



LMS Online Quiz – Create Calculated Type Questions (Embed Random Variables)

1. Open the question bank and navigate to the sub-category where you want to create the question.

The screenshot displays the 'Question bank' interface. At the top, there are tabs for 'Questions', 'Categories', 'Import', and 'Export'. The 'Questions' tab is active. Below the tabs, the 'Question bank' title is shown in red. A dropdown menu for 'Select a category:' is set to 'Unit-1 (7)'. Below this, there are several checkboxes for filtering questions, such as 'Show question text in the question list', 'Also show questions from subcategories', and 'Also show old questions'. A prominent blue button labeled 'CREATE A NEW QUESTION ...' is visible. Below the button, there are several question type categories listed with checkboxes: 'Essay Type Question', 'matching question', 'Embedded answers type', 'MCQ Type', 'Numerical Question', 'Q4 - ShortAnswer', and 'True False'. At the bottom left, there are buttons for 'DELETE', 'MOVE TO >>', and 'Unit-1 (7)'. A modal dialog box titled 'Choose a question type to add' is open in the center. It contains a list of question types under the heading 'QUESTIONS': 'Multiple choice', 'True/False', 'Short answer', 'Numerical', 'Calculated', 'Essay', 'Matching', 'Random short-answer matching', 'Embedded answers (Cloze)', 'Calculated multichoice', and 'Calculated simple'. To the right of the list, there is a text prompt: 'Select a question type to see its description.' At the bottom right of the dialog box, there are 'ADD' and 'CANCEL' buttons.



2. Write name of the question (This name will not display to the students).
3. Add question text. The variable for which you want to randomize its value for all students, should be written in curly brackets i.e. **{Vs}** in the question text.
4. An image can be directly pasted in the editor.

Shared wild cards: No shared wild card in this category

Question stored name: KCL_KVL

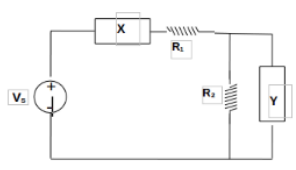
Question name:

Question text:

The device 'X' requires 4 volts and 15 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 $V_s = \{Vs\}$

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



Default mark:

5. Add the correct answer formula by using the variable and select "Grade" to 100%.
6. Absolute or relative tolerance can be provided (if necessary).

▼ **Answers**

Answer 1 formula = Grade:

Tolerance ±: Type:

Answer display: Format:

Feedback:

Rich text editor toolbar with icons for bold, italic, underline, list, link, image, etc.



7. Click on “Save changes” button.

▶ Unit handling

▶ Units

▶ Multiple tries

▶ Created / last saved

SAVE CHANGES AND CONTINUE EDITING

SAVE CHANGES CANCEL

There are required fields in this form marked *****

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 datas

Possible wild cards present only in the question text

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

Do not synchronise

Synchronise

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

NEXT PAGE



- 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...

- 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}

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

Set 19

Wild card {Vs}

$0.2 * \{Vs\} * 0.5$ $0.2 * 9 * 0.5 = 0.90$
 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:

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 type="checkbox"/>  KCL_KVL	Nazia 1 Perwaiz 11 December 2020, 12:23 PM	Nazia 1 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:

Correct
Marks for this submission: 1.00/1.00.

START AGAIN SAVE FILL IN CORRECT RESPONSES SUBMIT AND FINISH