



LMS Quiz – Questions Types

You may add a variety of different types of questions in the Quiz and Lesson modules. The most commonly used quiz question types are listed below with brief descriptions.

1. Multiple Choice

There are two types of multiple choice questions - single answer and multiple answer.

Multiple choice questions now offer the learner the option to clear all answers, once they have made a selection:

Single-answer questions

These questions allow one and only one answer to be chosen by providing radio buttons next to the answers. You can specify negative or non-negative marks for each answer, usually zero marks for wrong answers, maximum marks for correct answers and partial marks for partially correct answers.

Multiple-answer questions

The teacher can select "multiple answers are allowed" in a Multiple Choice question type. "Multiple answers" questions types in a quiz allow one or more answers to be chosen by providing check boxes next to the answers.

The screenshot shows a dialog box titled "Choose a question type to add" with a close button (X) in the top right corner. On the left, under the heading "QUESTIONS", there is a list of question types, each with a radio button and an icon: "Multiple choice" (selected, with a list icon), "True/False" (with a double-dot icon), "Short answer" (with a text box icon), "Numerical" (with a calculator icon), "Calculated" (with a fraction icon), "Essay" (with a document icon), "Matching" (with a list icon), "Random short-answer matching" (with a list icon), "Embedded answers (Cloze)" (with a list icon), "Calculated multichoice" (with a fraction icon), and "Calculated simple" (with a fraction icon). On the right, a description reads: "Allows the selection of a single or multiple responses from a pre-defined list." At the bottom right, there are two buttons: "ADD" and "CANCEL".




1. Select the question type “Multiple Choice” and click on the Add button.
2. Select the question category (default question bank category of the course or any sub-category of the question bank)
3. Give the question a descriptive name. You'll use the name to track your questions later so "Question 1" isn't a good idea. The name will be used in the question lists on the quiz editing page or in the lesson as a page title. It will not be shown to the students, so you can choose any name that makes sense to you and possibly other teachers.
4. Create the question text. If you're using the HTML Editor, you can format the question just like a word processing document.
5. If you want to add a picture to the question use the image icon. This will pop up the Insert Image window. You can choose to upload an image into your files area from this window and then click OK.
6. Set the 'default question grade' (i.e. the maximum marks for this question).


7. Choose whether students can only select one answer or multiple answers
8. Choose whether to shuffle the answer options
9. Choose the number format for answer choices.



NUST – LMS

ID number 

One or multiple answers?

☒ Shuffle the choices? 

Number the choices?


10. Write your first answer in the Choice 1 text field. Inserting HTML into this area also makes it possible to add an image or a sound file.

11. Select a grade percentage for the answer. This is the percentage of the total points for the question that selecting this response is worth. You can select negative percentages as well as positive percentages. So, selecting a correct response in a multiple answer question may give you 50% of the possible points, while selecting a wrong answer may take away 10%. Note that in a multiple-answer question, the positive grades must add up to at least 100%.

- Be aware that if you allow multiple answers and have more than a single correct choice, and do not use a negative grade percentage for wrong answers, the students can simply tick all choices and get the full grade.

Answers


Choice 1




This is correct answer

Grade:

Feedback




Choice 2



This is incorrect answer

Grade:

Feedback





12. If you wish, you can add feedback for each response. It may be a bit more work, but it's good practice to tell the students why each answer is right or wrong using the feedback area. If students know why an answer is right or wrong, they can analyze their own thinking and begin to understand why an answer is correct. Your feedback will only be displayed if you select Show Feedback in the quiz body options.
13. Fill in the rest of the response choices in the rest of the form. Any unused areas will be ignored.
14. Fill in the overall feedback fields if you wish.
15. The 'penalty factor' only applies when the question is used in a quiz using adaptive mode - i.e. where the student is allowed multiple attempts at a question even within the same attempt at the quiz. If the penalty factor is more than 0, then the student will lose that proportion of the maximum grade upon each successive attempt. For example, if the default question grade is 10, and the penalty factor is 0.2, then each successive attempt after the first one will incur a penalty of $0.2 \times 10 = 2$ points.

16. Select the "Save Changes" button at the bottom of the screen.

17. The question is added in the question bank.





2. True/ False:


A student is given only two choices for an answer in this kind of question: True or False. The question content can include an image or html code.


Choose a question type to add


QUESTIONS


☐  Multiple choice


☒  True/False


☐  Short answer


☐  Numerical


☐  Calculated

☐  Essay

☐  Matching

☐  Random short-answer matching

☐  Embedded answers (Cloze)

☐  Calculated multichoice

A simple form of multiple choice question with just the two choices 'True' and 'False'.

ADD

CANCEL

1. Select the question category
2. Give the question a descriptive name - this allows you to identify it in the question bank.
3. Enter a question in the 'question text' field. That can include an image to display if you want to add a picture to the question.



General

Category

Unit-1 (8)

Question name

TF-Question

Question text

Rich text editor toolbar with icons for bold, italic, underline, link, unlink, list, table, image, video, audio, and code. The text area contains: "Solar system has 10 planets."

4. Set the 'default question grade' (i.e. the maximum number of marks for this question).
5. If you wish, add general feedback. This is text that appears to the student after he/she has answered the question.
6. Select the correct answer - true or false.

ID number



Correct answer

False

7. Finally, provide feedback for each of the answers 'true' and 'false'.
8. Click 'Save changes' to add the question to the category.

SAVE CHANGES AND CONTINUE EDITING

SAVE CHANGES

CANCEL



3. Short Answer/ Fill in the blanks:

In a short answer question, the student types in a word or phrase in response to a question (that may include a image). Answers may or may not be case sensitive. The answer could be a word or a phrase, but it must match one of your acceptable answers exactly. It's a good idea to keep the required answer as short as possible to avoid missing a correct answer that's phrased differently.

Question setup steps are given below:

1. Select the question category
2. Give your question a descriptive name.
3. Create the question text. If you're using the HTML Editor, you can format the question just like a word processing document.
 - Tip: Normally the answer box appears below the question text. However, if you include five or more underscores in the text, the input box will be placed there. For example the question "A water molecule contains two atoms of _____ and one atom of oxygen".
4. Select an image to display if you want to add a picture to the question.
5. Set the 'default question grade' (i.e. the maximum number of marks for this question).
6. If you wish, add general feedback. This is text that appears to the student after he/she has answered the question.
7. Choose whether the answers are case-sensitive. Case sensitivity can be tricky where capitalization is important. Will you accept *Ban Ki-moon* as well as *ban ki-moon* as an answer?

Case sensitivity

No, case is unimportant ▾

Correct answers

You must provide at least one possible answer. Answers left blank will not be used. '*' can be used as a wildcard to match any characters. The first matching answer will be used to determine the score and feedback.

▼ **Answers**

Answer 1

hydrogen

Grade

100% ▾

8. Next, fill in the answers you will accept.
9. Add grade for each answer.
10. Click Save Changes to add the question to the category.



4. Numerical:

From the student perspective, a numerical question looks just like a short-answer question. The difference is that numerical answers are allowed to have an accepted error. This allows a fixed range of answers to be evaluated as one answer.

For example, if the answer is 30 with an accepted error of 5, then any number between 25 and 35 will be accepted as correct.

You are able to

- grade independently the number and the unit,
- choose to handle the unit response either as
 - a text input element or as
 - a multichoice radio element,
- just grade the number with the option to write the unit close to the input element,
- put the unit either
 - at right of the number as the most common occurrence
 - or at left as in \$ 100,00.

Question 1
Correct
Mark 1.00 out of 1.00

Sum of 2m and 3m?

Answer: ✓

CHECK

Correct
Marks for this submission: 1.00/1.00.

Text answers are no longer allowed.

1. Select the question category
2. Give the question a descriptive name - this allows you to identify it in the question bank.



3. Enter a question in the 'question text' field. This can include an equation. Alternatively, select an image to display if you want to add a picture to the question.
4. Select an image to display if you want to add a picture to the question. For the student, it appears immediately after the question text and before the choices.
5. Set the 'default question grade' (i.e. the maximum number of marks for this question).
6. Add general feedback. This is text that appears to the student after he/she has answered the question.
7. Now enter the first accepted answer(s). Note: Floating point numbers, e.g. 23.4, may also be written as 23,4 or 2.34E+1.
8. Enter an accepted error for this answer. This is the range above or below the answer that Moodle will accept as a match. For example, if the correct answer is 5, but you will accept 4.8 or 6.2 as answers, your accepted error is 0.2.

Answer 3	<input type="text" value="5"/>	Error	<input type="text" value="0.2"/>	Grade	<input type="text" value="100%"/>
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9. Enter a grade for this answer.
10. Enter feedback for the accepted answer. This is the text that the student will see if they enter a number within the accepted error of the answer.
11. Repeat for each of the answers you want to accept. You can provide feedback for *all* wrong answers by using a wildcard, i.e. the asterisk character (*), as an answer with grade 'None'.

▼ Unit handling

Unit handling	<input type="text" value="The unit must be given, and will be gra"/>	
Unit penalty	<input type="text" value="0.1"/>	<input type="text" value="as a fraction (0-1) of the response grad"/>
Units are input using	<input type="text" value="the text input element"/>	
Units go	<input type="text" value="on the right, for example 1.00cm or 1.0"/>	



12. Units can also be specified. 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. You can also specify a multiplier. So, if your main answer was 5500 with unit W, you can also add the unit kW with a multiplier of 0.001. This means that the answers '5500', '5500W' or '5.5kW' would all be marked correct. Note that the accepted error is also multiplied, so an allowed error of 100W would become an error of 0.1kW.

13. Click 'Save changes' to add the question to the category.

5. Calculated:

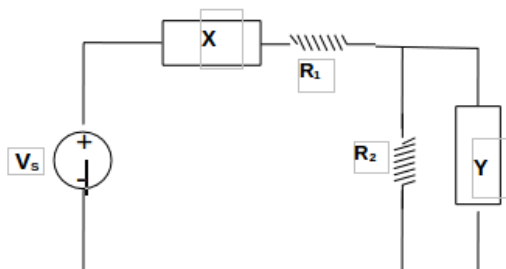
Calculated questions offer a way to create individual numerical questions by the use of wildcards (i.e you can use common variable names as **x** , **y** enclosed in curly braces to create the wildcards **{x}** and **{y}**) that are substituted with random values when the quiz is taken.

For example, if you want to create a large number of "Calculate the area of a rectangle" problems to drill your students, you could create a question with two wildcards (i.e. **{base}**, **{height}** created from the common **base**, **height** variable names) and put in the "Correct Answer Formula=" input field **{base} * {height}** (* being the multiplication sign).

Correct Answer Formula= {base}*{height}

When a student takes the test, Moodle will randomly select values for **{base}** and **{height}** and grade the response using the result of the **Correct Answer Formula**.

Example Question: The device 'X' requires 4 volts and 1.5 mA and device 'Y' operates at 2 volts and 1 mA. Using KCL and KVL, design the circuit i.e. specify the values of R_1 and R_2 .



Choose $V_s = \{V_s\}$

1. Open the question bank and navigate to the sub-category where you want to create the question.
2. Write name of the question (This name will not display to the students).



7. Click on “Save changes” button.

8. Upon saving the changes, system will ask you to define the variable you have added into the question and its answer. (Variables are termed as “Wild Card” in LMS). If you do not want to share this variable among different questions of your quiz, keep the default option selected i.e. “Will use the same existing private dataset as before” and Do not synchronise. Click on “Next page”.

Choose wildcards dataset properties

The wild cards {x..} will be substituted by a numerical value from their dataset

Mandatory wild cards present in answers

Wild card {Vs}

will use the same existing private dataset

Possible wild cards present only in the question text

Synchronise the data from shared datasets with other questions in a quiz

☒ not synchronise

☐ Synchronise

☐ Synchronise and display the shared datasets name as prefix of the question name

NEXT PAGE



9. Choose the range of variable by setting the minimum and maximum values. Adding decimal places will result in generation of more randomized set of variable values. Choose a distribution method for variable values.

Edit the wildcards datasets [?](#)

Shared wild cards

No shared wild card in this category

[UPDATE THE DATASETS PARAMETERS](#)

Item to add

Wild card (Vs)

14

Range of Values

Minimum

5

-Maximum

15

Decimal places

1

Distribution

Uniform

Answers tolerance parameters

 $0.2 * \{Vs\} * 0.5$ $0.2 * 14 * 0.5 = 1.40$

Correct answer : 1.40 inside limits of true value

Min: 1.38 --- Max: 1.42

[Show more...](#)

10. Select the number of random sets you want to add for the variable(s) and click on “ADD” button. e.g. choosing 20 will generate 20 sets of this variable which will be distributed among the students during quiz.

Add

Next 'Item to Add'

☒ reuse previous value if available☐ forceregeneration of only non-shared wildcards☐ forceregeneration of all wildcards[GET NEW ITEM TO ADD NOW](#)

Add item

[ADD](#)

Add item

20

new set(s) of wild card(s) values

You must add at least one dataset item before you can save this question.

[DISPLAY](#)

2

set(s) of wild card(s) values



11. You can choose any number to display the generated set of questions.

Delete

DELETE

Delete item1

1

set(s) of wild card(s) values

DISPLAY

2

set(s) of wild card(s) values

Set 20

Wild card {Vs}

10

$0.2 * \{Vs\} * 0.5$

$0.2 * 10 * 0.5 = 1.00$
Correct answer : 1.00 inside limits of true value
Min: 0.979999999999999 --- Max: 1.02

Set 19

Wild card {Vs}

9

$0.2 * \{Vs\} * 0.5$

$0.2 * 9 * 0.5 = 0.90$
Correct answer : 0.90 inside limits of true value
Min: 0.879999999999999 --- Max: 0.920000000000001

SAVE CHANGES

Preview

12. Verify the answers from the displayed sets of questions and save the changes.

13. Question is added into selected category of your question bank. Using preview icon (magnifying glass icon) you can preview how question will appear to the students.



Questions Categories Import Export

Question bank

Select a category: Unit-1 (2)

This category contains all questions related to unit-1.

☐ Show question text in the question list

Search options

☐ Also show questions from subcategories

☐ Also show old questions

[CREATE A NEW QUESTION](#)

	Created by	Last modified by
<input checked="" type="checkbox"/> KCL_KVL	Nazia I Perwaiz 11 December 2020, 12:25 PM	Nazia I Perwaiz 11 December 2020, 12:26 PM
<input type="checkbox"/> Essay Type Question	Nazia Perwaiz 30 April 2020, 5:13 PM	Nazia Perwaiz 30 April 2020, 5:13 PM
<input type="checkbox"/> matching question	Nazia Perwaiz 30 April 2020, 5:13 PM	Nazia Perwaiz 30 April 2020, 5:13 PM

14. Variable value is selected from the range you have defined while creating the question.

Question 1

Correct

Mark 1.00 out of 1.00

The device 'X' requires 4 volts and 1.5 mA and device 'Y' operates at 2 volts and 1 mA. Using KCL and KVL, design the circuit i.e. specify the values of R_1 and R_2 .

Choose $V_S = 6$

(Note: Marks will be deducted if explanations/justifications are not included.)

Answer:

Correct

Marks for this submission: 1.00/1.00.

[START AGAIN](#) [SAVE](#) [FILL IN CORRECT RESPONSES](#) [SUBMIT AND FINISH](#) [CLOSE PREVIEW](#)

15. Another preview of the same question will fetch a different value of the variable V_S .



Question 1
Correct
Mark 1.00 out of 1.00

The device 'X' requires 4 volts and 1.5 mA and device 'Y' operates at 2 volts and 1 mA. Using KCL and KVL, design the circuit i.e. specify the values of R_1 and R_2 .
Choose $V_S = 11$.
(Note: Marks will be deducted if explanations/justifications are not included.)

Answer: 1.10

Correct
Marks for this submission: 1.00/1.00.

[START AGAIN](#) [SAVE](#) [FILL IN CORRECT RESPONSES](#) [SUBMIT AND FINISH](#)

6. Essay:

The essay question type provides the option of answering by uploading one or more files and/or entering text online. (For longer essays, text or file uploads, you may wish to consider using the “Assignment activity” rather than this question type.)

Essay questions are created in the same way as other quiz question types. The difference is that essay questions have to be marked manually, and the student will not get a final grade until the teacher has marked their essay.

1. Give the question a descriptive name - this allows you to identify it in the Question bank.
2. Enter the question in the 'Question text' field. This will be the title of and information about the essay you wish them to write.
3. Set the 'default mark' and any 'General Feedback' if required. This is text that appears to the student once you have graded their essay.
4. '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'. *(Note that this setting does not force the student to type text into the text editor; they can still leave it blank and continue to another question.)*



Require text

Require the student to enter text ▼

Text input is optional

5. Response format' allows you to choose what is available for the students when typing their essays. It is possible for a teacher to create a template to scaffold the student's answer in order to give them extra support. The template is then reproduced in the text editor when the student starts to answer the question

▼ Response Template

Response template

A ▼ B I

Introduction:

Background:

Your method:

Conclusion:

6. Student view of the question is shown in the next image:

Question 1
Not yet answered
Marked out of 1.00

Write down the differences between parallel and series circuits:

A ▼ B I

Introduction:

Background:

Your method:

Conclusion:

7. The essay question will not be assigned a grade until it has been reviewed by a teacher and manually graded. Until that happens, the student's grade will be 0.
8. When manually grading an essay question, the grader is able to enter a custom comment in response to the essay and assign a score for the essay.
9. If necessary the teacher can also upload a file such as an image (or even record audio/video) in the essay grading box.
10. Save changes



7. Embedded Answers/ Cloze:

Embedded answers (Cloze) questions consist of a passage of text (in Moodle format) that has various answers embedded within it, including multiple choice, short answers and numerical answers. e.g question:

Question 1

Not complete

Marked out of
4.00

Brooks Enterprises has never paid a dividend. Free cash flow is projected to be \$80,000 and \$100,000 for the next 2 years, respectively; after the second year, FCF is expected to grow at a constant rate of 8%. The company's weighted average cost of capital is 12%.

**ANSWER IN NUMERICAL VALUE ONLY (NO \$ SIGNS, COMMAS, ETC.).
ROUND TO TWO DECIMAL PLACES**

What is the terminal, or horizon, value of operations?

Calculate the value of Brooks's operations.

Suppose Brooks has \$100,000 in marketable securities, \$1,000,000 in debt, and 100,000 shares of stock. What is the intrinsic price per share? \$

☐ 3☐ 4☐ 2☐ 5

per share.

1. Select the question category
2. Give the question a descriptive name - this allows you to identify it in the question bank.
3. Enter the passage of text into the 'question text' field.





4. Select an image to display if you want to add a picture to the question. For the student, it appears immediately above the question text.
5. Set the 'default question grade' (i.e. the maximum number of marks for this question).
6. If you wish, add general feedback. This is text that appears to the student after he/she has answered the question.
7. The editor has been modified and allows you to test if your syntax is good. The different questions elements decoded will be displayed and syntax errors pinpoint. However, it cannot check if the question decoded is two questions in one because of an error syntax (for example ~}, =~, etc.).
8. Click Save changes to add the question to the category.

8. Description:

A Description question page simply shows some text (and possibly graphics) without requiring an answer. It is more of a label than a question type.

Note that these questions are not really questions so they are ignored when adding random questions from a category.

TIP: When shuffling questions is turned off, this type of page can provide information to be used by a following group of questions.
