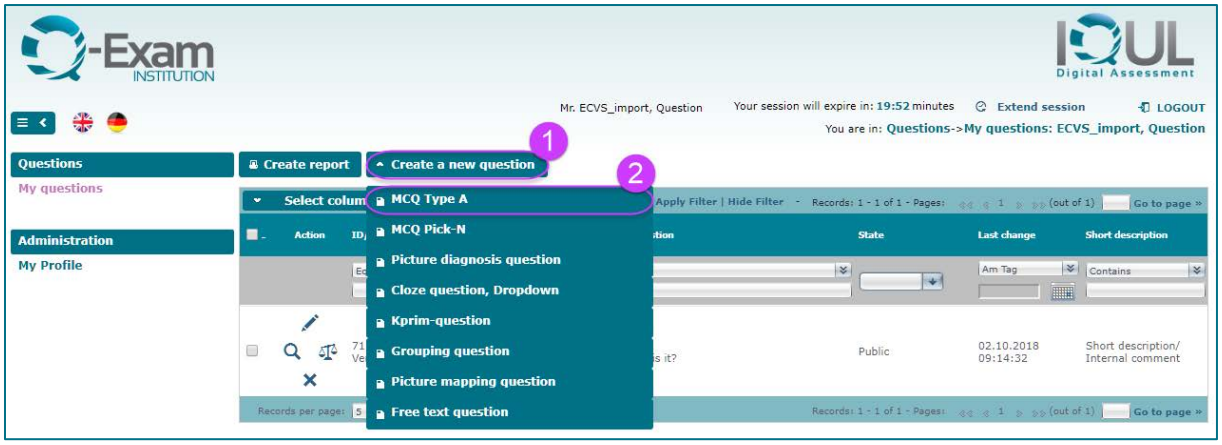


Edit your profile by clicking the pen button (1).



Save your changes with the saving button (2).

2. Creating Questions

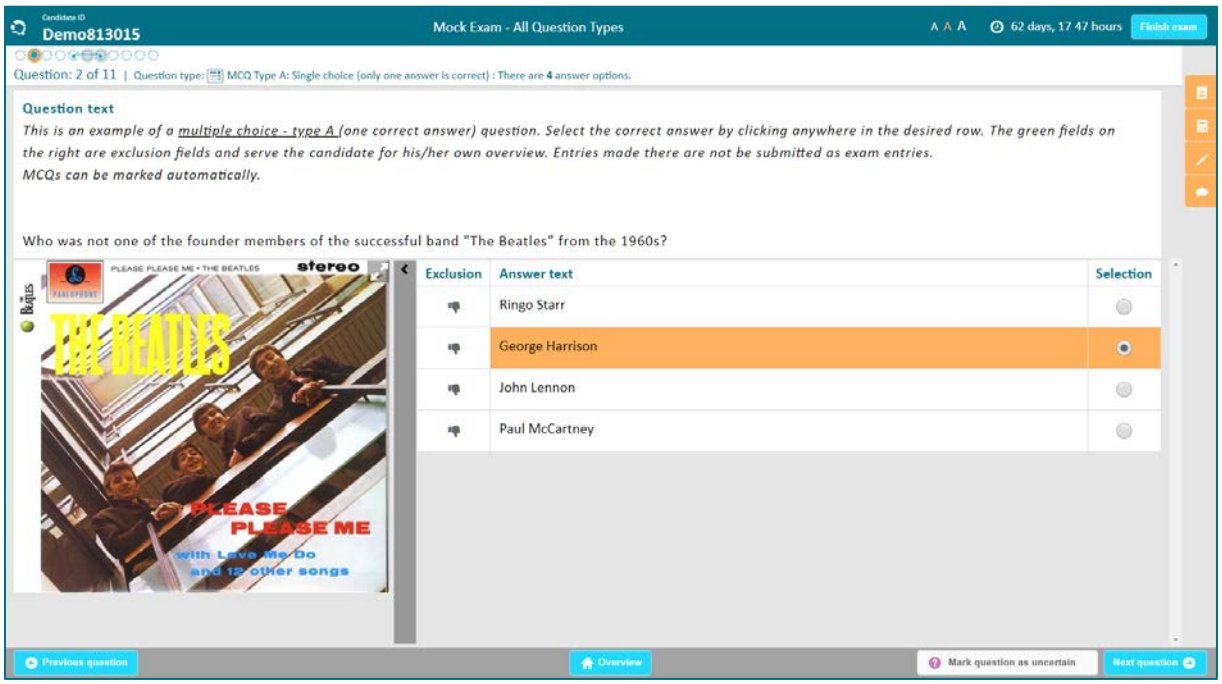


Create a new question by clicking on "Create a new question" (1) in the menu "My questions". Select the desired question type (2).

IMPORTANT: Save changes to the question as “Version”. Saving your changes as “Related” creates a copy of the question with a new question ID.

2.1. Overview of the Different Question Types

2.1.1. MCQ Type A



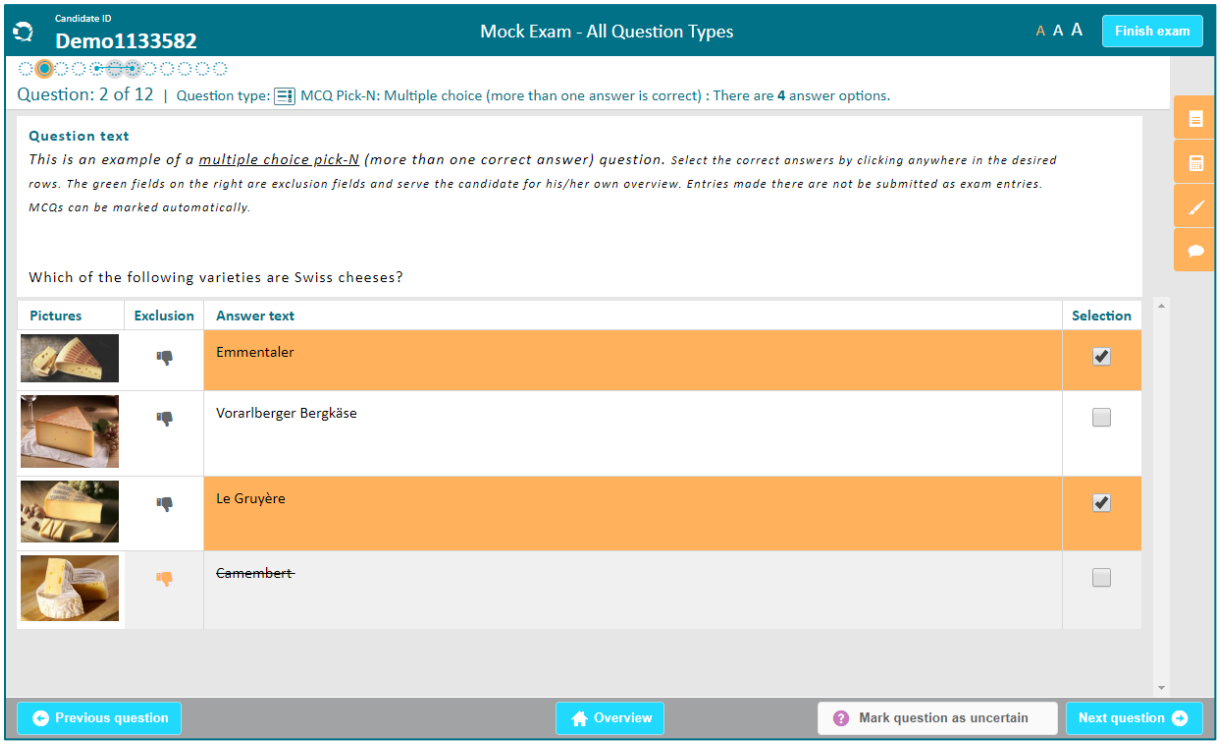
Display of a MCQ Type A question in Q-Examiner Secure (candidates' view).

An MCQ Type A question consists of a question stem and several answer options. Exactly one of the answers is correct. The question can be enriched with pictures.

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.2. MCQ Pick-N

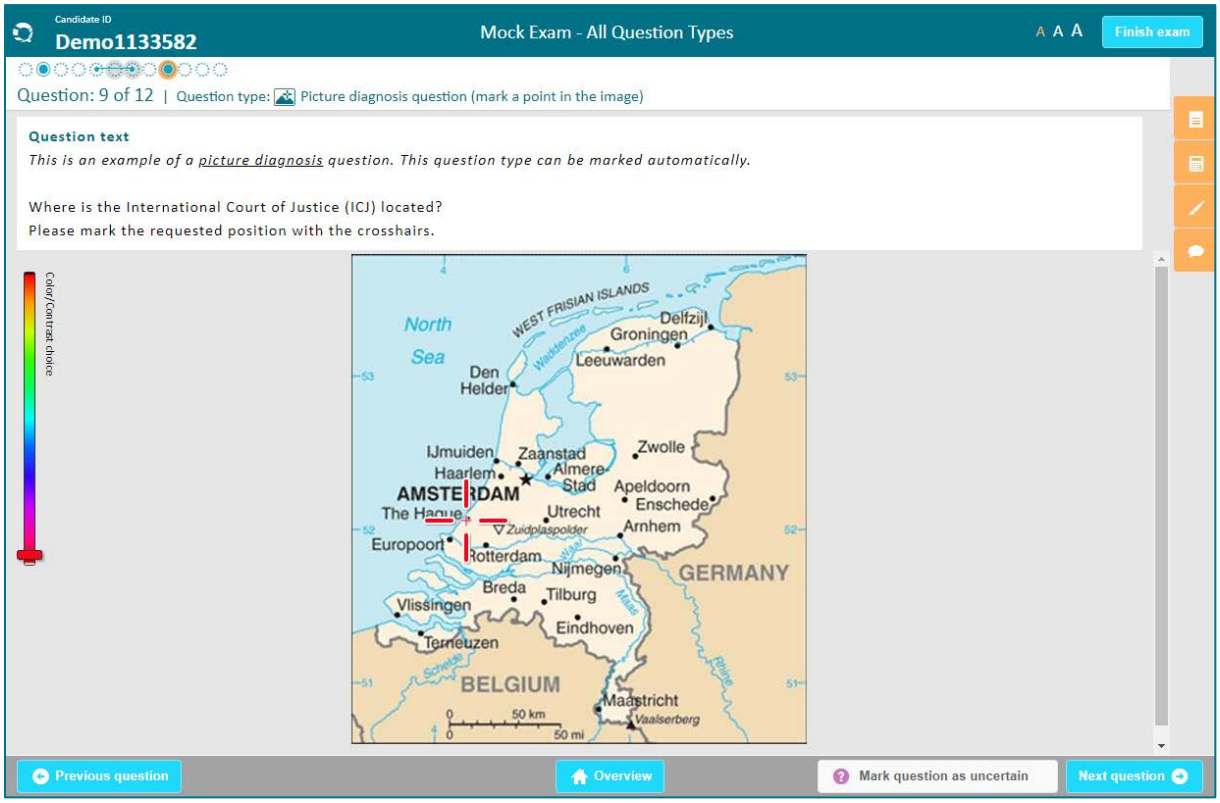


An MCQ Pick-N question consists of a question stem and several answer options. Several or all of the answers can be correct. The question can be enriched with pictures.

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.3. Picture Diagnosis Question

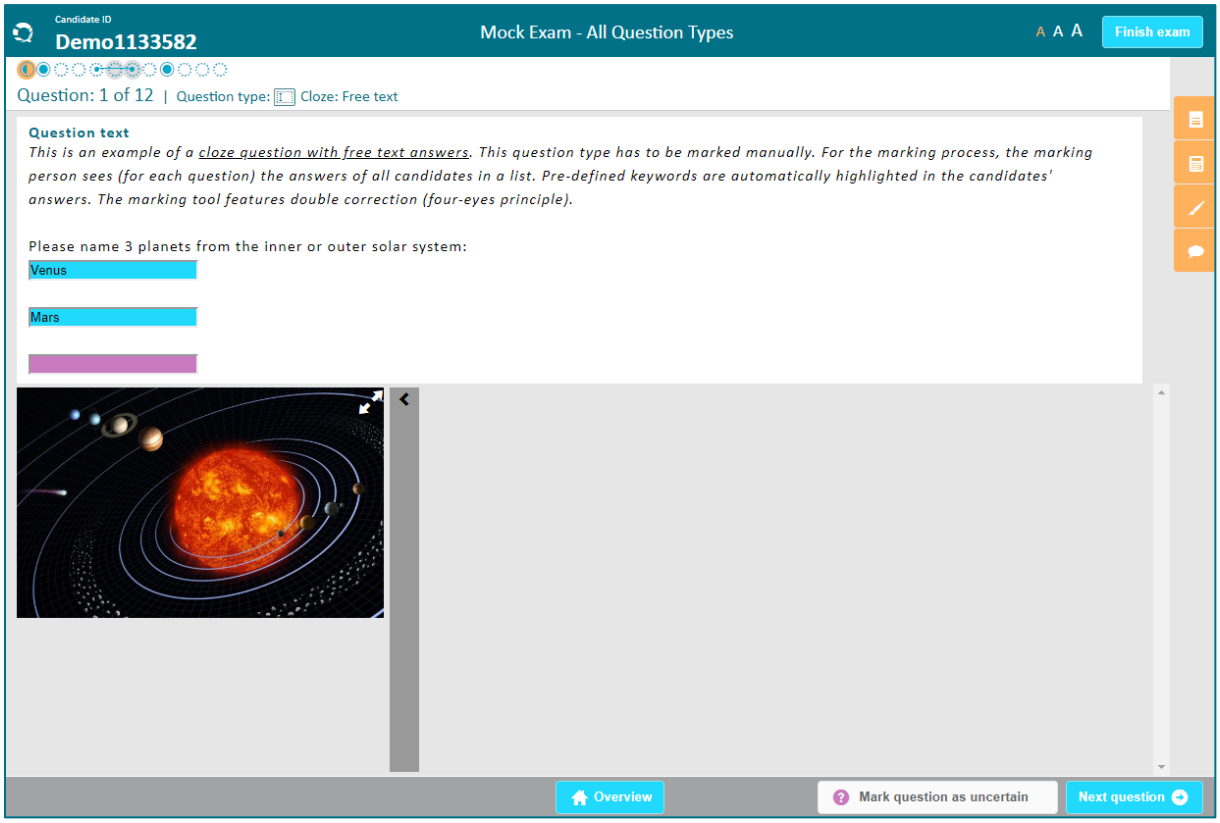


Central to a picture diagnosis question is a picture. The candidate is asked to mark a specific area in this picture.

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.4. Cloze Question, Freetext

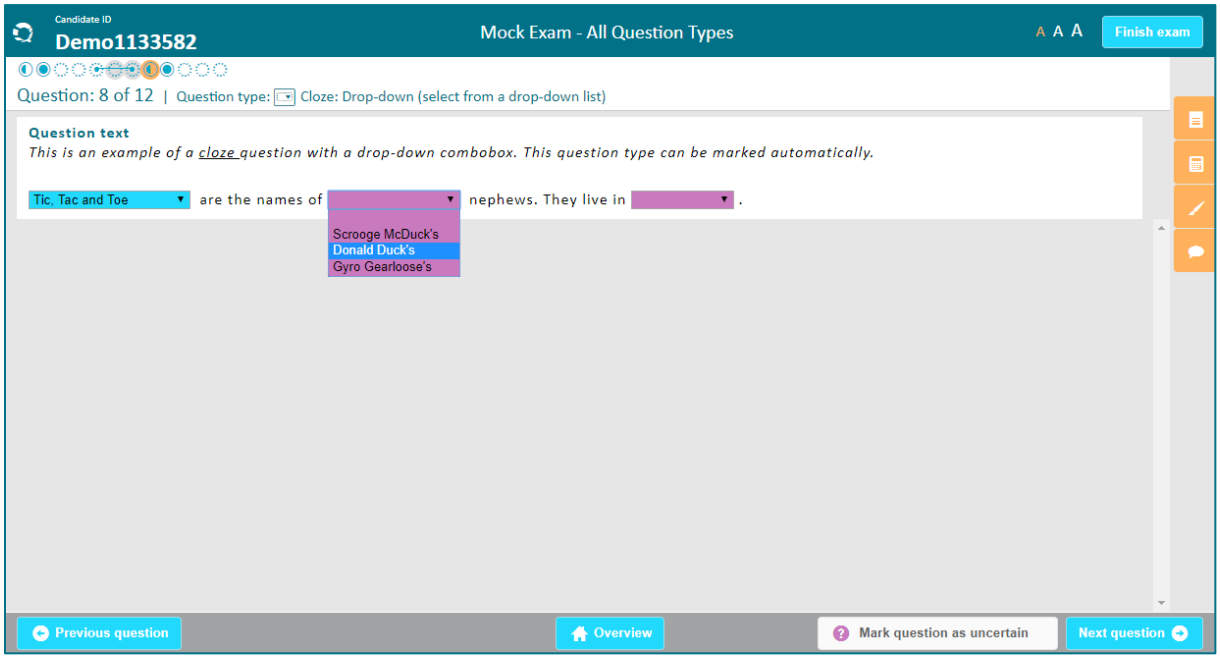


With the option of the cloze question (free text) you can create a cloze, which gaps the examinee has to fill individually. The question can be enriched with pictures.

Marking: This question type needs a closer revision in terms of marking. In the automatic pre-marking process, points are pre-assigned if candidates name one of the correct answers. However, all pre-assigned points need to be confirmed or adjusted manually afterwards.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.5. Cloze Question, Dropdown

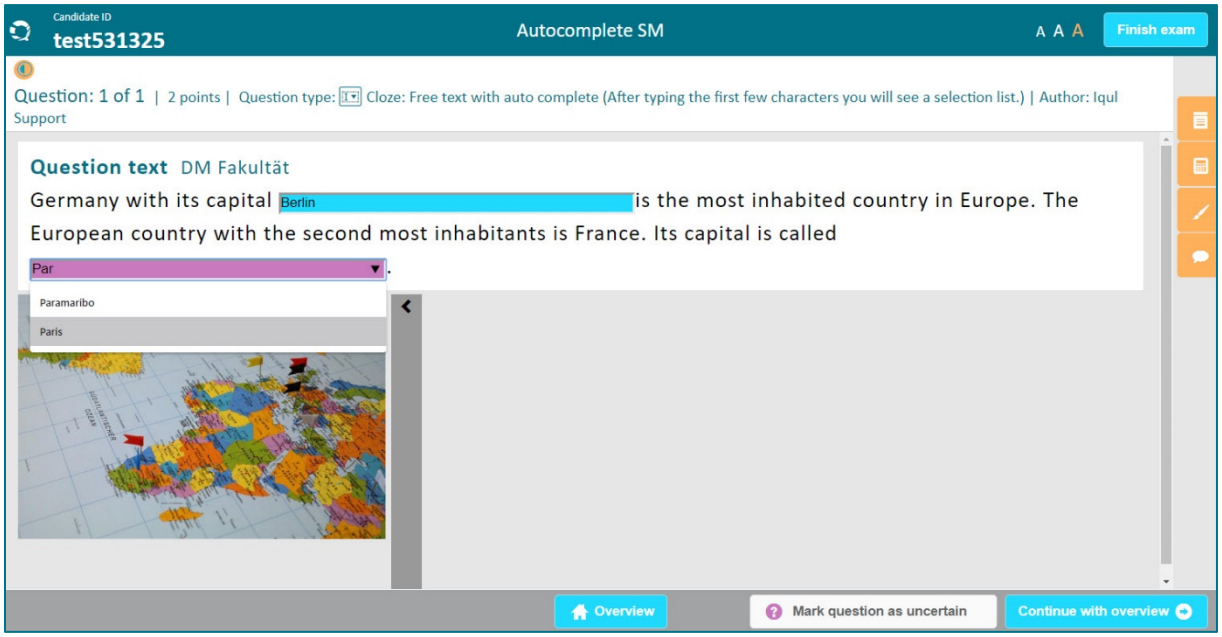


With the option of the cloze question (drop down) you can create a cloze, which gaps hold several available answer options as a drop down menu. The candidate has to select the correct answer. The question can be enriched with pictures.

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.6. Cloze Question, Autocomplete

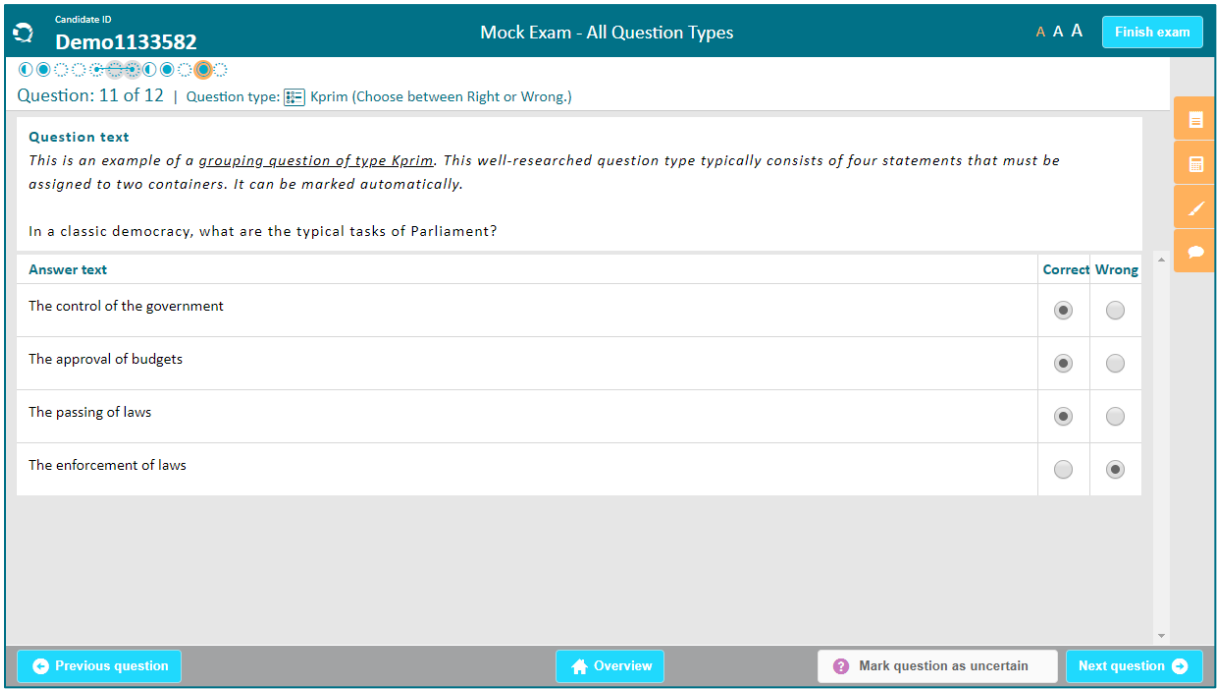


With the option of the cloze question (autocomplete) the candidate is asked to complete given statements. If the candidate starts typing his answer into one of the gaps, auto-completion options are displayed in a drop-down menu from which he can choose. The question can be enriched with pictures.

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.7. Kprim-Question

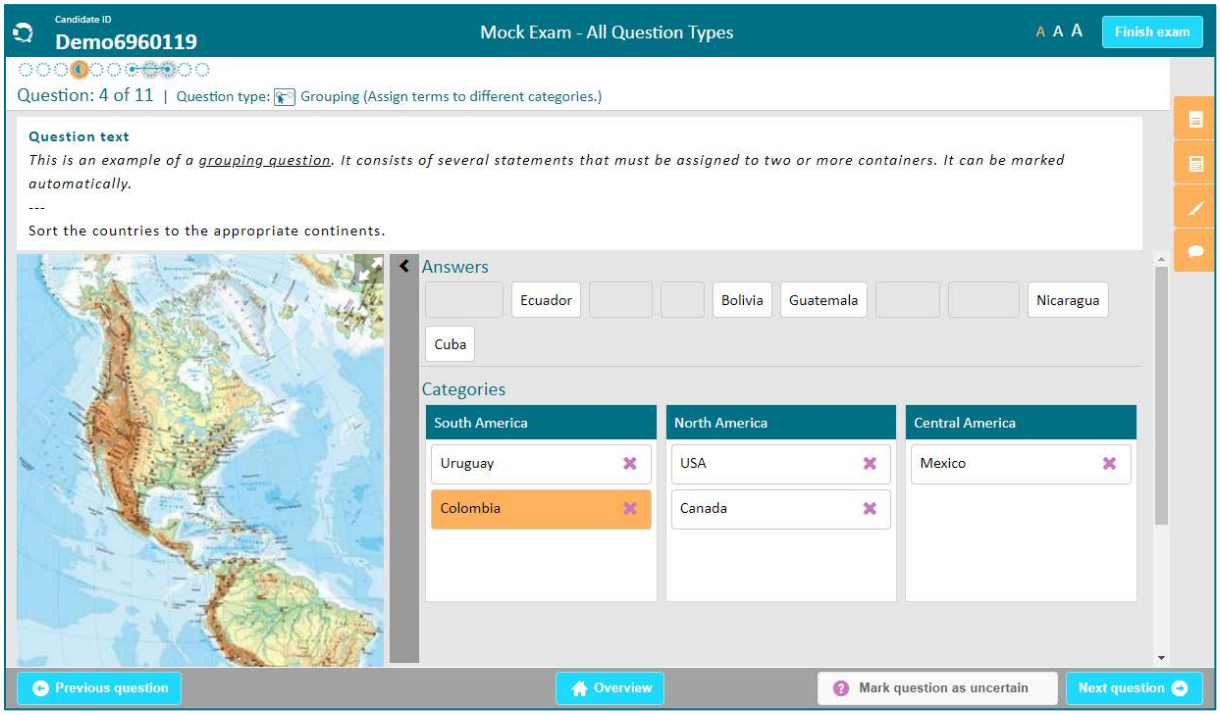


Kprim is a type of grouping question. Typically, it consist of four statements that must be assigned to two containers (usually “correct” or “wrong”).

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.8. Grouping Question

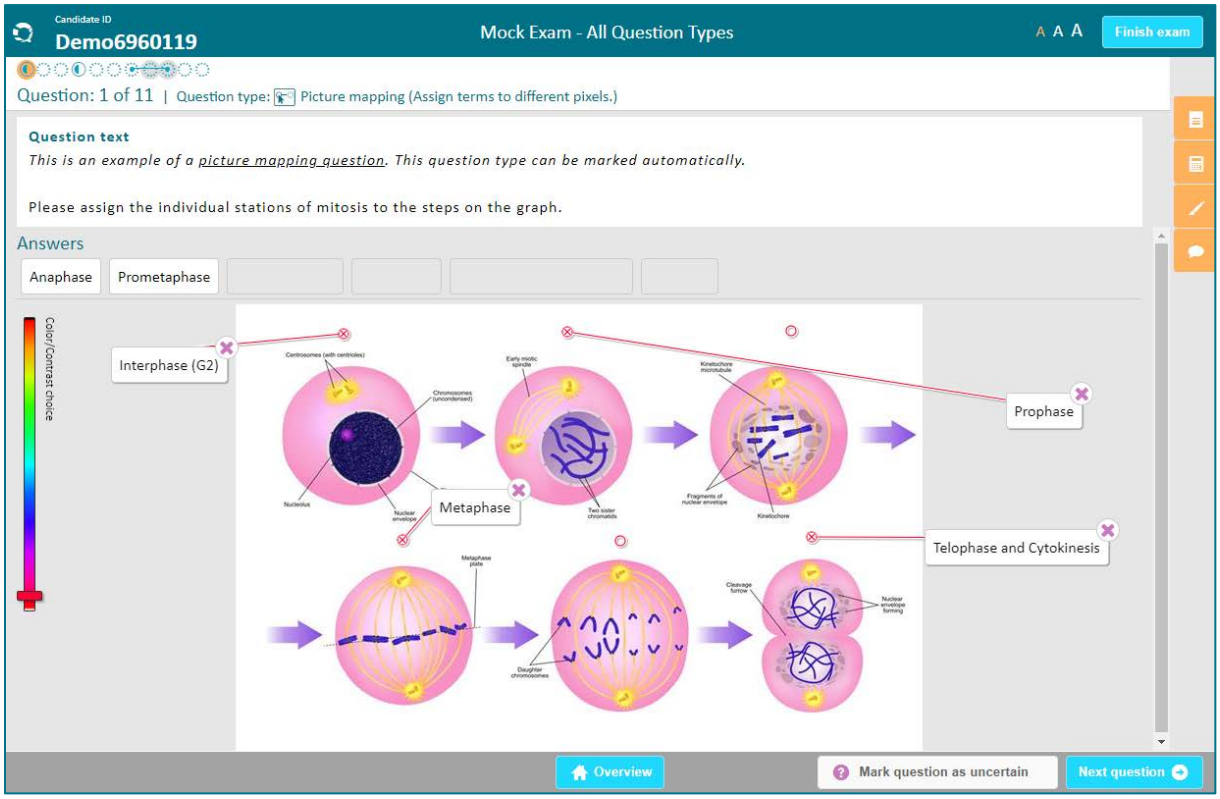


The classic grouping question consists of several statements that must be assigned to two or more (maximum is five) containers.

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.9. Picture Mapping Question

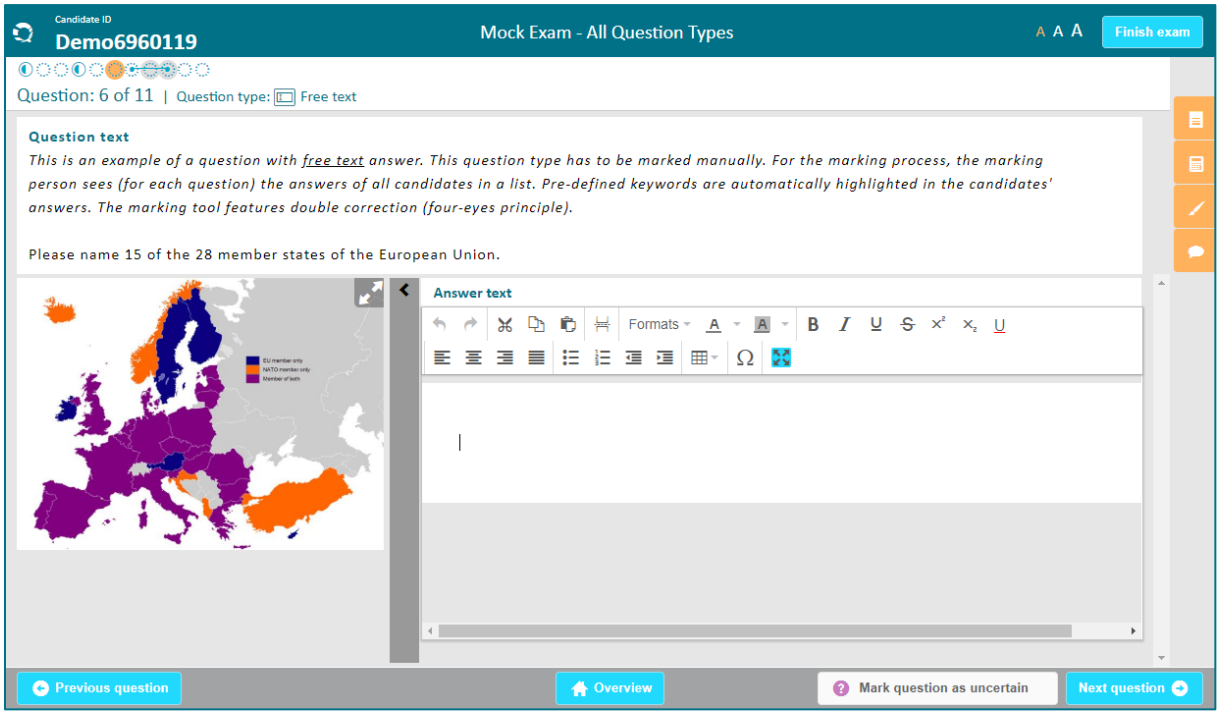


Central to a picture mapping question is a picture. There are several answers, statements or terms given, which have to be assigned to different dots on the picture.

Marking: This question type is marked automatically.

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.1.10. Free Text Question

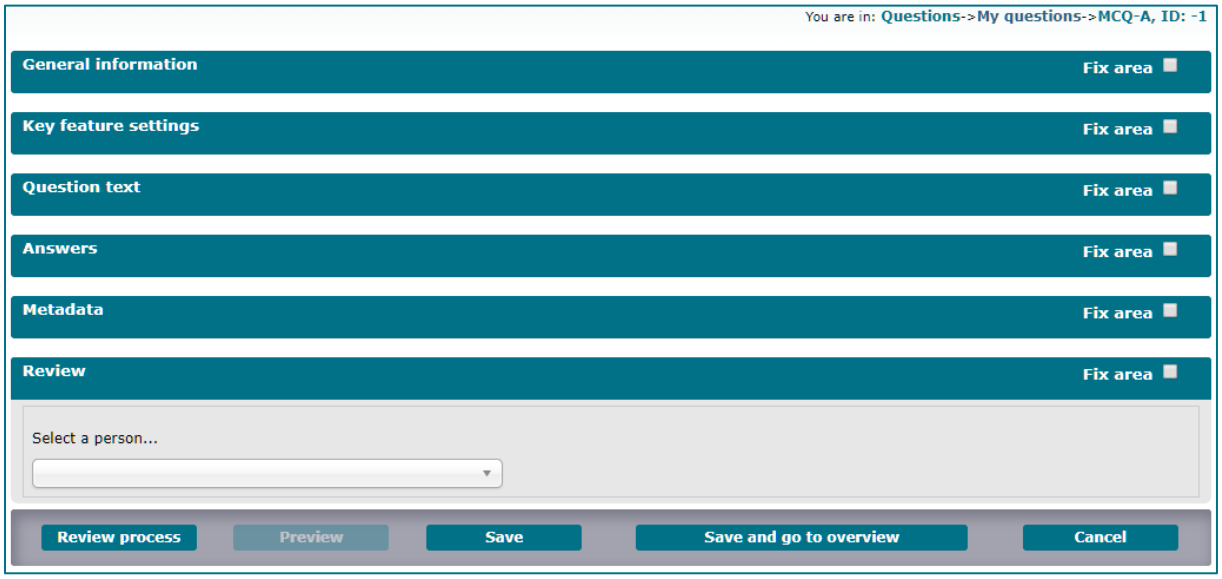


The candidate can answer a free text question in an individual free text. The question can be enriched with pictures and other documents.

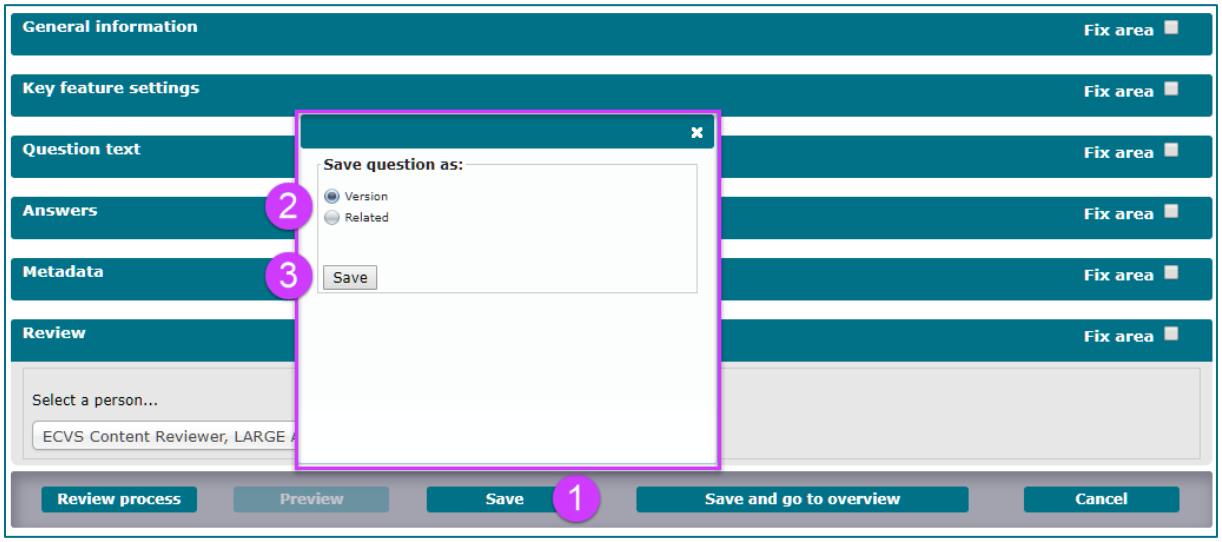
Marking: This question type has to be marked manually. In the marking process, the corrector sees (for each question) the answers of all candidates in a list. Pre-defined keywords are automatically highlighted in the candidates' answers. The marking tool features double correction (four-eyes-principle).

Click here to jump directly to the specifics of creating questions and answers for this particular type of exam question.

2.2. Structure of the Form



Each question entry form contains six sections. A click on the turquoise colored bar opens the respective input area of a section.

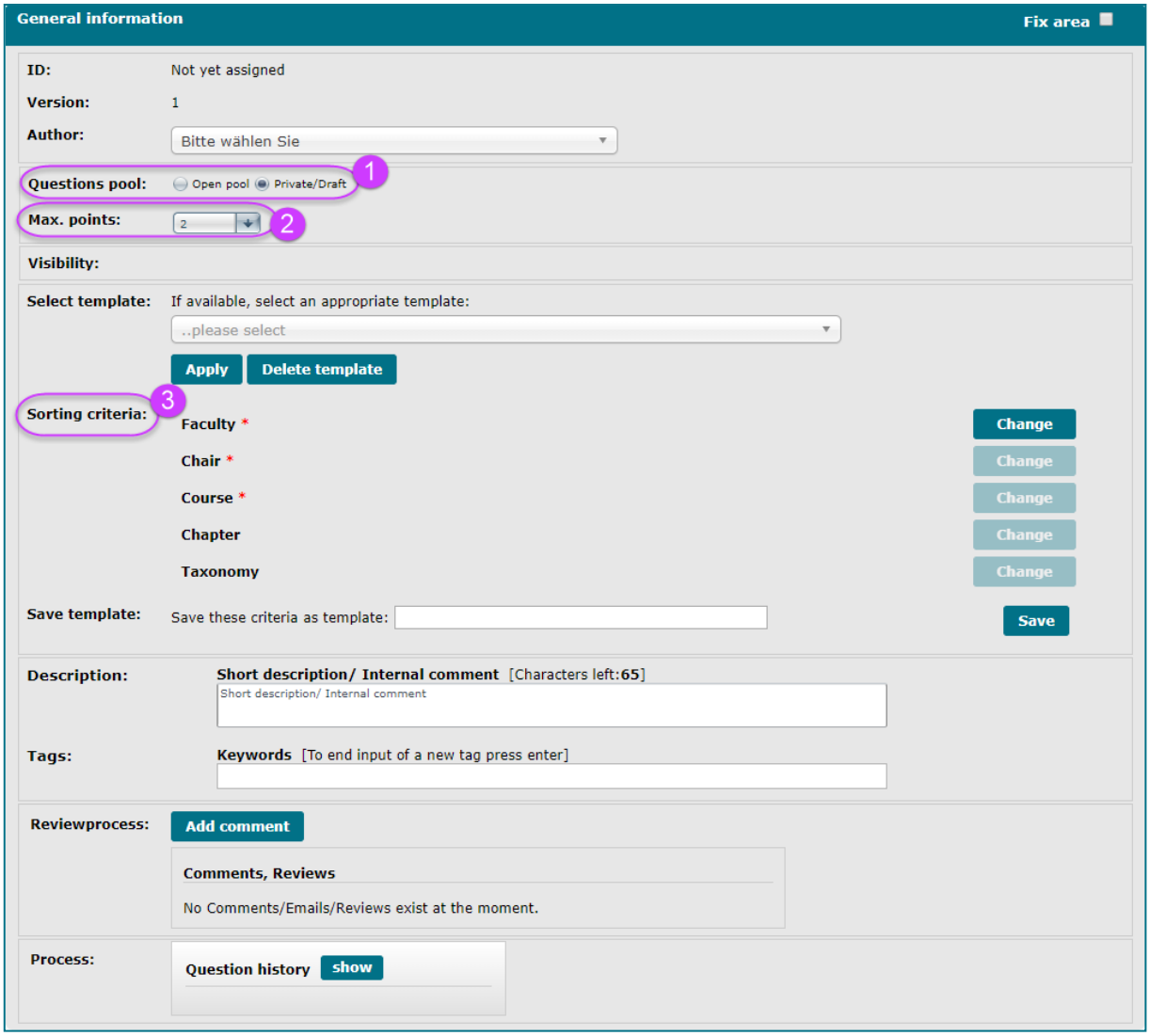


Please save your entries regularly by pressing the "Save" button (1) at the bottom of the form.

- Select "Version" (2) to save a new version of the same question. Question ID remains the same, version counter raises by one.
- Select "Related" (2) to make a copy of the current question. The question gets a new question ID.

Confirm your selection again with "Save" (3).

2.3. Section: General Information



Key settings:

1. Question pool:

   Private / Draft : Your private draft mode. Only you our people with whom you have explicitly shared the question can see this question.

   IMPORTANT: After completing an exam question, please change the status to "Open pool".

   Open Pool: Questions go through a review process and can then be used in exams afterwards.

2. Max. points: Define the desired maximum point value for this question.
3. Sorting criteria: Allocate blueprint categories to an exam question. Fields with * are mandatory.

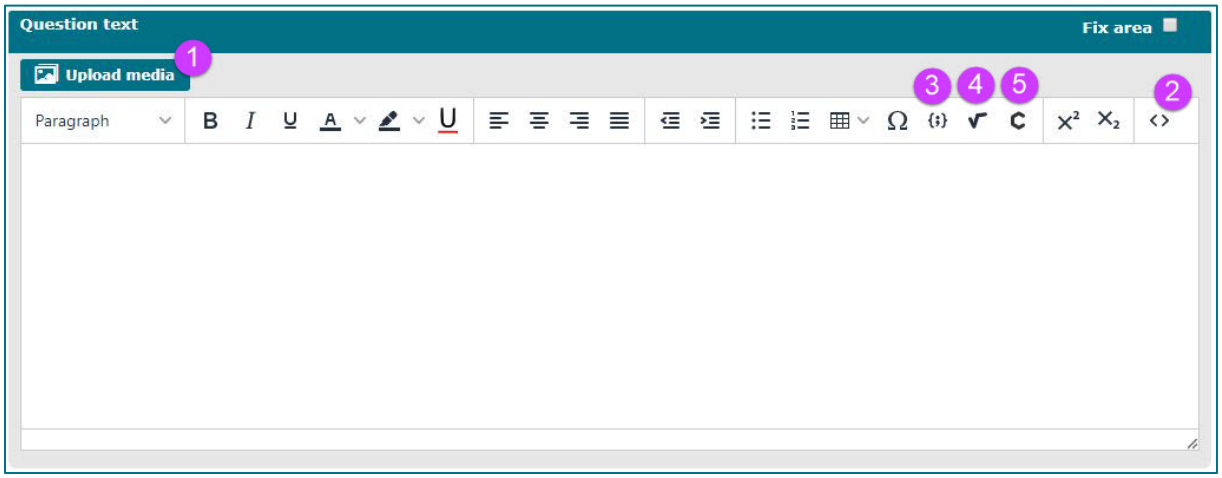
Save template:	Create your own blueprint templates. Your templates are only visible to you.

2.4. Section: Key Feature Settings

Create groups of related exam questions (key feature case studies). The presentation of the question group in the exam follows special rules.

Questions in a key feature group always appear in the order in which they have been created. They will not be randomized. Subsequent questions in a key feature question group are hidden and cannot be seen by the candidate until he has answered his current question. Before moving to the next question, the candidate needs to confirm his entries and cannot change them anymore afterwards. He can navigate back but all answer fields are displayed in a read-only mode. This method allows to create didactical relationships between different questions in a group. E.g. one can provide the correct answer to the previous question if one wants to control for subsequent faults.

2.5. Section: Text Editor



The text editor is used to create exam questions and possible answers. Similar to an ordinary word processing program, the editor has a wide range of functions that make it easy to create the desired text format. For example, you can include software code, create tables, insert mathematical or chemical formulas and make use of an extensive library of special characters.

Key settings:

1. **Upload media:** Upload images or PDFs to an exam question.

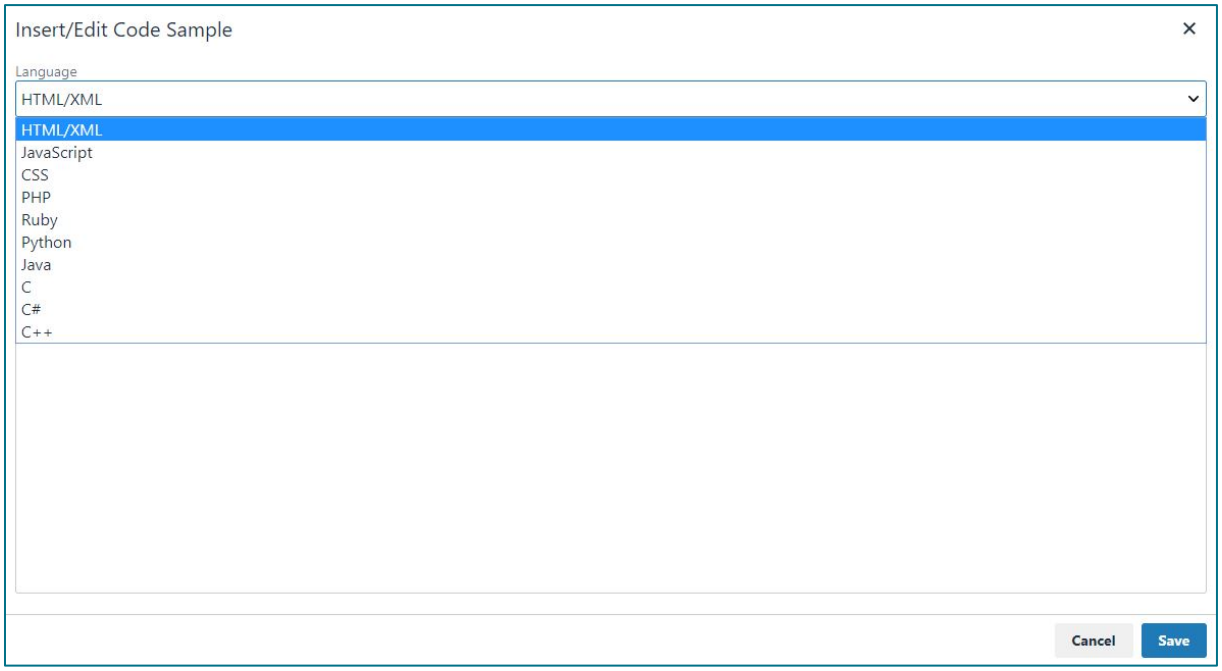
   IMPORTANT: Always upload images in an image file format (e.g. .jpg) rather than PDF. A question can have multiple images but only one PDF! Please note that the system will compress the images to reduce data traffic during the exams. Make sure to edit pictures before uploading them in order to present the relevant part of the depiction best (cut away irrelevant parts).

2. **< >:** Shows the HTML formatting of the entered text.

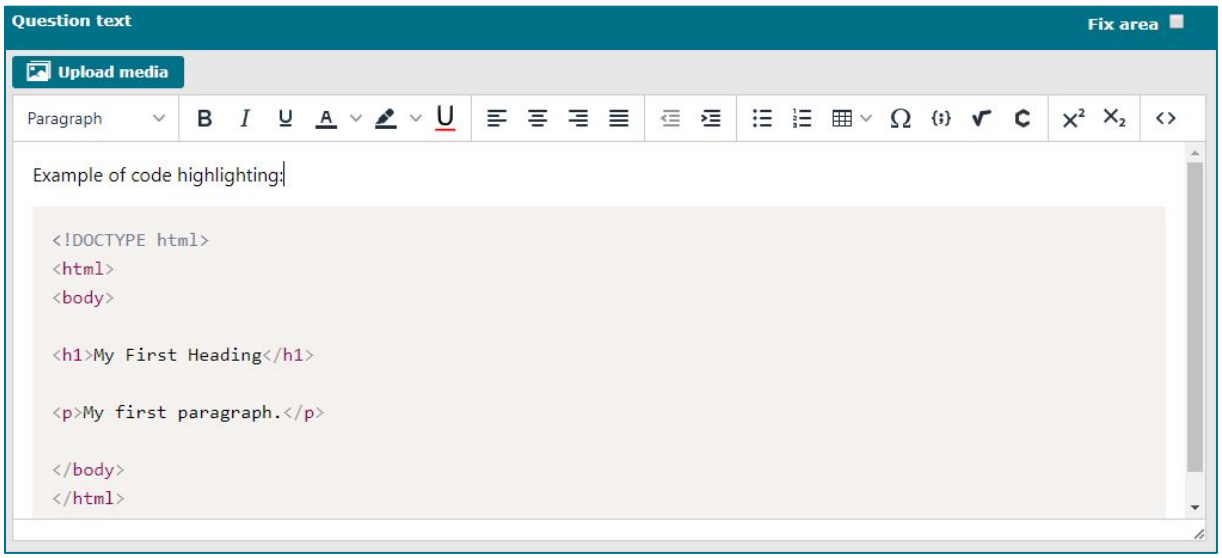
   IMPORTANT: You can copy texts including formatting into the text field. However, for a clean presentation in the question in the exam it is recommended to import unformatted text. With the "HTML text" view you can remove unwanted or invisible HTML text formatting.

3. **Code sample:** Include software code in your question. This feature automatically formats and clearly displays code for many programming languages.
4. **Mathematical formula:** Add mathematical formulas to your question.
5. **Chemical formula:** Add chemical formulas to your question.

2.5.1. Software Code

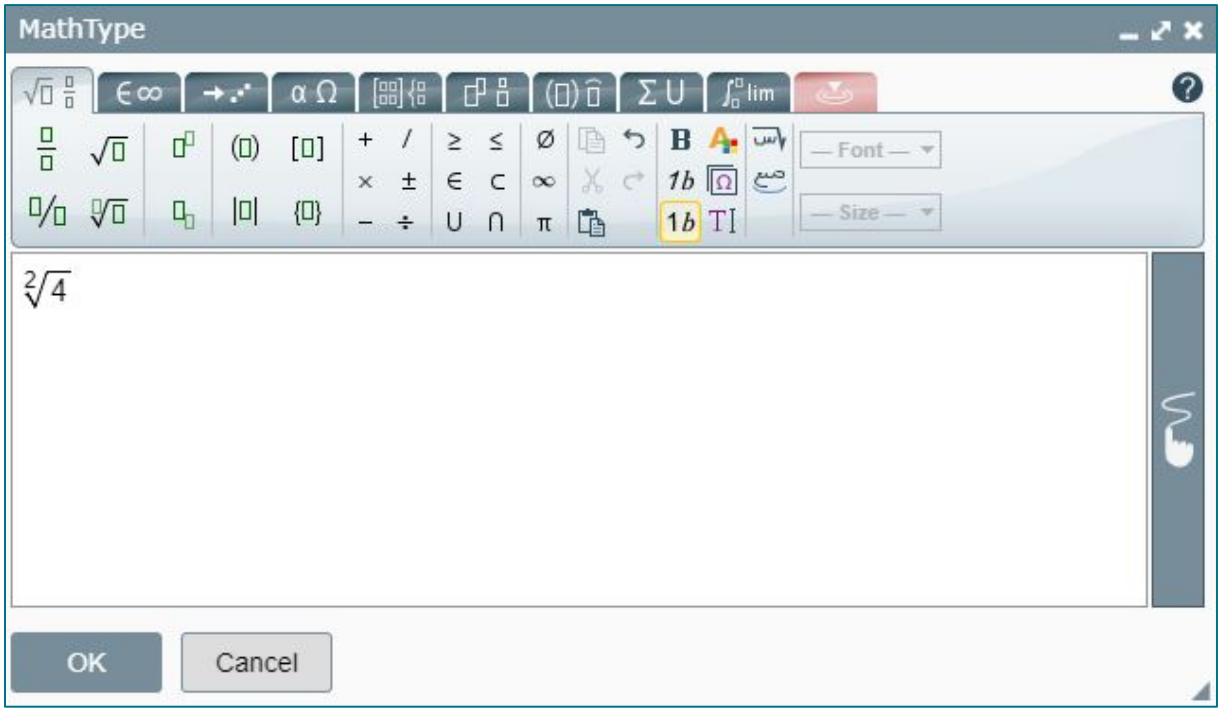


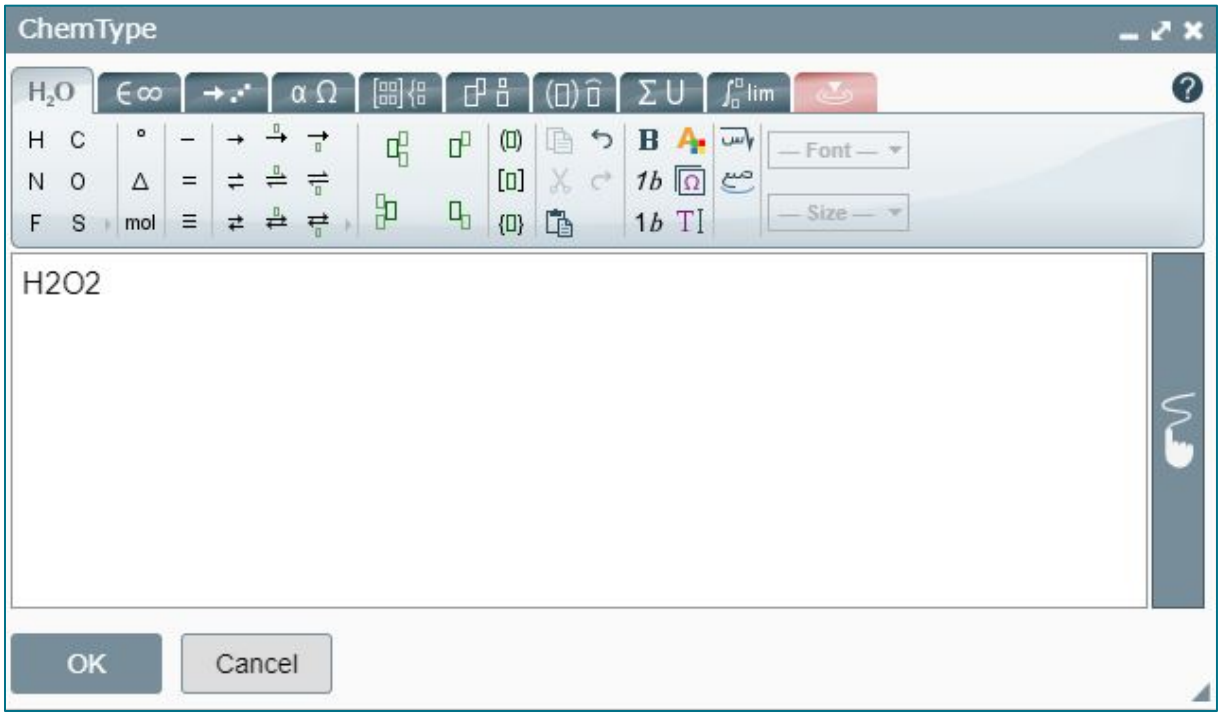
The text editor displays software code in a legible color. First select the desired programming language.



Afterwards you can copy code into the given field and it will be displayed as shown in this example.

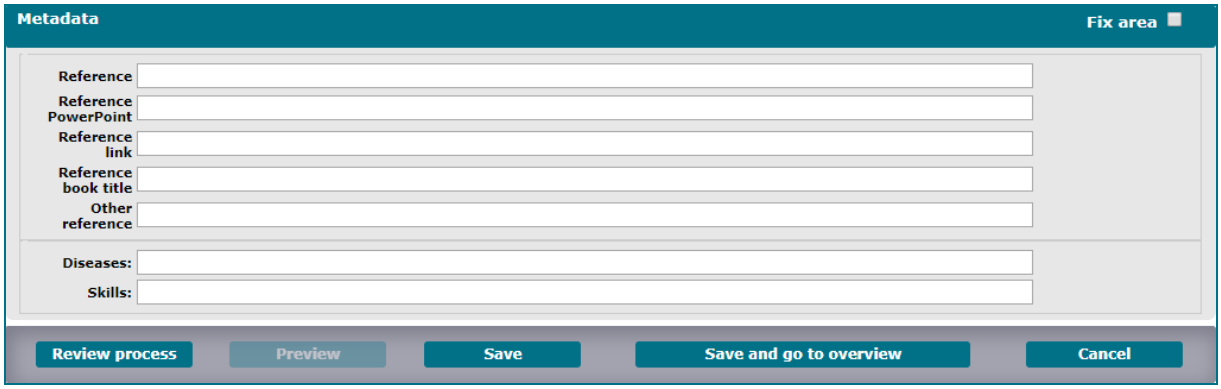
2.5.2. Mathematical and Chemical Formulas





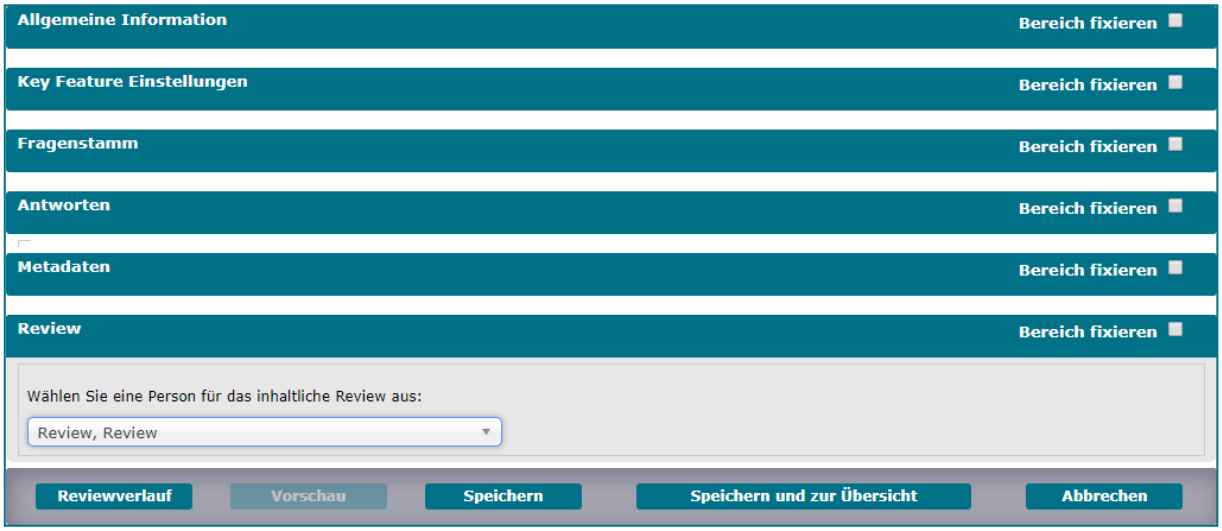
With the functions MathType and ChemType the text editor offers the possibility to integrate mathematical or chemical formulas into an exam question in a simple and uncomplicated way. In addition, a separate button allows handwriting for both mathematical and chemical formulas.

2.6. Section: Metadata



Fill this section with references and other data, which help your peers to retrace every step of the process to create the question.

2.7. Section: Review

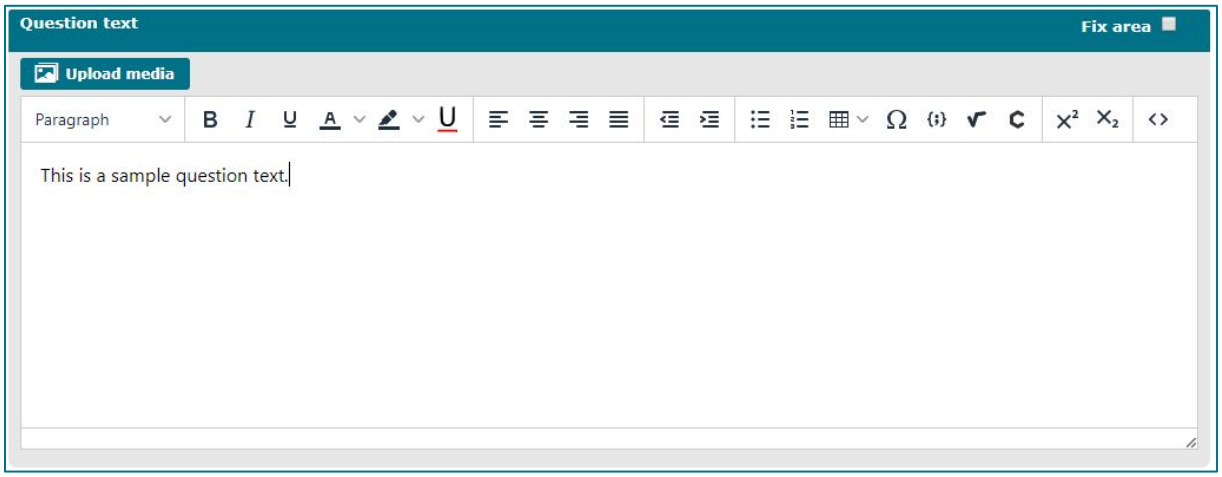


After you reassigned the question to the public pool, decide who should be allowed to review the content of your question.

2.8. Specifics Due to Different Question Types

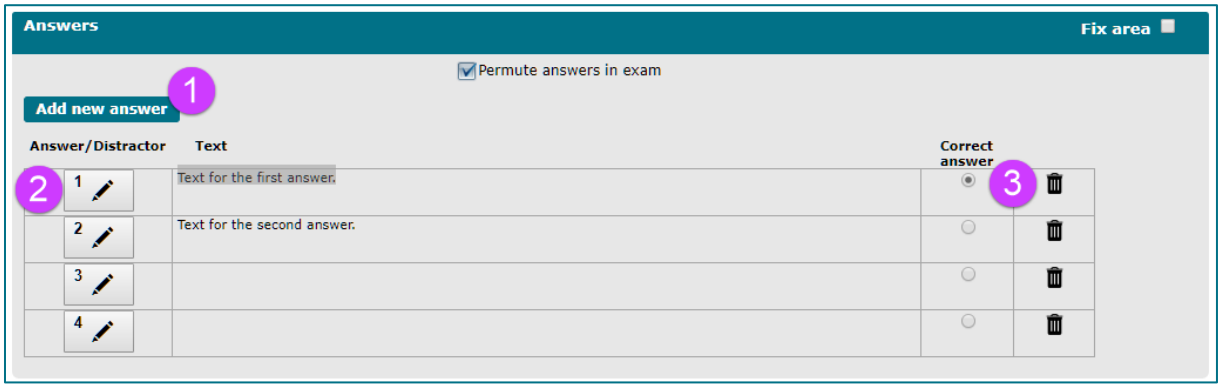
2.8.1. MCQ Type A

2.8.1.1. Section: Question Text



Enter the question text / question stem.

2.8.1.2. Section: Answers



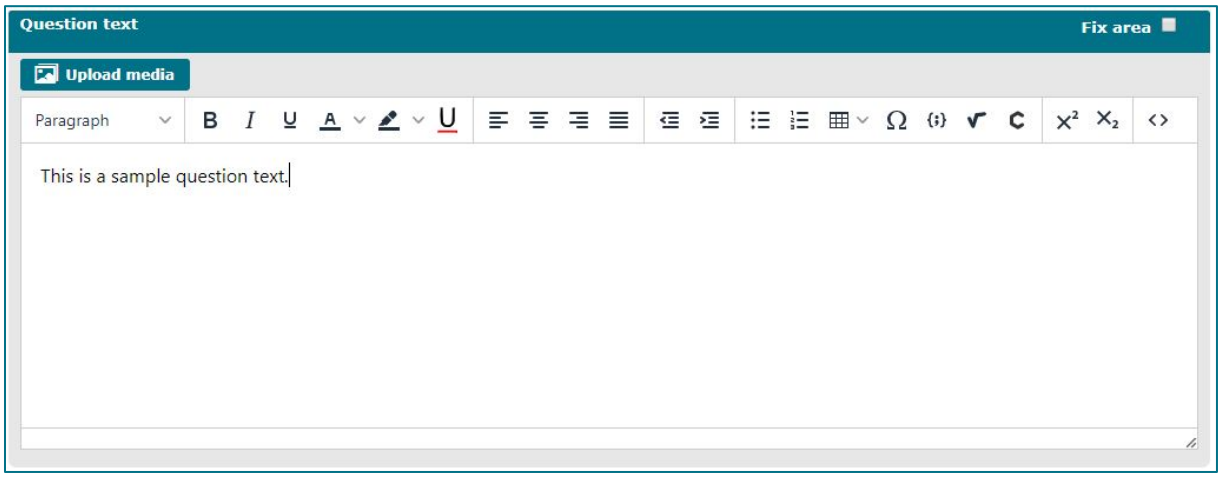
Enter any amount of answers.

Key settings:

1. Add new answer: Create a new answer option.
2. Pen icon: Enter the answer text.
3. Correct answer: Mark the correct answer.

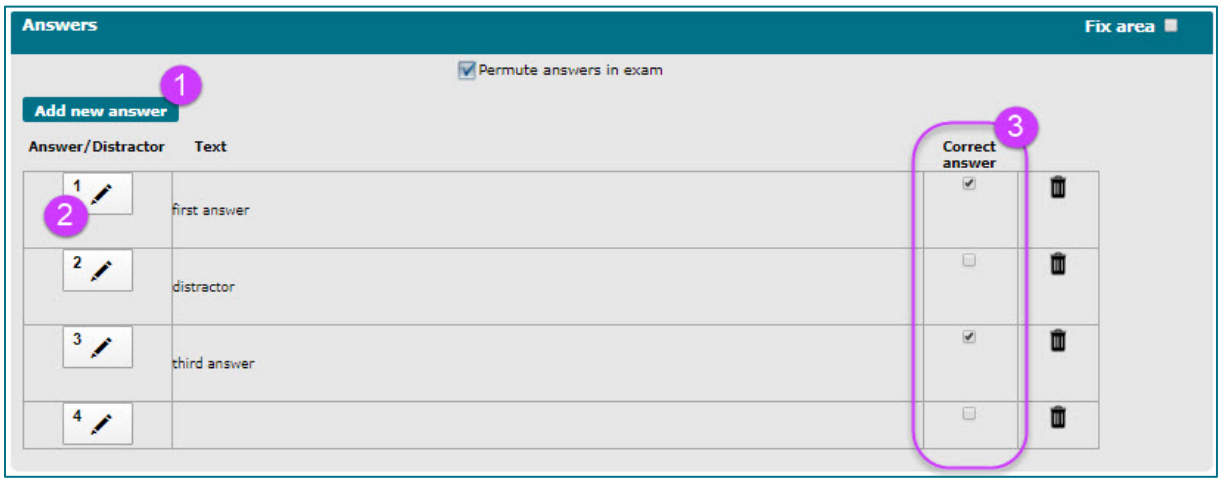
2.8.2. MCQ Pick-N

2.8.2.1. Section: Question Text



Enter the question text / question stem.

2.8.2.2. Section: Answers



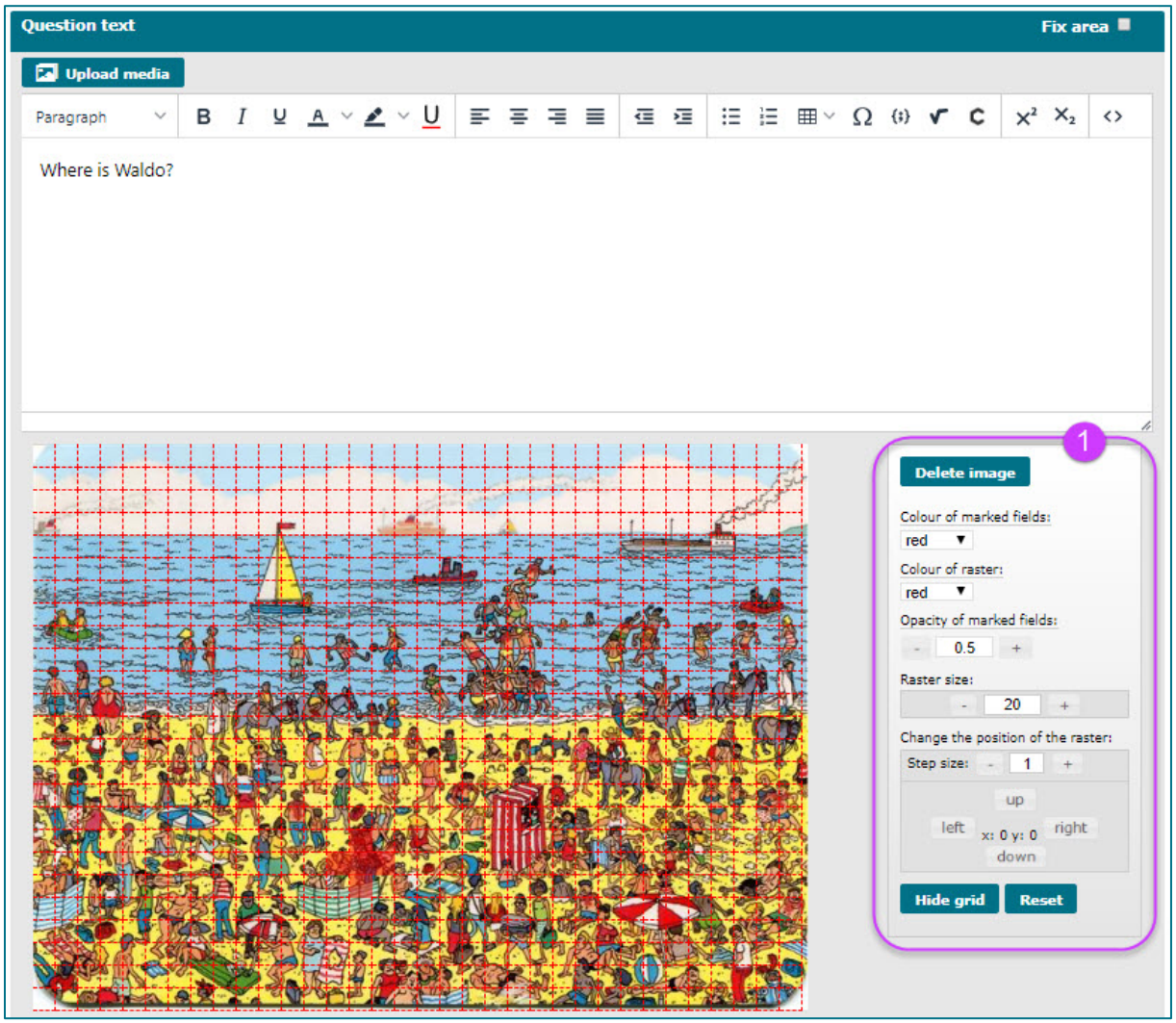
Enter any amount of answers.

Key settings:

1. **Add new answer:** Create a new answer option.
2. **Pen icon:** Enter the answer text.
3. **Correct answer:** Mark the correct answer.

2.8.3. Picture Diagnosis Question

2.8.3.1. Section: Question Text



Enter the question text / question stem.

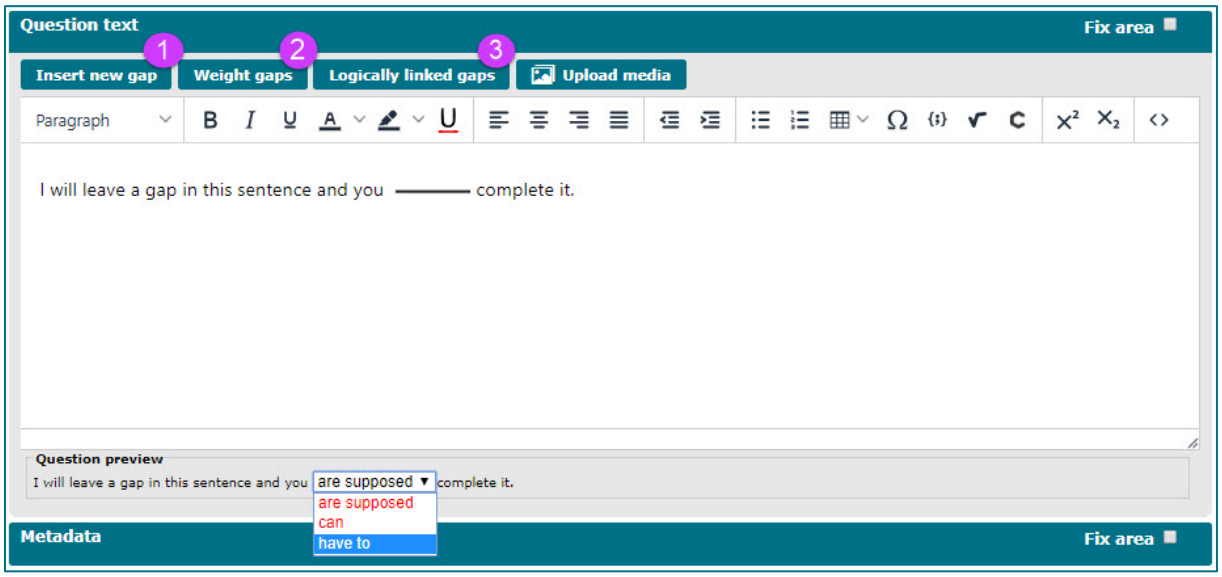
Key settings:

1. Raster/grid: As soon as you have uploaded an image it will be displayed to you in a grid. Adjust the position or size of the grid by using the menu on the right side.

   IMPORTANT: Mark all target fields where the candidate's click would be considered as a correct answer. The grid is invisible for the candidate in the exam. Please be aware that with this question type candidates can only mark one spot in the picture (not multiple, no areas).

2.8.4. Cloze Question, Freetext

2.8.4.1. Section: Question Text



Enter the question text / cloze in the text field.

IMPORTANT: The question preview is not identical to the way the cloze is presented to candidate! There will be no dropdown menu, but blanks. The author's preview is available after saving.
If you want to learn more about the dropdown function, click here.

Key settings:

1. **Insert new gap:** You can choose between two different variants of the free text cloze – for texts or for figures. In both cases you can define a set of correct answers beforehand. In the automatic pre-marking process, points are pre-assigned if candidates name one of the correct answers. However, all pre-assigned points afterwards need to be confirmed or adjusted manually.

   Type Figure: If you define free text gaps as type figure, only numbers are accepted as valid input formats in the exam. If you enter a decimal number, the number of decimal places allowed is automatically set in the exam according to the decimal places of the correct answer. In addition, two input fields are automatically created in the check, one before and one after the decimal point (e.g. ___ , ___).

IMPORTANT: You can copy information from existing cloze within the same question.

2. Weight gaps: Determine the influence of one gap on the total point value.

   IMPORTANT: If you want all gaps to be equally important, leave the weighting factor at "1" for each cloze in this task.

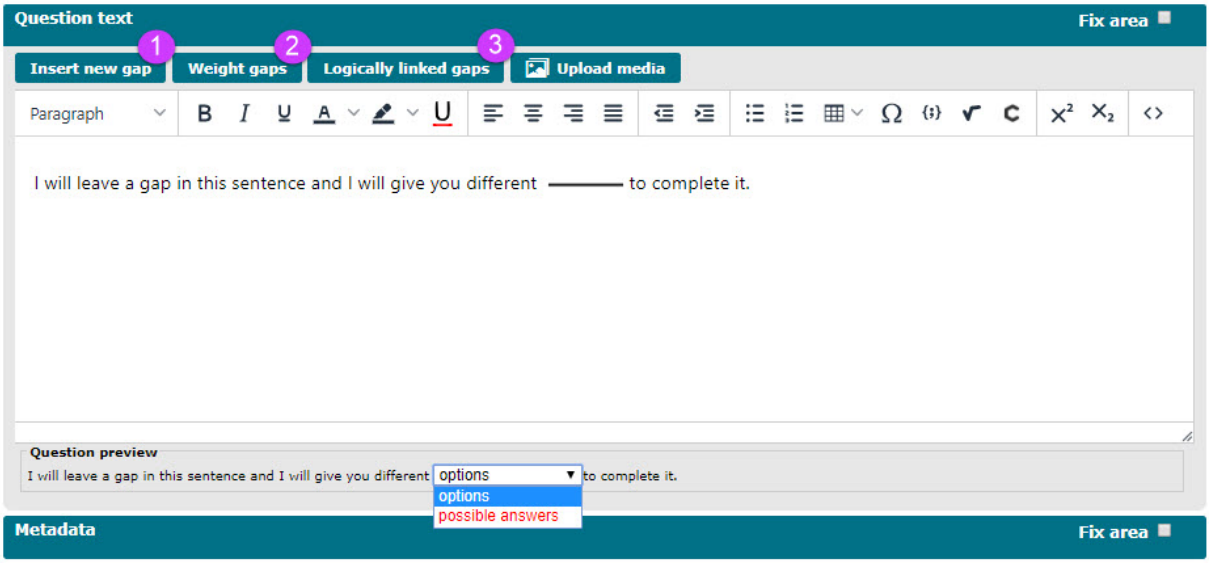
3. Logically linked gaps: Link gaps logically by assigning them to a group. If gaps are logically linked, a correct answer selected in one gap will not be marked as correct in another gap of this group.

   Example: Name three birds: 1. _____, 2. _____, 3. _____
   Correct answers would be: blackbird, thrush, starling in any order. You have to enter the three correct answers in each gap, but you want to avoid that the same bird being mentioned several times will give the candidate multiple points.

   IMPORTANT: All gaps in a group need to be completely identical in terms of content, they need to have equal weighting factors and the number of correct answers (per gap) has to equal the number of gaps in the group.

2.8.5. Cloze Question, Dropdown

2.8.5.1. Section: Question Text



Enter the question text / cloze in the text field.

Key settings:

1. **Insert new gap:** You can create new gaps and select with "equal" or "not equal" if they are correct or wrong. In the automatic pre marking process, points are pre-assigned if candidates name one of the correct answers. However, all pre-assigned points afterwards need to be confirmed or adjusted manually.

   IMPORTANT: You can copy information from existing cloze within the same question.

2. **Weight gaps:** Determine the influence of one gap on the total point value.

   IMPORTANT: If you want all gaps to be equally important, leave the weighting factor at "1" for each cloze in this task.

3. **Logically linked gaps:** Link gaps logically by assigning them to a group. If gaps are logically linked, a correct answer selected in one gap will not be marked as correct in another gap of this group.

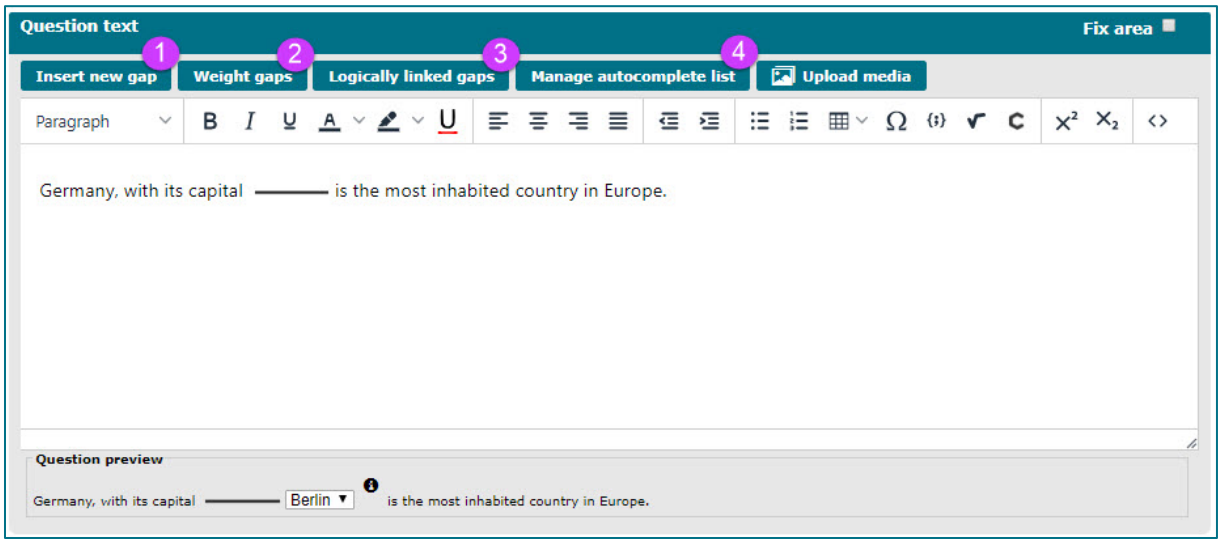
Example: Name three birds: 1. _____, 2. _____, 3. _____ Correct answers would be: blackbird, thrush, starling in any order. You have to enter the three correct answers in each gap, but you want to avoid that the same bird being mentioned several times will give the candidate multiple points.

IMPORTANT:

All gaps in a group need to be completely identical in terms of content, they need to have equal weighting factors and the number of correct answers (per gap) has to equal the number of gaps in the group.

2.8.6. Cloze Question, Autocomplete

2.8.6.1. Section: Question Text



Enter the question text / cloze in the text field.

Key settings:

1. Insert new gap: When creating a new gap, you will first be asked to specify the minimum number of characters that the candidate must enter before the answer options are displayed. You then select the list you want to base the question on and the correct answers. In the automatic pre-marking process, points are pre-assigned if candidates name one of the correct answers. However, all pre-assigned points afterwards need to be confirmed or adjusted manually.

   IMPORTANT: You can copy information from existing cloze within the same question.

2. Weight gaps: Determine the influence of one gap on the total point value.

   IMPORTANT: If you want all gaps to be equally important, leave the weighting factor at "1" for each cloze in this task.

3. Logically linked gaps: Link gaps logically by assigning them to a group. If gaps are logically linked, a correct answer selected in one gap will not be marked as correct in another gap of this group.

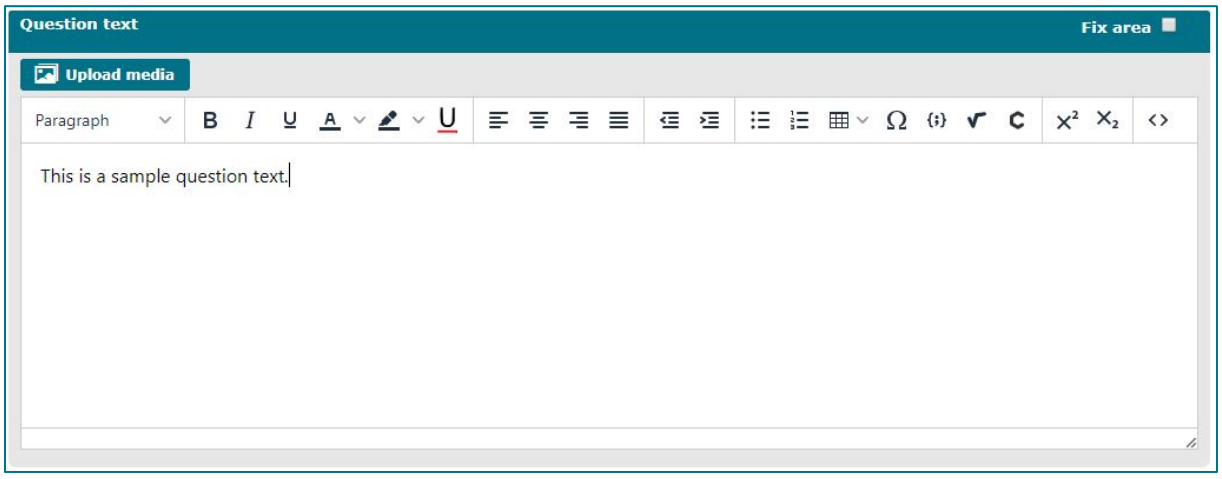
Example: Name three birds: 1. _____, 2. _____, 3. _____ Correct answers would be: blackbird, thrush, starling in any order. You have to enter the three correct answers in each gap, but you want to avoid that the same bird being mentioned several times will give the candidate multiple points.

IMPORTANT: All gaps in a group need to be completely identical in terms of content, they need to have equal weighting factors and the number of correct answers (per gap) has to equal the number of gaps in the group.

4. Manage autocomplete list: Manage, edit and copy existing cloze text lists or create new lists.

2.8.7. Kprim-Question

2.8.7.1. Section: Question Text



Enter the question text / question stem.

2.8.7.2. Section: Answers

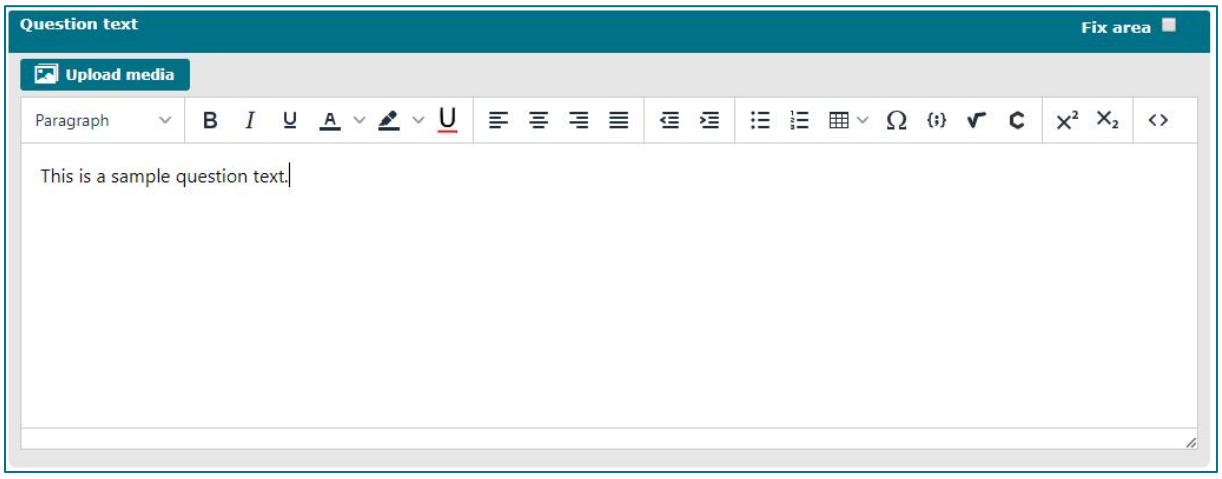
Enter a set of four answers/statements in total.

Key settings:

1. True: Insert a correct answer/statement.
2. False: Insert a false answer/statement.
3. Pen icon: Edit answer/statement.
4. Discard Delete answer/statement.

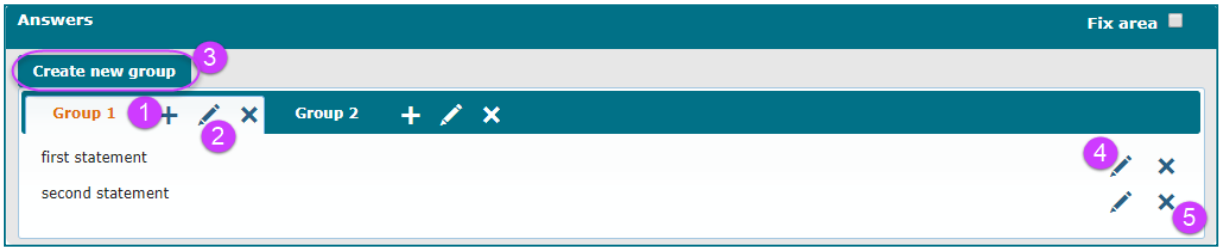
2.8.8. Grouping Question

2.8.8.1. Section: Question Text



Enter the question text / question stem.

2.8.8.2. Section: Answers



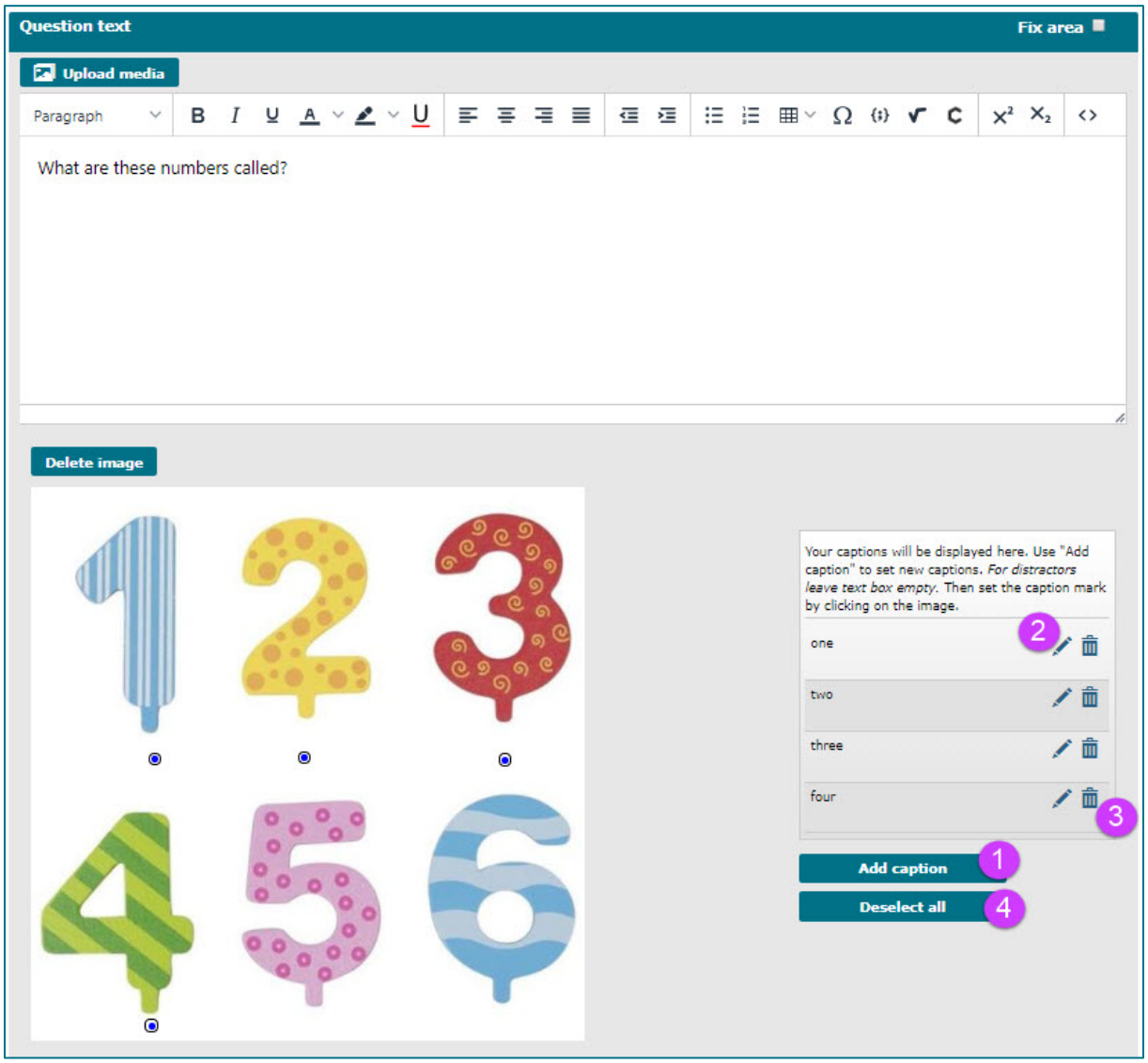
Enter any amount of answers. Use a new answer segment for every new answer. Distractors are not possible (at the moment).

Key settings:

1. Add new answer: Create a new answer/statement fitting this group.
2. Pen icon: Edit the group/container name.
3. Create new group: Add a new container.
4. Pen icon: Edit an answer/statement.
5. Discard: Delete a certain group or statement.

2.8.9. Picture Mapping Question

2.8.9.1. Section: Question Text



Enter the question text / question stem. Afterwards click "Upload media" and select an image which as a next step is to be labelled.

Key settings:

1. Add caption: After setting a new caption, click on the right area of the image to set the caption mark.

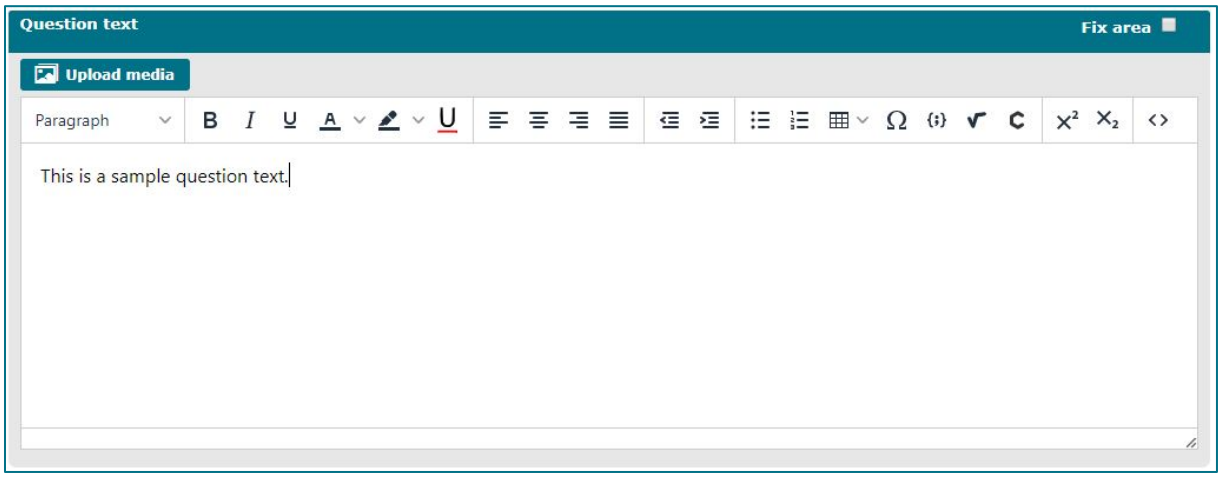
   IMPORTANT: In case you want to set a distractor point (point with no text attached), just leave the text box empty and position the caption mark by clicking at the desired area in the image. Please note that you CANNOT set a distractor textbox (text with no point attached).

2. Pen icon: Edit the text or remove the caption mark.

3. **Discard:** Delete the caption.
4. **Deselect all**: Deselect all captions.

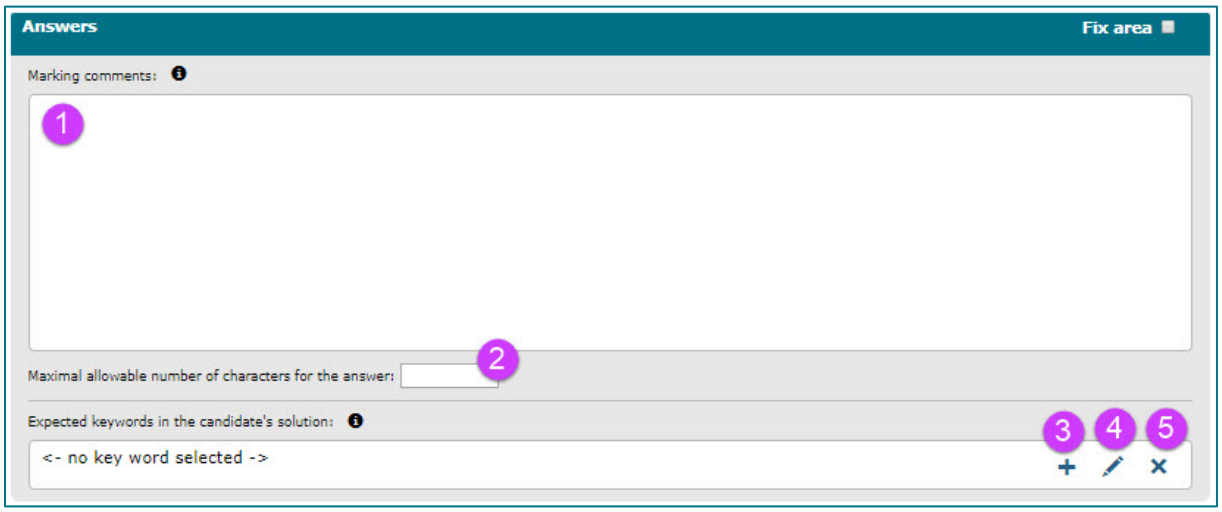
2.8.10. Free Text Question

2.8.10.1. Section: Question Text



Enter the question text / question stem.

2.8.10.2. Section: Answers



Key settings:

1. **Marking comments:** Leave marking comments in the field in order to obtain a correction result that is as consistent as possible across several correctors.
2. **Maximum number of characters:** Determine the maximum number of characters allowed for the answer. Depending on the settings of the Q-Examiner software, you can either prevent additional entries when the total number of characters is reached (A maximum of X characters can be entered.) or display warnings

when the total number of characters is reached (More than X characters can be entered. The candidate receives a note.).

3. **Add new keyword:** Add keywords that you would expect in the candidate's solution. The keywords are automatically highlighted during manual marking.
4. **Pen icon:** Edit keyword.
5. **Discard:** Delete keyword.

Technologie Park
Friedrich-Ebert-Straße 75
Haus 27 / Ebene 10
51429 Bergisch Gladbach