

Canvas: How are Multiple Answer Questions graded?

Scoring of the Multiple Answer question is often difficult for both instructors and students to understand. In this type of question, there can be multiple correct responses and to earn full marks the student must (a) select all the correct responses, and (b) select none of the incorrect responses. Every selected answer option receives some type of score (+ or -) while unselected options receive no score.

Scoring overview:

- The **value of a correct selected response** in a specific question is based on both the value of the question overall, and the number of correct responses that must be selected in it.
- The **value of an incorrect selected response** is the negative value of a correct response.
- **Not selecting a correct answer = 0**
- **Not selecting an incorrect answer = 0**
- A student will never be given a negative question score.

Example 1: Question 15 shows a graded Multiple Answer question.

- This question has 5 response options: three are correct answers (1,2, 5) and two are not (3, 4).
- The question is worth 1 point.
- Each correct answer is worth $(1\text{pt}/3) = 0.33$ pt.
- The student selected response 5 only.

Question 15 0.33 / 1 pts

Which hormone(s) work to increase the amount of circulating plasma glucose?

(Check all that apply)

Correct Answer ☐ Cortisol

Correct Answer ☐ Epinephrine and norepinephrine

☐ Growth Hormone

☐ Insulin

Correct! ☒ Glucagon

	Student's score per response (pt)
Option 1 = Correct	0
Option 2 = Correct	0
Option 3 = Incorrect	0
Option 4 = Incorrect	0
Option 5 = Correct	0.33
TOTAL	0.33

Example 2: Question 6 shows a graded Multiple Answer question.

- This question has 5 response options: four are correct (#2,3,4,5) and the first one is not.
- The question is worth 1 point.
- Each correct answer is worth $(1\text{pt}/4) = 0.25$ pt.
- The student selected responses 1, 2, 3, and 5.

Question 6
0.5 / 1 pts

Indirect calorimetry
(Check All That Apply)

You Answered

☒ Assesses the body's energy expenditure by measuring heat production

Correct!

☐ Can not be used to measure protein breakdown

Correct!

☐ Can be used to calculate fat and carbohydrate breakdown

Correct Answer

☐ Can track rapid changes in energy expenditure

Correct!

☐ Uses measurements of respiratory gases in estimating energy expenditure A and B are correct

	Student's score per response (pt)
Option 1 = Incorrect	-0.25
Option 2 = Correct	0.25
Option 3 = Correct	0.25
Option 4 = Correct	0
Option 5 = Correct	0.25
TOTAL:	0.5

Example 3: Question 31 shows a graded Multiple Answer question.

Question 31
0 / 1 pts

Which speed up creatine phosphate breakdown by increasing the activity of creatine phosphokinase?
(Click on all that apply)

You Answered

☒ Greater [ATP]

☐ Lower [ADP]

Correct!

☒ Greater [ADP]

Correct Answer

☐ Lower [ATP]

- Question 31 has 4 response options: two are correct (#3,4) and two are not (1,2).
- The question is worth 1 point.
- Each correct answer is worth (1pt/2) = 0.5 pt.
- The student selected responses 1 and 3

	Student's score per response (pt)
Option 1 = Incorrect	-0.5
Option 2 = Incorrect	0
Option 3 = Correct	0.5
Option 4 = Correct	0
TOTAL:	0

Example 4: Question 36 shows a graded Multiple Answer question.

Question 36

0.5 / 1 pts

What could cause the RER to be less than 0.70 during exercise?

(Check all that apply)

You Answered

☒ Low VO₂

Correct!

☐ High VCO₂

Correct!

☒ Low VCO₂

Correct!

☒ Retention of CO₂ in the blood

- Question 36 has 4 response options: two are correct (#3,4) and two are not (1,2).
- The question is worth 1 point.
- Each correct answer is worth (1pt/2) = 0.5 pt.
- The student selected responses 1, 3, and 4.

	Student's score per response (pt)
Option 1 = Incorrect	-0.5
Option 2 = Incorrect	0
Option 3 = Correct	0.5
Option 4 = Correct	0.5
TOTAL:	0.5