

Module 5

Student Assessment Using Quiz

After completing this module, you should be able to:

- Develop a database of questions in e-learning
- Develop various types questions such as multiple-choice, true/false, matching, short answers, numeric answers, random short answer matching, description, calculation, essays, and "embedded answers (cloze)"
- Selecting questions to be included in a quiz
- Import questions from text file using Aiken and GIFT formats

Introduction

The quiz module in Moodle allows the instructor to design and set a quiz consisting of multiple choice, true / false, short answer, numerical, matching, description, calculation, essays, short answers random matching, and embedded answers (cloze) questions. These questions are stored in a categorized database and can be reused in the same course or in other courses. Students can try to answer the quiz several times and every attempt will be automatically graded, while the instructor may choose whether to provide feedbacks or to display the correct answers. The quiz module also includes grading and scoring facilities.

Preparing a Quiz

A quiz in Moodle has two main components: body of the quiz and question bank. You can imagine the quiz body as a container which holds a variety of questions selected from the question bank. The quiz body is what is seen by students when they take the quiz. It defines how students interact with the quiz. The questions in the quiz can be any type of questions, randomly selected and displayed in a certain order or random order. Question Bank can consist of questions that are arranged in a manner you like. We can build a question bank based on the chapters, the weeks in the semester, the key concepts or some other schemes.

When we build a quiz, we are building a container for the questions and set the rules for interacting with the quiz.

Follow this exercise to develop a quiz:

1. Click "Turn editing on" button to enter editing mode.
2. Select "Quiz" from the "Add an activity or resource" menu in the section where you want to put a link to the quiz.
3. In the "Editing quiz" page, as shown below, provide a Name for the quiz.



The screenshot shows the Moodle interface for adding a new quiz. The title is "Adding a new Quiz to Bab 1". Below the title, there is a "General" section. In this section, there is a "Name" field with a red asterisk, which is currently empty. Below the "Name" field is a "Description" field with a rich text editor toolbar containing icons for text color, bold, italic, list, link, unlink, image, video, and file. The "Description" field is also empty. At the bottom left of the form, there is a checkbox labeled "Display description on course page" which is currently unchecked.

4. Write a short introduction for the quiz in the description text box. Be sure to include any special instructions such as number of attempts allowed or scoring information.
5. You can choose to display the quiz description on your course page by placing tick in the “Display description on course page” setting.
6. In the Timing setting:

The screenshot shows the 'Timing' settings for a quiz. It includes the following fields and options:

- Open the quiz:** A date selector set to 30, March, 2018, 13. Below it is a time selector set to 20 and an 'Enable' checkbox.
- Close the quiz:** A date selector set to 30, March, 2018, 13. Below it is a time selector set to 20 and an 'Enable' checkbox.
- Time limit:** A field set to 0, a unit dropdown set to 'minutes', and an 'Enable' checkbox.
- When time expires:** A dropdown menu set to 'Attempts must be submitted b'.
- Submission grace period:** A field set to 1, a unit dropdown set to 'days', and an 'Enable' checkbox.

- **Open the quiz**, set the date when the quiz is available. A student cannot take the quiz before the time it is opened.
- **Close the quiz**, set the date when the quiz is closed. A student cannot take the quiz after it is closed.
- **Time limit** set the time allowed for students to complete the quiz. When time has expired, the quiz will automatically be closed and the answers given by students will be assessed.
- **When time expires** controls what happen when students fail to submit their quiz attempt before time expires.
- **Submission grace period** setting depend on your setting on “When time expires”. If you set ‘Allow a grace period to submit, but not change any responses’, this setting let you specify the amount of extra time that is allowed.

7. In the Grade setting:

The screenshot shows the 'Grade' settings for a quiz. It includes the following fields and options:

- Grade category:** A dropdown menu set to 'Uncategorised'.
- Grade to pass:** An empty text input field.
- Attempts allowed:** A dropdown menu set to 'Unlimited'.
- Grading method:** A dropdown menu set to 'Highest grade'.

- **Grade category** controls the category in which this activity's grades are placed in the gradebook.
- **Grade to pass** determines the minimum grade required to pass. The value is used in activity and course completion, and in the gradebook, where pass grades are highlighted in green and fail grades in red.
- **Attempts allowed** let you determine the number of attempts allowed
- **Grading method:** when multiple attempts are allowed, the following methods are available for calculating the final quiz grade:
 - Highest grade of all attempts
 - Average (mean) grade of all attempts
 - First attempt (all other attempts are ignored)
 - Last attempt (all other attempts are ignored)

8. In the Layout setting:

▼ **Layout**

New page ⓘ Every question ▼

Navigation method * ⓘ Free ▼

Show less...

- **New page** allows you to stretch the quiz over several pages by limiting the number of questions per page. This is useful for longer quiz.
- **Navigation method** let you choose whether to let students navigate freely through the quiz or choose sequential navigation where student must progress through the quiz in order and may not return to previous pages nor skip ahead.

9. In the Question behaviour setting:

▼ **Question behaviour**

Shuffle within questions ⓘ Yes ▼

How questions behave ⓘ Deferred feedback ▼

Allow redo within an attempt * ⓘ No ▼

Each attempt builds on the last * ⓘ No ▼

Show less...

- **Shuffle within question** give you option to shuffle within question. This only applies to question that have multiple parts such as multiple-choice question and matching question.
- **How question behave** let you determine how student interact with the question.
 - ***Deferred feedback***: Students must enter an answer to each question and then submit the entire quiz, before anything is graded or they get any feedback.
 - ***Adaptive mode and Adaptive mode (no penalties)***: Allows students to have multiple attempts at the question before moving on to the next question. This behaviour requires that the "Whether correct" box is ticked under "During the attempt" in the "Review options" section, at a minimum.
 - ***Manual grading***: Used for essay questions (irrespective of what the quiz is set to) but you can now choose to have every question in the quiz manually graded, if you wish.
 - ***Interactive mode***: After submitting one answer, and reading the feedback, the student has to click a 'Try again' button before they can try a new response. They can be given hints to help them. Once the student has got the question right, they can no longer change their response. Once the student has got the question wrong too many times, they are just graded wrong (or partially correct) and get shown the feedback and can no longer change their answer. There can be different feedback after each try the student makes. The number of tries the student gets is the number of hints in the question definition plus one.
 - ***Immediate feedback***: Similar to interactive mode in that the student can submit their response immediately during the quiz attempt, and get it graded. However, they can only submit one response, they cannot change it later.
 - ***Deferred feedback or Immediate feedback with Certainty-based marking (CBM)***: With CBM, the student does not only answer the question, but they also indicate how sure they are they got the question right. The grading is adjusted by the choice of certainty, so that students have to reflect honestly on their own level of knowledge in order to get the best mark.
 - ***Conditional questions***: If using the Interactive with multiple tries or Immediate Feedback behaviour and with the navigation method set to 'Free', it is possible to make the display of a question dependent on a previous question being answered first. The question editing page will display padlock icons to the right of each question.
- **Allow redo within an attempt**: If enabled, then when students have finished attempting particular question, they will see a Redo question button. This allows them to attempt another version of the same question, without having to submit the entire quiz attempt and start another one. This option is mainly useful for practice quizzes.
- **Each attempt build on the last**: If multiple attempts are allowed and this setting is enabled, each new quiz attempt will contain the results of the previous attempt. This allows a quiz to be completed over several attempts.

10. Review setting let you control what information students can see when they review a quiz attempt or look at the quiz reports.

Review options			
During the attempt	Immediately after the attempt	Later, while the quiz is still open	After the quiz is closed
<input checked="" type="checkbox"/> The attempt			
<input checked="" type="checkbox"/> Whether correct			
<input checked="" type="checkbox"/> Marks			
<input checked="" type="checkbox"/> Specific feedback			
<input checked="" type="checkbox"/> General feedback			
<input checked="" type="checkbox"/> Right answer			
<input type="checkbox"/> Overall feedback	<input checked="" type="checkbox"/> Overall feedback	<input checked="" type="checkbox"/> Overall feedback	<input checked="" type="checkbox"/> Overall feedback

- **During the attempt** settings are only relevant for some behaviours, like 'interactive with multiple tries', which may display feedback during the attempt.
- **Immediately after the attempt** settings apply for the first two minutes after 'Submit all and finish' is clicked.
- **Later, while the quiz is still open** settings apply after this, and before the quiz close date.
- **After the quiz is closed** settings apply after the quiz close date has passed. If the quiz does not have a close date, this state is never reached.

11. In the Appearance setting:

Appearance

Show the user's picture ? No image

Decimal places in grades ? 2

Decimal places in question grades ? Same as for overall grades

Show blocks during quiz attempts ? No

[Show less...](#)

- **Show the user's picture:** If enabled, the student's name and picture will be shown on-screen during the attempt, and on the review screen, making it easier to check that the student is logged in as themselves in an invigilated (proctored) exam.
- **Decimal places in grades:** This setting specifies the number of digits shown after the decimal point when displaying grades. It only affects the display of

grades, not the grades stored in the database, nor the internal calculations, which are carried out to full accuracy.

- **Decimal places in question grades:** This setting specifies the number of digits shown after the decimal point when displaying the grades for individual questions.
- **Show blocks during quiz attempts:** If set to yes then normal blocks will be shown during quiz attempts

12. In the Extra restriction attempts setting:

The screenshot shows the 'Extra restrictions on attempts' settings panel. It contains the following settings:

- Require password:** A text input field with a search icon and a help icon. The text 'Click to enter text' is visible.
- Require network address:** An empty text input field with a help icon.
- Enforced delay between 1st and 2nd attempts:** A numeric input field set to '0', a unit dropdown menu set to 'minutes', and an 'Enable' checkbox.
- Enforced delay between later attempts:** A numeric input field set to '0', a unit dropdown menu set to 'minutes', and an 'Enable' checkbox.
- Browser security:** A dropdown menu currently set to 'None' with a help icon.
- Allow quiz to be attempted offline using the mobile app:** A dropdown menu currently set to 'No' with a help icon.

A 'Show less...' link is located at the bottom right of the panel.

- **Require password:** If a password is specified, a student must enter it in order to attempt the quiz.
- **Require network address:** Quiz access may be restricted to particular subnets on the LAN or Internet by specifying a comma-separated list of partial or full IP address numbers. This can be useful for an invigilated (proctored) quiz, to ensure that only people in a certain location can access the quiz.
- **Enforced delay between 1st and 2nd attempts:** If enabled, a student must wait for the specified time to elapse before being able to attempt the quiz a second time.
- **Enforced delay between later attempts:** If enabled, a student must wait for the specified time to elapse before attempting the quiz a third time and any subsequent times.
- **Browser security:** If "Full screen pop-up with some JavaScript security" is selected,
 - The quiz will only start if the student has a JavaScript-enabled web-browser
 - The quiz appears in a full screen popup window that covers all the other windows and has no navigation controls

- Students are prevented, as far as is possible, from using facilities like copy and paste
- **Allow quiz to be attempted offline using the mobile app:** If enabled, a mobile app user can download the quiz and attempt it offline.
 - Note: It is not possible for a quiz to be attempted offline if it has a time limit, or requires a network address, or uses any question behaviour other than deferred feedback (with or without CBM).

13. In the Overall feedback setting, Overall feedback is text that is shown after a quiz has been attempted. By specifying additional grade boundaries (as a percentage or as a number), the text shown can depend on the grade obtained.

Overall feedback

Grade boundary 100%

Feedback

Grade boundary

Feedback

Grade boundary 0%

ADD 3 MORE FEEDBACK FIELDS

14. In the Common module settings:

Common module settings

Availability ? Show on course page

ID number ?

Group mode ? Visible groups

Grouping ? None

ADD GROUP/GROUPING ACCESS RESTRICTION

- **Availability:** You can choose to show or hide the quiz to students. But, other roles in the course such as teacher and non-editing teacher can still view the quiz.
- **ID number:** The ID number provides a way for identifying activity for grade calculation. If you decide to give grade for chat session activity, you must set the ID number. If not, you can leave it blank.
- **Group mode:** This is another location in which to set the group mode for the activity. If group mode is forced in the course settings, then this setting will be ignored.
- **Grouping:** A grouping is a collection of groups within a course. If a grouping is selected, students assigned to groups within the grouping will be able to work together.

15. Restrict Access & Activity Completion settings are visible if Conditional Activities and Activity Completion have been enabled in the site and the course.

The screenshot shows two sections of settings:

- Restrict access:** Shows 'Access restrictions' set to 'None' with an 'ADD RESTRICTION...' button.
- Activity completion:** Contains several options:
 - 'Completion tracking' is set to 'Students can manually mark t'.
 - 'Require view' is checked with the label 'Student must view this activity to complete it'.
 - 'Require grade' is unchecked with the label 'Student must receive a grade to complete this activity'.
 - 'Require passing grade' is unchecked with the label 'Require passing grade' and a sub-option 'Or all available attempts completed'.
 - 'Expect completed on' is set to '30', 'March', and '2018', with an 'Enable' checkbox.

16. When you have finished entering all the settings you want, click on “Save and view”. The following screen will be displayed:

The screenshot shows the 'Quiz Week 5' settings screen with the following elements:

- Header: 'Quiz Week 5' in red text.
- Grading method: 'Highest grade'.
- Message: 'No questions have been added yet' in a light red box with a close button (X).
- Buttons: 'EDIT QUIZ' and 'BACK TO THE COURSE' in dark red boxes.

Creating Multiple Choice Questions

There are two types of multiple choice questions, questions that accept only one answer as the correct answer and questions that accept more than one answer. Do the following exercises to create a multiple-choice question:

1. Select "Multiple Choice" and you will be prompted with a screen like in the next page.
2. Type the name of the question (something that helps you identify the question) and type the actual question in the appropriate space. You do not need to enter the answer in the question box.

Adding a Multiple choice question ⓘ

Expand all

General

Category: Default for MTA101 (18) ▼

Question name:

Question text:

Default mark: 1

3. Next set the default mark for the question. Usually the mark is 1 (1 mark for 1 question)

General feedback ⓘ

One or multiple answers?: One answer only ▼

Shuffle the choices? ⓘ

Number the choices?: a., b., c., ... ▼

4. The **General feedback** is shown after student completed the question. You can use general feedback to give students the answer to the question and perhaps a link to more information.
5. In the **‘One or multiple answer’** you can determine if your question have only one correct answer or multiple correct answer.
6. You can also choose to shuffle the choices within the question by place tick in the **‘Shuffle the choice’** setting. But first you must enable the ‘Shuffle within question’ option in the activity setting for this option to appear on the setting.
7. **Number the choices:** To display the question’s choices, you can choose to number the choices using a few different formats.
8. The next section of the setting, you can add the answer choices. For each choice, you can write the choices, the grade (mark) you give for that choice, and feedback for each choice. If the choice is the wrong answer, you can set the grade to None, and if the choice is the correct answer, you can set the grade to 100%. As for the Feedback text, you can leave it blank if you don’t want to write any feedback for each choice.

The screenshot displays the 'Answers' configuration section. It contains two identical blocks for 'Choice 1' and 'Choice 2'. Each block includes:

- A text input field for the choice text, equipped with a rich text editor toolbar (bulleted list, numbered list, link, unlink, image, video, audio, embed).
- A 'Grade' dropdown menu currently set to 'None'.
- A 'Feedback' text input field, also equipped with a rich text editor toolbar.

9. For combined feedback: you can specify feedback for each correct, partially correct, and incorrect response.

▼ Combined feedback

For any correct response

Your answer is correct.

For any partially correct response

Your answer is partially correct.

Options Show the number of correct responses once the question has finished

For any incorrect response

Your answer is incorrect.

10. When questions are run using the 'Interactive with multiple tries' or 'Adaptive mode' behaviour, so that the student will have several tries to get the question right, then this option controls how much they are penalised for each incorrect try. The penalty is a proportion of the total question grade, so if the question is worth three marks, and the penalty is 0.3333333, then the student will score 3 if they get the question right first time, 2 if they get it right second try, and 1 if they get it right on the third try.

▼ Multiple tries

Penalty for each incorrect try

Hint 1

Hint 1 options Clear incorrect responses Show the number of correct responses

Hint 2

Hint 2 options Clear incorrect responses Show the number of correct responses

ADD ANOTHER HINT

11. After finish setting up the question, click 'Save Changes'. You will be see your newly made question listed in the quiz.

Creating True/False Questions

The true / false questions allow you to provide a statement; students will read it, and then determine whether it is true or false.

1. Select True / False from the list of type of question to add.
2. Type the name of the question (something that helps you identify the question) and type the actual question in the appropriate space. You do not need to enter the answer in the question box.
3. Next set the default mark for the question. Usually the mark is 1 (1 mark for 1 question)

Adding a True/False question ⓘ

▶ Expand all

▼ General

Category

Question name

Question text

Default mark

4. General feedback is shown to the student after they have completed the question. You can use the general feedback to give students a fully worked answer and perhaps a link to more information they can use if they did not understand the questions.
5. In the correct answer options, you need to specify if the question correct answer is 'True' or 'False'.

Basic e-Learning



The screenshot shows a 'General feedback' editor. It features a title bar with a question mark icon and a toolbar with icons for text alignment, bold, italic, bulleted list, numbered list, link, unlink, image, video, and document. Below the toolbar is a large empty text area for entering feedback. At the bottom left, there is a label 'Correct answer' and a dropdown menu currently set to 'False'.

6. You can provide feedback for students who response to 'True' and 'False'. Specify your feedback in the provided textbox.



The screenshot displays two separate feedback editors. The top one is titled 'Feedback for the response 'True'' and the bottom one is titled 'Feedback for the response 'False''. Each editor has a toolbar with the same icons as the 'General feedback' editor and a large empty text area for entering feedback.

7. When questions are run using the 'Interactive with multiple tries' or 'Adaptive mode' behaviour, so that the student will have several tries to get the question right, then this option controls how much they are penalised for each incorrect try. For true or false question, the penalties for each try is 1.



The screenshot shows a configuration option labeled 'Multiple tries' with a dropdown arrow. Below the label is a text input field containing the value '1'. To the right of the input field is a question mark icon.

8. After finish setting up the question, click 'Save Changes'. You will be see your newly made question listed in the quiz.

Creating Short Answer Questions

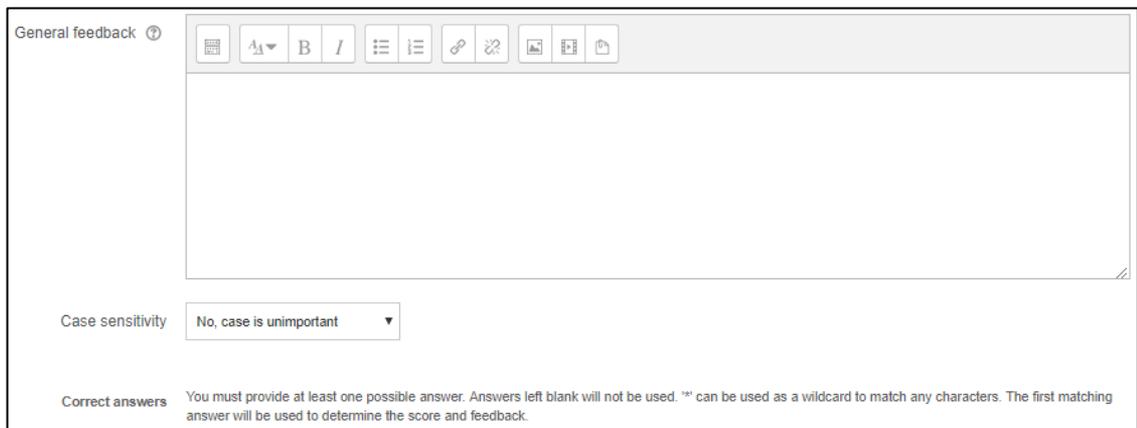
Short-answer questions require students to type in the answer.

The answer may consist of a word or a phrase, but it must match one of the acceptable answers. Ideally, the acceptable answer must be short to avoid the correct answer being graded as wrong just because it is written in a different phrase.

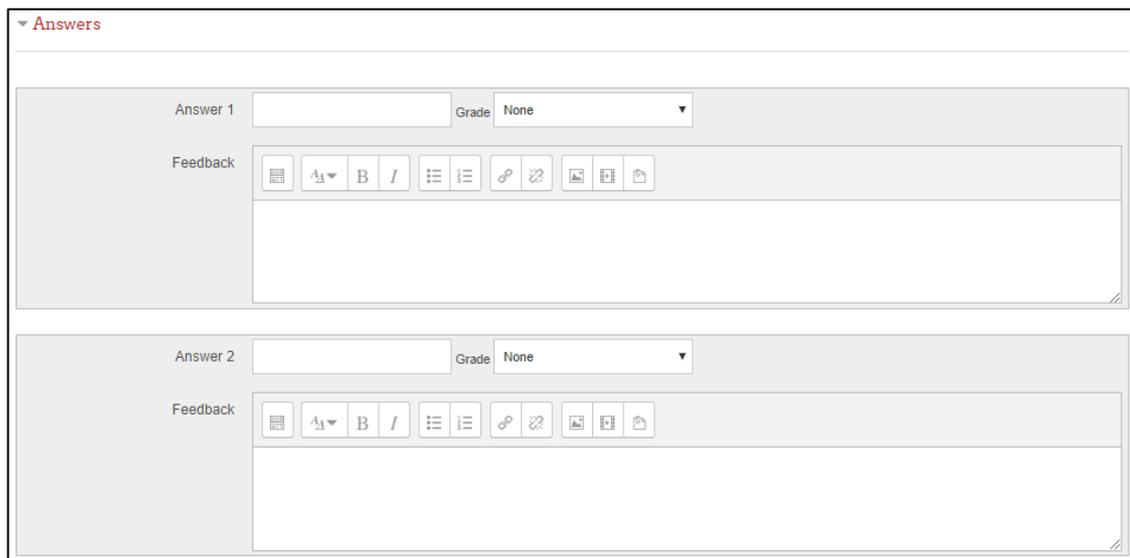
Do the following exercise:

1. Select “Short Answer” from the list of type of question to add. The following screen will appear.
2. Type the name of the question (something that helps you identify the question) and type the actual question in the appropriate space. You do not need to enter the answer in the question box.
3. Next set the default mark for the question. Usually the mark is 1 (1 mark for 1 question)

4. General feedback is shown to the student after they have completed the question. You can use the general feedback to give students a fully worked answer and perhaps a link to more information they can use if they did not understand the questions.
5. Case sensitivity: You can determine whether to accept answer with specific case letter (Yes, case must match) or if students spell the answer correctly regardless of uppercase or lowercase (No, case is unimportant).



6. You must provide at least one possible answer using the answers form below and give grade and you can give feedback for each answer.



4. When questions are run using the 'Interactive with multiple tries' or 'Adaptive mode' behaviour, so that the student will have several tries to get the question right, then this option controls how much they are penalised for each incorrect try. The penalty is a proportion of the total question grade, so if the question is worth three marks, and the penalty is 0.3333333, then the student will score 3 if they get the question right first time, 2 if they get it right second try, and 1 if they get it right on the third try.

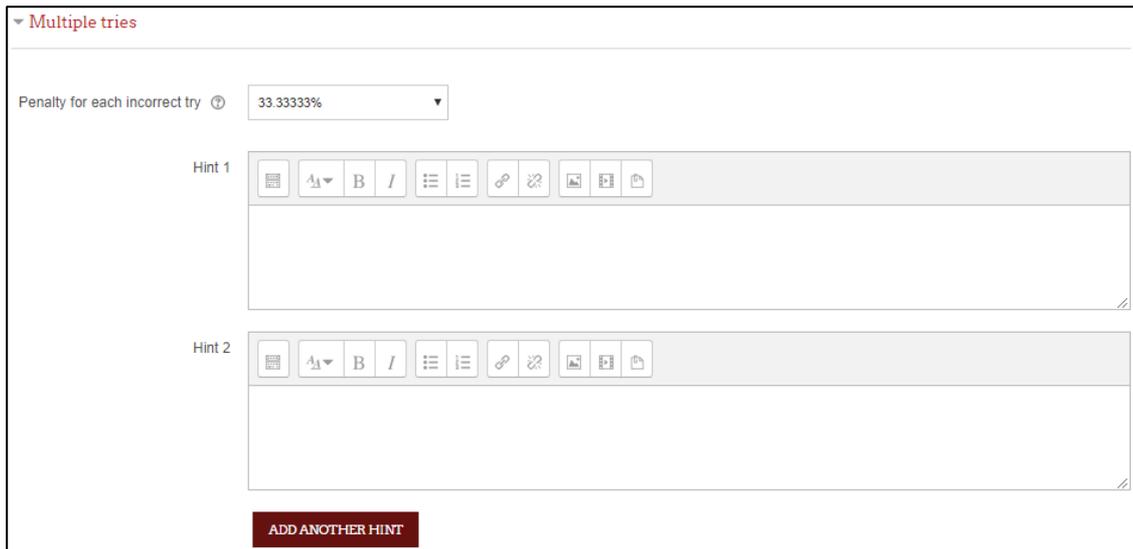
Multiple tries

Penalty for each incorrect try 33.33333%

Hint 1

Hint 2

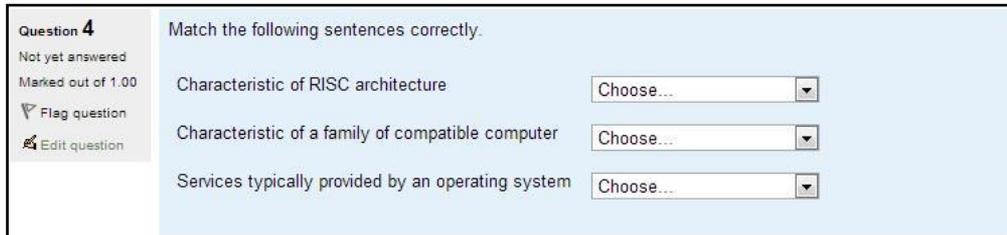
ADD ANOTHER HINT



5. After finish setting up the question, click 'Save Changes'. You will be see your newly made question listed in the quiz.

Creating Matching Questions

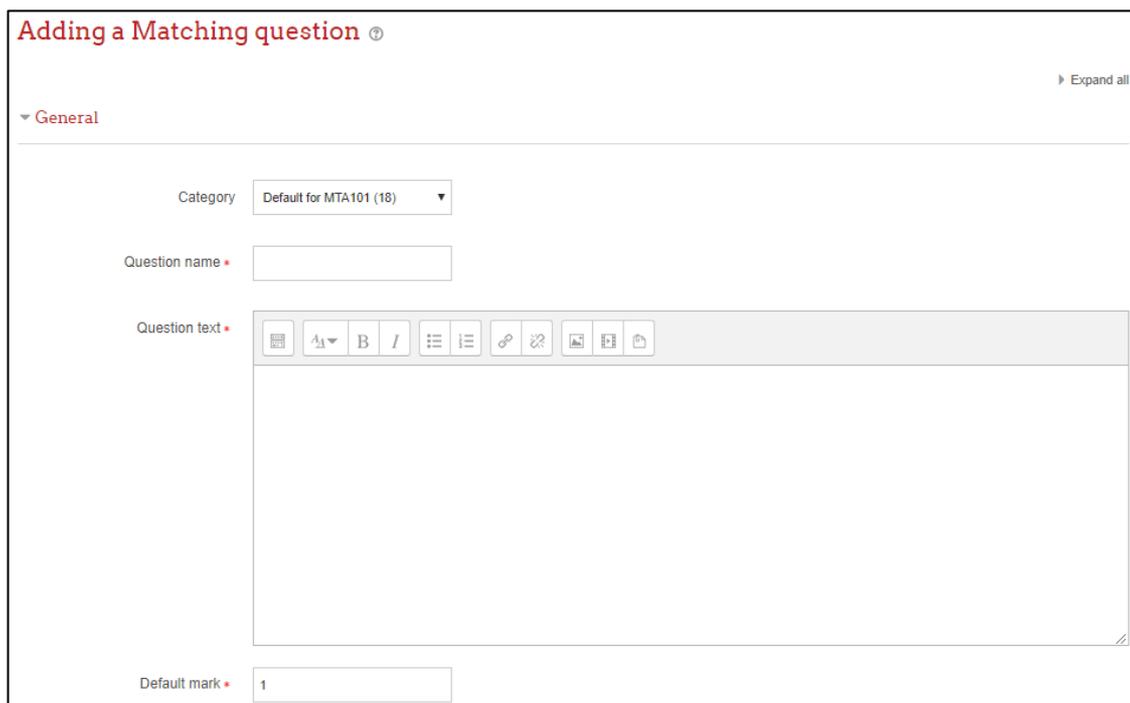
Matching question requires students to match the many basic terms with possible answers.



The screenshot shows a Moodle question interface for a matching question. On the left, there is a sidebar with the following information: 'Question 4', 'Not yet answered', 'Marked out of 1.00', and three icons: 'Flag question' and 'Edit question'. The main area contains the question text: 'Match the following sentences correctly.' Below this, there are three rows, each with a sentence and a dropdown menu labeled 'Choose...':
1. 'Characteristic of RISC architecture' with a 'Choose...' dropdown.
2. 'Characteristic of a family of compatible computer' with a 'Choose...' dropdown.
3. 'Services typically provided by an operating system' with a 'Choose...' dropdown.

To tests students' understanding of vocabulary and the ability to match examples to the concept is a useful assessment of learning. Here, creating matching questions in Moodle is a little different from other types of questions.

1. Select “Matching” from the list of type of question to add. The following screen will appear.
2. Type the name of the question (something that helps you identify the question) and type the actual question in the appropriate space. You do not need to enter the answer in the question box.
3. Next set the default mark for the question. Usually the mark is 1 (1 mark for 1 question)



The screenshot shows the Moodle 'Adding a Matching question' form. The title is 'Adding a Matching question' with a help icon. There is an 'Expand all' link in the top right. The 'General' section is expanded and contains the following fields:
- 'Category': A dropdown menu set to 'Default for MTA101 (18)'.
- 'Question name': An empty text input field.
- 'Question text': A rich text editor with a toolbar containing icons for text alignment, bold, italic, list, link, unlink, image, video, and file upload. Below the toolbar is a large empty text area.
- 'Default mark': A text input field containing the number '1'.
There is a small icon in the bottom right corner of the question text area.

4. General feedback is shown to the student after they have completed the question. You can use the general feedback to give students a fully worked answer and

perhaps a link to more information they can use if they did not understand the questions.

5. **Shuffle:** If enabled, the order of the statements (answers) is randomly shuffled for each attempt, provided that "Shuffle within questions" in the activity settings is also enabled.

General feedback ⓘ

Shuffle

6. You must provide at least two questions and three answers. You can provide extra wrong answers by giving an answer with a blank question. Entries where both the question and the answer are blank will be ignored.

▼ Answers

Available choices You must provide at least two questions and three answers. You can provide extra wrong answers by giving an answer with a blank question. Entries where both the question and the answer are blank will be ignored.

Question 1

Answer

Question 2

Answer

7. For combined feedback: you can specify feedback for each correct, partially correct, and incorrect response.

▼ Combined feedback

For any correct response

Your answer is correct.

For any partially correct response

Your answer is partially correct.

Options Show the number of correct responses once the question has finished

For any incorrect response

Your answer is incorrect.

8. When questions are run using the 'Interactive with multiple tries' or 'Adaptive mode' behaviour, so that the student will have several tries to get the question right, then this option controls how much they are penalised for each incorrect try. The penalty is a proportion of the total question grade, so if the question is worth three marks, and the penalty is 0.3333333, then the student will score 3 if they get the question right first time, 2 if they get it right second try, and 1 if they get it right on the third try.

▼ Multiple tries

Penalty for each incorrect try

Hint 1

Hint 1 options Clear incorrect responses Show the number of correct responses

Hint 2

Hint 2 options Clear incorrect responses Show the number of correct responses

ADD ANOTHER HINT

9. After finish setting up the question, click 'Save Changes'. You will be see your newly made question listed in the quiz.

Creating Calculated Questions

Calculated Questions offer a method to build individual numerical question by the use of "wildcards" which are substituted with individual values when the quiz is taken. Shown below are examples of calculated questions:

1. Select “Calculated” from the list of type of question to add. The following screen will appear.

Name	Range of Values	Items Count	Used in Question
r	1 - 10	10	Area of circle

2. Choose category. If the category has shared wild card, it will show at the ‘Shared wild cards’ section.
3. Type the name of the question (something that helps you identify the question) and type the actual question in the Question text. You do not need to enter the answer in the question box.
4. Next, set the default mark for the question. Usually the mark is 1 (1 mark for 1 question).
5. General feedback is shown to the student after they have completed the question. You can use the general feedback to give students a fully worked answer and perhaps a link to more information they can use if they did not understand the questions.

The screenshot shows a question editor interface. At the top, there is a text input field labeled "Question name". Below it is a larger text area labeled "Question text" with a rich text editor toolbar above it containing icons for text color, bold, italic, list, link, unlink, image, video, and document. Below the "Question text" area is a text input field labeled "Default mark" with the value "1". At the bottom, there is another text area labeled "General feedback" with a similar rich text editor toolbar.

4. In the Answers section, you need to add formula for your answers. And also grade and feedback for the answer.

The screenshot shows the "Answers" section of the question editor. It features a dropdown menu labeled "Answers" at the top left. Below it, there are several input fields and dropdown menus: "Answer 1 formula =" with an empty text box, "Grade" with a dropdown menu set to "None", "Tolerance ±" with a text box containing "0.01", "Type" with a dropdown menu set to "Relative", "Answer display" with a dropdown menu set to "2", and "Format" with a dropdown menu set to "decimals". Below these fields is a "Feedback" text area with a rich text editor toolbar. At the bottom of the section, there is a red button labeled "BLANKS FOR 1 MORE ANSWERS".

5. You can also specify units for the answers in the Unit handling section. For example, if you enter a unit of 'cm' here, and the accepted answer is 15, then the answers '15cm' and '15' are both accepted as correct.

▼ Unit handling

Unit handling

Unit penalty as a fraction (0-1) of the resp

Units are input using

Units go

6. When questions are run using the 'Interactive with multiple tries' or 'Adaptive mode' behaviour, so that the student will have several tries to get the question right, then this option controls how much they are penalised for each incorrect try. The penalty is a proportion of the total question grade, so if the question is worth three marks, and the penalty is 0.3333333, then the student will score 3 if they get the question right first time, 2 if they get it right second try, and 1 if they get it right on the third try.

▼ Multiple tries

Penalty for each incorrect try

Hint 1

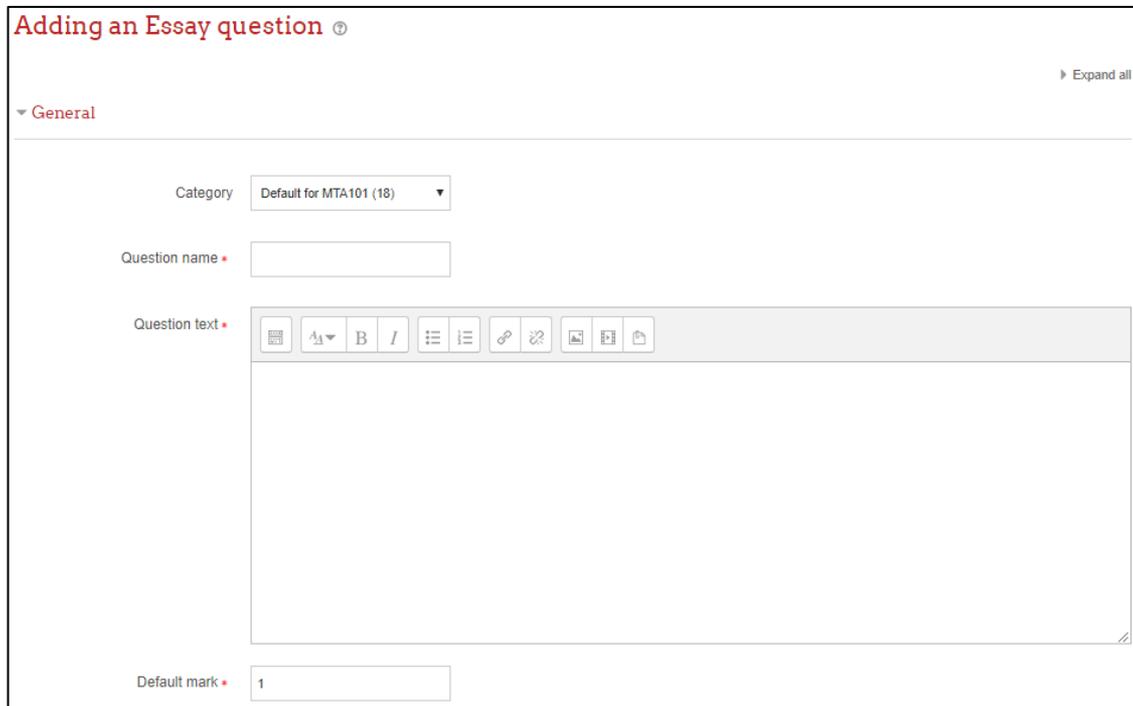
Hint 2

6. After finish setting up the question, click 'Save Changes'. You will see your newly made question listed in the quiz.

Creating Essay type Questions

To construct an essay question, follow this exercise:

1. Select “Essays” from the list of type of question to add. The following screen will appear:



The screenshot shows a web interface titled "Adding an Essay question" with a help icon. A "General" section is expanded. It contains a "Category" dropdown menu set to "Default for MTA101 (18)", a "Question name" text box, a "Question text" text area with a rich text editor toolbar (including bold, italic, list, link, unlink, image, video, and file icons), and a "Default mark" text box set to "1". An "Expand all" link is visible in the top right corner.

6. Give a name to the question. This will help you remember description of the question.
7. In the “Question” text box, type in the essay question that would be asked. You may also add images to the question.
8. Next, set the default mark for the question. Usually the mark is 1 (1 mark for 1 question).
9. General feedback is shown to the student after they have completed the question. You can use the general feedback to give students a fully worked answer and perhaps a link to more information they can use if they did not understand the questions.



The screenshot shows a web interface titled "General feedback" with a help icon. It features a rich text editor toolbar with icons for bold, italic, list, link, unlink, image, video, and file. Below the toolbar is a large text area for entering feedback.

10. In the Response Options:

- **'Response format'** allows you to choose what is available for the students when typing their essays, for example the regular WYSIWYG editor with or without the option to upload files, or a plain text editor (with no formatting.) *No online text* means they cannot type any text. You cannot select this if you don't allow attachments, as the students will have nothing to submit. If you have programming students, they may require *plain text with monospaced font* for their code
- **'Require text'** allows you to decide whether or not students must add text into the text editor when they do the question. If you only want them to upload a word-processed file as an essay, then you can set this to 'Text input is optional'.

▼ Response Options

Response format: HTML editor ▼

Require text: Require the student to enter t ▼

Input box size: 15 lines ▼

Allow attachments: No ▼

Require attachments ⓘ: Attachments are optional ▼

11. **Response Template:** You can create a template to scaffold your students' answer. The template that you design will be reproduced in the text editor when student start to answer the essay question.

▼ Response Template

Response template ⓘ

Rich text editor toolbar: [Text color], [B], [I], [List], [List], [Link], [Unlink], [Image]

Large empty text area for creating the response template.

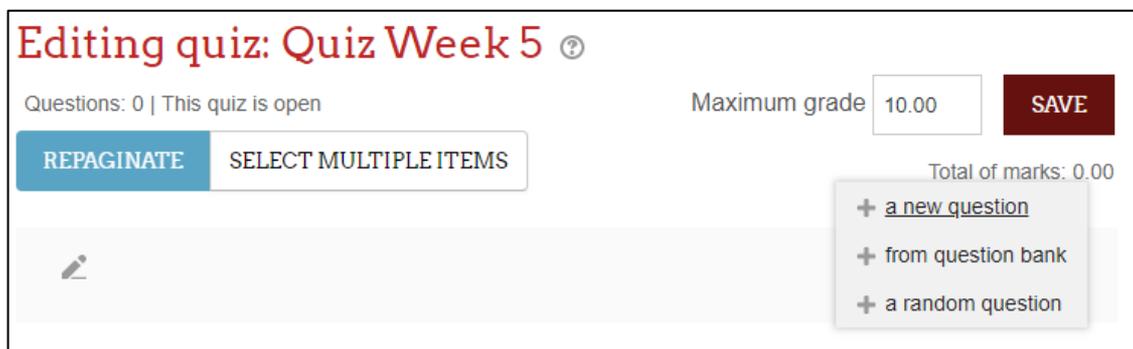
12. Add information for grader as appropriate in the Grader Information section.



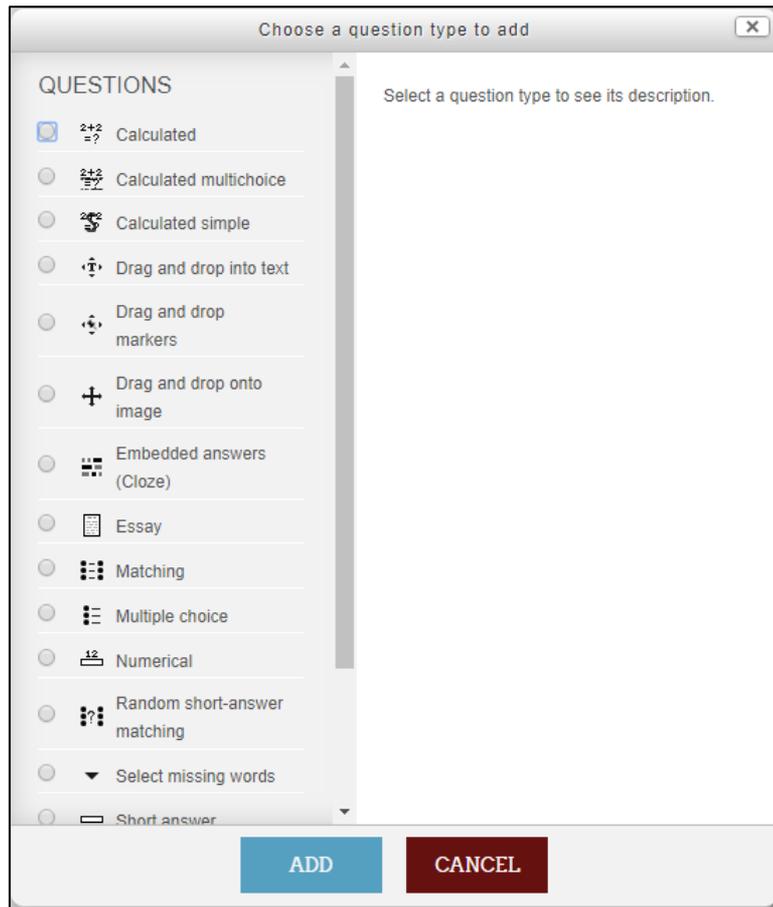
13. After finish setting up the question, click 'Save Changes'. You will be see your newly made question listed in the quiz.

Adding Questions to the Quiz

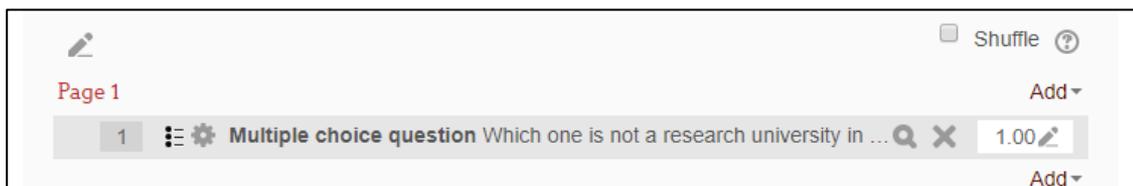
To add questions to the quiz, click Edit Quiz. Here, you have three options to add question to the quiz.



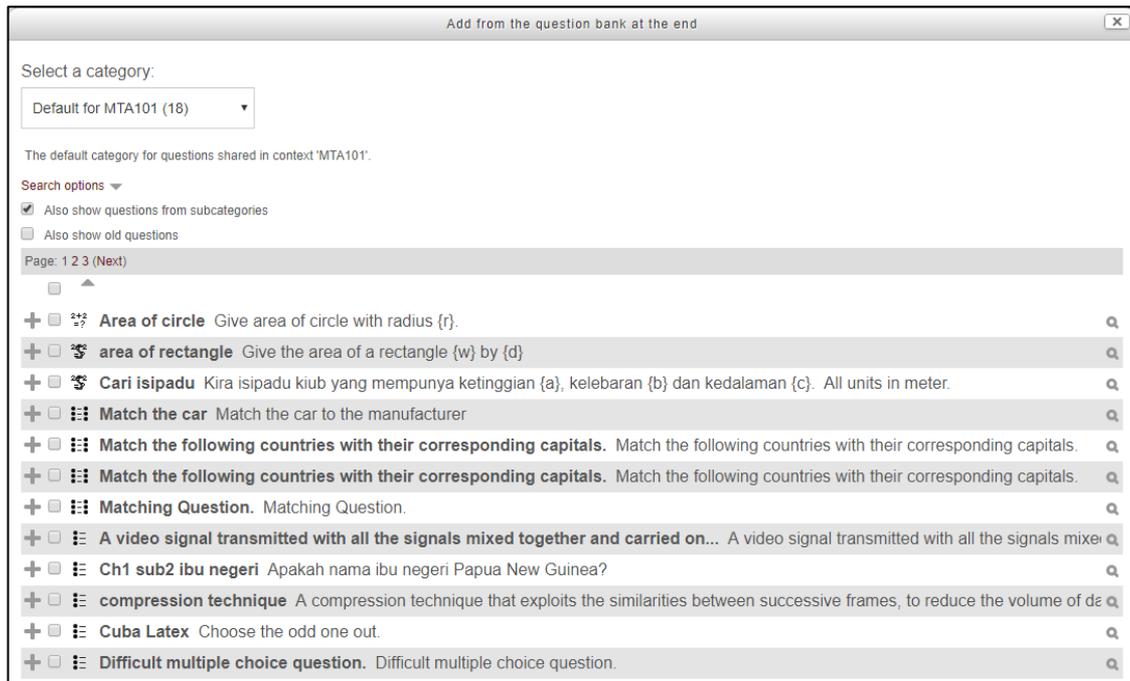
1. **Create new question:** To create new question, click + a new question and choose the type of question you want to add.



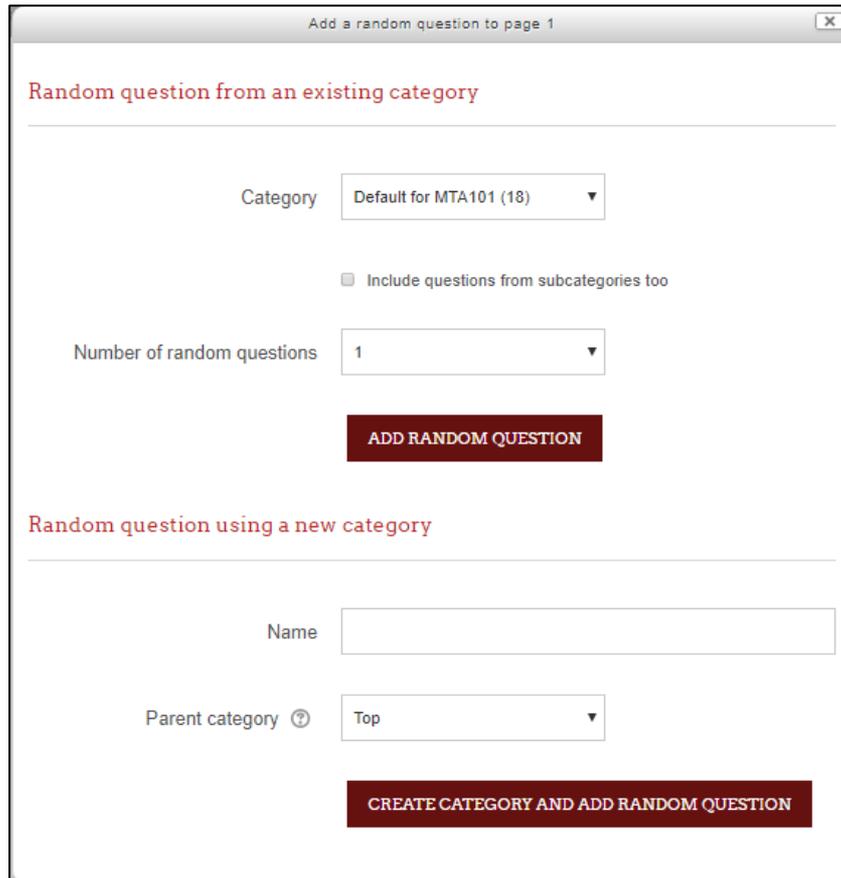
2. Fill in the question form and make sure to give grade to correct answer. Click Save. Below is the example question that have been created.



3. **Choosing pre-made question:** You can also add from question bank by click + from question bank. You can add multiple questions from the question bank and click ‘Add Selected Questions to the Quiz’ button.



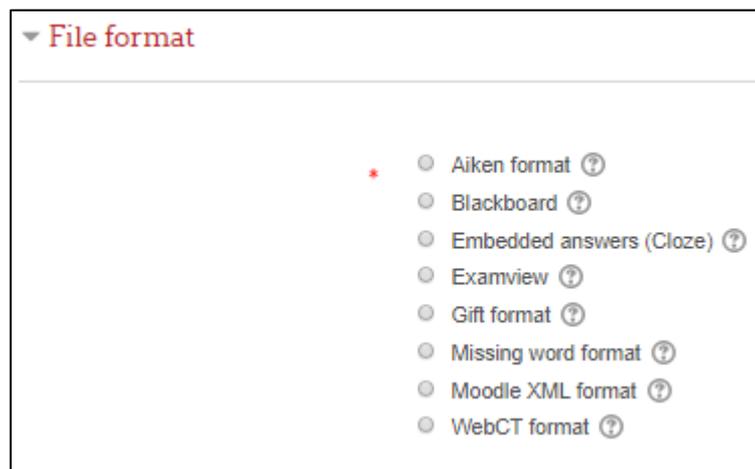
14. **Adding random questions:** You can also add random question by click + random question. This will use question from your question bank. You add questions by choosing the category and number of random question. Alternatively, you can a new category of question.



Importing Question from a File

If you have any questions from your textbook question bank or you do not want to use the web interface to create questions, you can import questions from text files. Moodle allows you to import questions from a text file and supports some basic formatting. When you are familiar with this basic format, it will allow you to type all your questions in a text file instead of using the web interface.

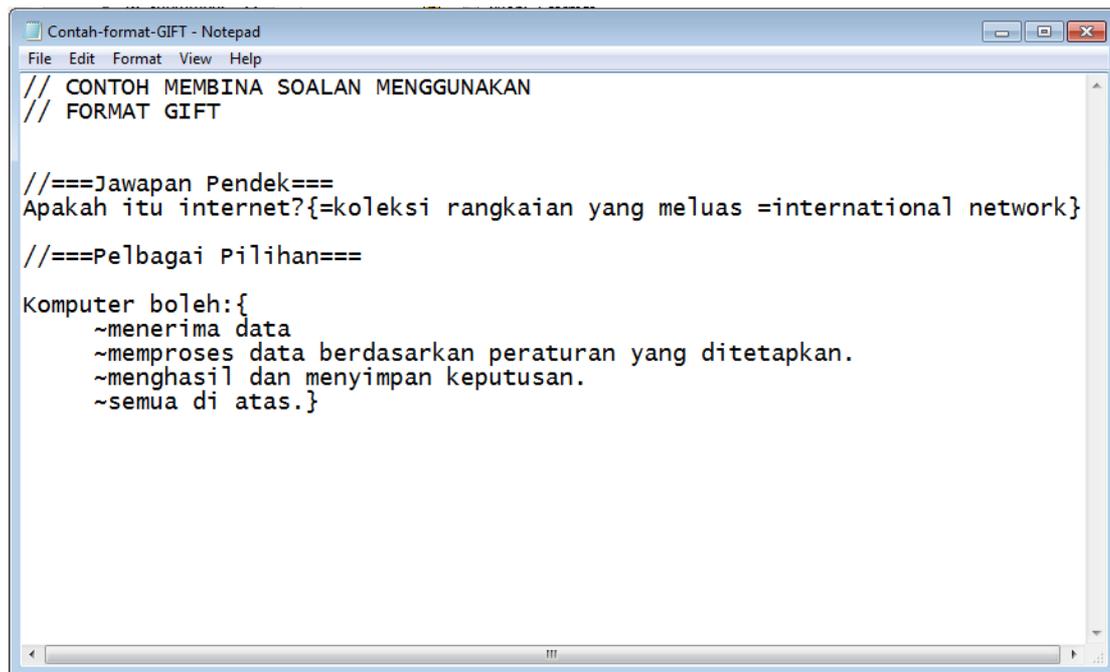
The basic format varies with the version of Moodle. Some examples are: GIFT, Aiken, Blackboard, Embedded Answers (Cloze), Exam view, Missing word, Moodle XML and WebCT as shown in the screen below:



In this module, only GIFT dan Aiken will be described.

GIFT

GIFT format is one of the more flexible formats for importing quiz questions. It is designed as a method for educators to write questions in a text file, in the form of multiple choice, true / false, short answer, matching and calculated questions. Different types of questions can be included in a single text file. Here is an example of questions created using GIFT format:



```
Contah-format-GIFT - Notepad
File Edit Format View Help
// CONTOH MEMBINA SOALAN MENGGUNAKAN
// FORMAT GIFT

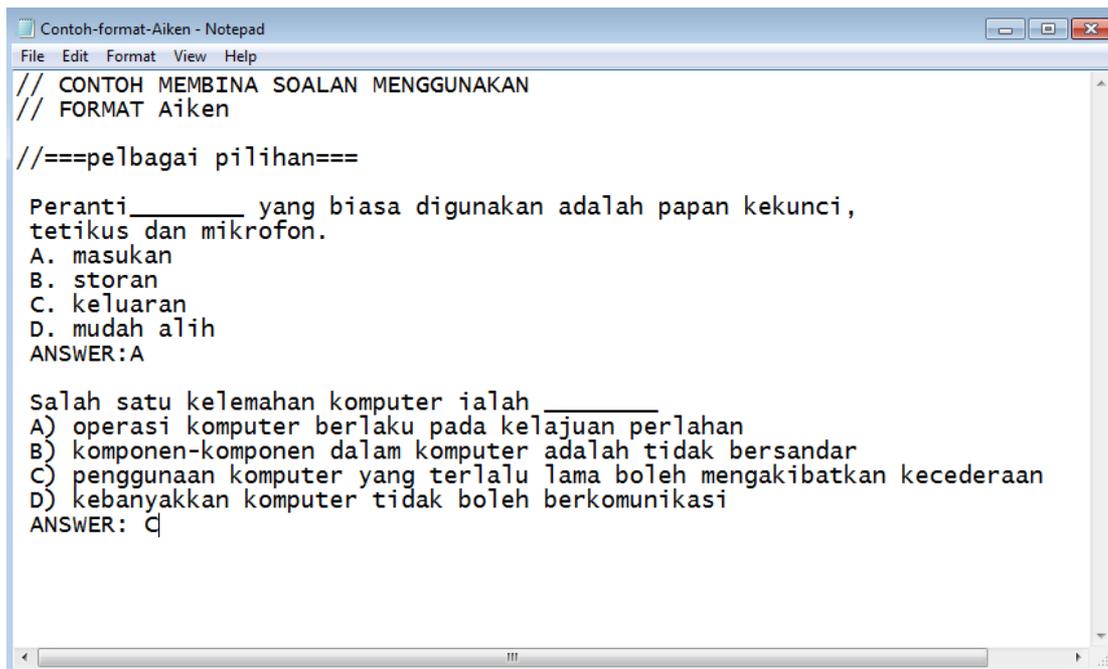
//===Jawapan Pendek===
Apakah itu internet?{=koleksi rangkaian yang meluas =international network}

//===Pelbagai Pilihan===

Komputer boleh:{
  ~menerima data
  ~memproses data berdasarkan peraturan yang ditetapkan.
  ~menghasil dan menyimpan keputusan.
  ~semua di atas.}
```

Aiken

Aiken format provides an easy way to import multiple choice questions. This format is quite easy to generate and an example is shown in the screen below.



```
Contoh-format-Aiken - Notepad
File Edit Format View Help
// CONTOH MEMBINA SOALAN MENGGUNAKAN
// FORMAT Aiken

//===pelbagai pilihan===

Peranti_____ yang biasa digunakan adalah papan kekunci,
tetikus dan mikrofon.
A. masukan
B. storan
C. keluaran
D. mudah alih
ANSWER:A

salah satu kelemahan komputer ialah _____
A) operasi komputer berlaku pada kelajuan perlahan
B) komponen-komponen dalam komputer adalah tidak bersandar
C) penggunaan komputer yang terlalu lama boleh mengakibatkan kecederaan
D) kebanyakan komputer tidak boleh berkomunikasi
ANSWER: C
```

General rules for AIKEN format:

- The question must be written in one line
- Each answer must begin with a single letter followed by a period “.” or a bracket “)”, and a space.
- The correct answer is specified by typing the word “ANSWER:’ followed by the appropriate letter.

Summary

This chapter has discussed the process of preparing a question bank in Moodle to enable the use of on-line quizzes for evaluation of students’ performance. The types of questions presented in this chapter are the multiple choice, true / false, short answer, numeric answer, matching, description, etc. The skills acquired are necessary for those who want to make Moodle as one of the tools for online assessment.