Welcome to this session



Rate this workshop-What score would you give out of 20?





Rate this workshop-

What score would you give out of 20?



It May be from - to



Rate this workshop-

What score would you give out of 10?

Level of Scoring

Excellent (3) Good (2) Weak (1) Worst (0) Venue Selection and Management **Essential Contents Selection for Newly Recruited Facilitator** Criteria **Workshop Food Management Distribution of Workshop Materials Previously Proper Time Management**

Total Score = 10 out of 15

What are the benefits of using rubrics for assessment?

Answer: Rubrics clearly outline the criteria and standards for assessment, making it easier for students to understand what is expected of them and for teachers to evaluate their work objectively. Rubrics provide feedback that can help students identify areas of strength and weakness, and can help teachers identify areas where additional instruction is needed. It can be adapted to specific task only, making them less flexible tool for educators.

Total Marks (4)

The range of marks awarded by examiners is - 2 to 4

What are the benefits of using rubrics for assessment?

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If they have some criteria such as —



Clear and transparent assessment – 1



Consistency in grading - 1



Feedback for improvement – 1



Flexibility - 1



A Session on –

Rubric for Assessment



Organized by –



Presented By -

Md. Matiur Rahman

Assistant Professor

Department of Medical Physics, KYAU



Objectives of the Session -

Participants will be able to -



Can Explain



R





Identify

the Situation



B





R











Definition

Rules

R

Understanding

U

Benchmark

B

Reliable

R

Instruction

Criteria

C



Definition

A *rubric* is a *scoring tool* that lays out *specific expectation* for the task, assignment or project. Rules

Understanding

Benchmark

Reliable

Instruction

Criteria

R

U

B

R

C



Why do we need rubric?

For Teachers:

Saved Grading Time

Accurate and Fair Assessment

Long Term Usage



For Students:

Clear Learning Goals

Fair Assessment

Tool for Self Assessment

Standardized Marking

For Parents:

They are also convinced easily about their child's performance and they know exactly what their child needs to do to be successful.



Why do we need rubric?

For Teachers:

Saved Grading Time

Accurate and Fair Assessment

Long Term Usage



For Parents

They are also co they know exac

Template for Course File

(Outcome-based Curriculum)

- 1. Course outline
- 2. Lecture materials/notes
- 3. Attendance sheet
- 4. Assignment → copies of best, mediocre and poor
- Class test/quiz /mid-term test etc.→copies of best, mediocre and poor
- 6. Copies of question papers/assessment tools
- 7. Rubrics for assessment
- 8. Course evaluation by course teacher considering feedback from the students
- 9. Feedback from the students on the course
- 10.Peer review: Done/Not done
- 11. Evaluation of attainment of CLOs
- 12.Improvement plan for better attainment of CLOs



Why do we need rubric?

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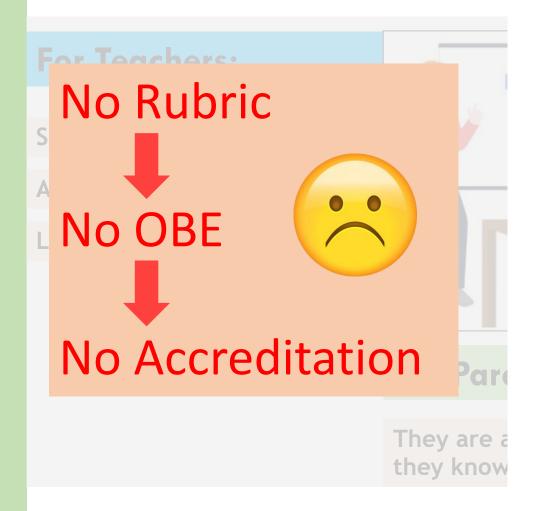
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Why need a rubric?



- 3. Attendance sheet
- Assignment → copies of
- Class test/quiz/mid-tern
- 6. Copies of question pape
- 7. Rubrics for assessment
- Course evaluation by co
- 9. Feedback from the stude
- 10.Peer review: Done/Not



How do you make a rubric?

Example:

Level of Mastery

Physics Problem solving

Structure of the Rubric

Evaluation Criteria

Level of Mastery

Quality Definition

Score

Evaluation Criteria

	Excellent (1)	Good (0.7)	Poor (0.3)	Irrelevant/ Wrong (0)
Strategic Approach with exact equations	Approach chosen is correct & selected the exact equations with all valid elements. (1)	Approach chosen is correct but selected the equations with minor errors. (0.7)	Approach chosen is correct but selected the equations with multiple errors. (0.3)	Invalid approach & selected the wrong equations. (0)
Identifying the values of all variables	All variables identified properly.	All variables identified with minor errors. (0.7)	Variables identified with multiple errors. (0.3)	Failed to identify the variables.
Solving steps & finding correct answer	Followed all steps for solving & found the exact answer (1)	Followed steps & found the answer with minor errors. (0.7)	Followed steps are not sufficient & found the partial answer. (0.3)	Missed steps & found the wrong answer. (0)
Using proper units & making the decision from answer	Used proper units and made the adequate decision (1)	Used proper units but made the inadequate decision (0.7)	Used partially correct units and made the inadequate decision (0.3)	Used incorrect units and made the inaccurate decision (0)



How do you make a rubric?

Structure of the Rubric

Level of Mastery

Three Levels

Weak | Satisfactory | Strong
Beginning | Intermediate | High
Weak | Average | Excellent
Developing | Competent | Exemplary
Low Mastery | Average Mastery | High Mastery

Four Levels

Unacceptable | Marginal | Proficient | Distinguished
Beginning | Developing | Accomplished | Exemplary
Needs Improvement | Satisfactory | Good | Accomplished
Emerging | Progressing | Partial Mastery | Mastery
Not Yet Competent | Partly Competent | Competent | Sophisticated
Inadequate | Needs Improvement | Meets Expectations | Exceeds Expectations
Poor | Fair | Good | Excellent



How do you make a rubric?

Structure of the Rubric

Level of Mastery

Five Levels

Poor | Minimal | Sufficient | Above Average | Excellent Novice | Intermediate | Proficient | Distinguished | Master Unacceptable | Poor | Satisfactory | Good | Excellent

Six Levels

Unacceptable | Emerging | Minimally Acceptable | Acceptable | Accomplished | Exemplary





Analytical Rubrics

Level of Mastery



Holistic Rubrics

	Excellent	Good	Score	Description
	(3)	(2)		Excellent:The student has demonstrated a deep understanding of the physics concepts involved and has applied them accurately and efficiently to solve
Strategic Approach with exact equations	Approach chosen is correct & selected the exact equations with all	Approach chosen is correct but selected the equations with mino	4	the problem. The student has presented the solution in a clear and organized manner, showing all steps and calculations, and has arrived at the correct answer with no significant errors.
with exact equations	valid elements. (3)	errors. (2) Qual		Good: The student has demonstrated a good understanding of the physics concepts involved and has applied them correctly to solve the problem.
Identifying the values of all variables	All variables identified properly. (3)	All variables identified with minor errors. (2)	3	The solution is presented in a mostly clear and organized manner, showing most steps and calculations, and has arrived at the correct answer with minor errors or omissions.
Solving steps & finding correct answer	Followed all steps for solving & found the exact answer (3)	Followed steps & four the answer with minc errors. (2)	2	Fair: The student has demonstrated a basic understanding of the physics concepts involved and has applied them somewhat correctly to solve the problem. The solution is presented in a somewhat unclear or disorganized manner, showing some steps and calculations, and has arrived at the
Using proper units &	Used proper units and	Used proper units bu		correct answer with some significant errors or omissions.
making the decision from answer	made the adequate decision (3)	made the inadequate decision (2)	1	Poor: The student has demonstrated little understanding of the physics concepts involved and has applied them incorrectly or incoherently to solve the problem. The solution is presented in a unclear or disorganized manner,
Total Score =	12	8		showing few steps and calculations, and has arrived at an incorrect answer with significant errors or omissions.

Evaluation Criteria



Analytical Rubrics

- Analytical Rubrics provides specific feedback along several criteria.
- Each criteria is scored independently using rating scale/performance level.
- Applicable in all types of assessment but mostly in *formative assessment*.

Holistic Rubrics

- Holistic Rubrics provides a single score based on an overall impression of a student's performance of a task.
- Mostly applicable in summative assessment.





Analytical Rubrics

Level of Mastery

	Excellent (3)	Good (2)	Poor (1)	Irrelevant/ Wrong (0)
Strategic Approach with exact equations	Approach chosen is correct & selected the exact equations with all valid elements. (3)	Approach chosen is correct but selected the equations with minor errors. (2) Quality	Approach chosen is correct but selected the equations with multiple errors. Definition (1)	Invalid approach & selected the wrong equations. (0)
Identifying the values of all variables	All variables identified properly. (3)	All variables identified with minor errors. (2)	Variables identified with multiple errors. (1)	Failed to identify the variables. (0)
Solving steps & finding correct answer	Followed all steps for solving & found the exact answer (3)	Followed steps & found the answer with minor errors. (2)	Followed steps are not sufficient & found the partial answer. (1)	Missed steps & found the wrong answer. (0)
Using proper units & making the decision from answer	Used proper units and made the adequate decision (3)	Used proper units but made the inadequate decision (2)	Used partially correct units and made the inadequate decision (1)	Used incorrect units and made the inaccurate decision (0)
Total Score =	12	8	4	0

Evaluation Criteria





Holistic Rubrics

Score	Description
4	Excellent:The student has demonstrated a deep understanding of the physics concepts involved and has applied them accurately and efficiently to solve the problem. The student has presented the solution in a clear and organized manner, showing all steps and calculations, and has arrived at the correct answer with no significant errors.
3	Good: The student has demonstrated a good understanding of the physics concepts involved and has applied them correctly to solve the problem. The solution is presented in a mostly clear and organized manner, showing most steps and calculations, and has arrived at the correct answer with minor errors or omissions.
2	Fair: The student has demonstrated a basic understanding of the physics concepts involved and has applied them somewhat correctly to solve the problem. The solution is presented in a somewhat unclear or disorganized manner, showing some steps and calculations, and has arrived at the correct answer with some significant errors or omissions.
1	Poor: The student has demonstrated little understanding of the physics concepts involved and has applied them incorrectly or incoherently to solve the problem. The solution is presented in a unclear or disorganized manner, showing few steps and calculations, and has arrived at an incorrect answer with significant errors or omissions.





Analytical Rubrics

Holistic Rubrics



Advantages

- More detail feedback
- Scoring more consistent across students and graders

Quick scoring

Provides overview of student achievement.

Disadvantages

Time consuming in score

Don't provide a detail information, may be difficult to provide one overall score.





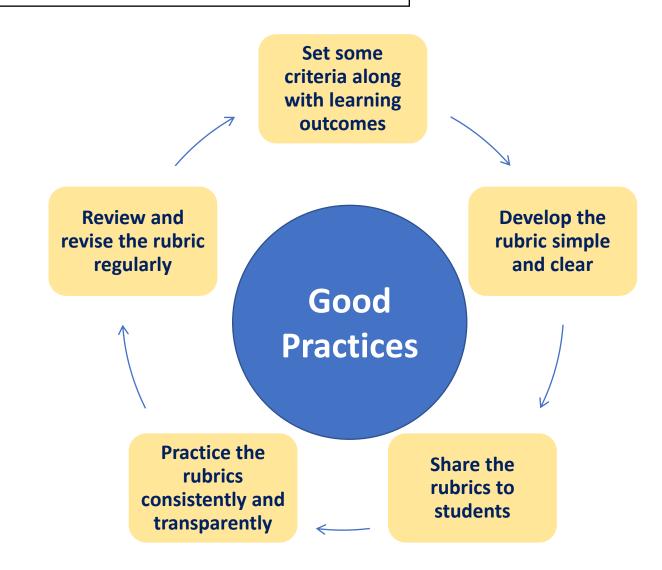
- A subset of analytical rubrics.
- Mostly used in regular progress evaluation.

- Checklist Rubrics
 Sample:
- Has some specific criteria.
- Only two performance levels possible

Criterion	Yes	No
All Sites have Notes		
Sites Notes are Thorough		
Site Notes are Thoughtful		
Answers all Site Questions for All Sites		
Provided Reflection on each of the 6 Site Visits		
Reflection on Site Visits was Thoughtful		



Good Practices of Rubric



Rubric for Rubric

ITAB	ne for Rubine			
	Criteria	1 Below	2 Approaching	3 Meeting
	Selection & Clarity of Criteria (rows)	Criteria being assessed are unclear, have significant overlap, or are not derived from appropriate standards for product/ task and subject area	Criteria being assessed can be identified, but not all are clearly differentiated or derived from appropriate standards for product/task and subject area	All criteria are clear, distinct, and derived from appropriate standards for product/ task and subject area
	Distinction between Levels (columns)	Little or no distinction can be made between levels of achievement	Some distinction between levels is clear, but may be too narrow or too big of a jump	Each level is distinct and progresses in a clear and logical order
	Quality of Writing	Writing is not understandable to all users of rubric, including students; it has vague and unclear language which makes it difficult for different users to agree on a score	Writing is mostly understandable to all users of rubric, including students; some language may cause confusion among different users	Writing is understandable to all users of rubric, including students; it has clear, specific language that helps different users reliably agree on a score
	Involvement of Students in Rubric Development *	Students are not involved in development of rubric	Students discuss the wording and design of the rubric and offer feedback/input	Teachers and students jointly construct rubric, using exemplars of the product or task
	Use of Rubric to Communicate Expectations & Guide Students	Rubric is not shared with students	Rubric is shared with students when the product/task is completed, and used only for evaluation of student work	Rubric serves as a primary reference point from the beginning of work on the product/task, for discussion and guidance as well as evaluation of student work

A "Good Rubric" should be able to be used by various teachers and have them all arrive at similar scores





Misconception – "One rubric for a full course"



- No, its wrong!

Number of rubrics depends on how many Teaching – Learning items and assessment strategies, such as –

- Critical Thinking
- Story writing
- Problem solving
- Presentation
- Project work
- field work

etc.

Khwaja Yunus Ali University

School of Science and Engineering Department of Computer Science and Engineering

Mid-term Examination: Summer 2022 Program: B.Sc. in CSE (Batch - 14th) 1st Year 1st Semester

> Course Title: Physics - I Course Code: PHY 1101

Time: 1 Hour and 20 Minutes

Part 2: SAQ

(Answer Question No. 1 and any three from the rest.)

[The figures in the right margin indicate full marks for the respective question]

1. See the stem carefully and answer the question that follows:

A capacitor consisting of two concentric spheres -



Potential difference between two

- a) Estimate the amount of energy stored in the capacitor.
- b) Compare the amount of free charge and induced charge, if dielectric material (K=1.5) is placed between two plates.
- 2. a) Specify electric flux by surface integration.

[1] [2]

[2]

[2]

[3]

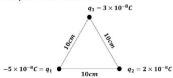
[1]

[2]

[2]

Total Marks: 20

- b) Formulate the Coulomb's law from Gauss law. c) A silver wire 1 mm in diameter carries a charge of 90 C in 1 hr. Silver contains 5.8 × 1028 free electrons/m3. Calculate -
 - (i) the current density of the wire.
 - (ii) the drift velocity of electrons in the wire.
- 3. a) Identify the limitations of Coulomb's law.
 - [1] b) Relate electric field with charge density and current density. [2]
 - c) Calculate the electric field strength at a point when there is an electron experienced $89.18 \times 10^{-31} N$ force. [2]
- 4. See the stem and answer the question that follows:



- a) Illustrate if there is no q₁charge in the above system then what will be the structure of electric
- b) Find the electric potential energy for the above system.
- 5. a) State Fleming's right-hand rule.
 - b) Summarize the Oersted's Experiment.
 - c) A straight horizontal segment of copper wire carries I = 28A. What is the magnitude of the magnetic field needed of float the wire, that is, to balance its weight? Its linear mass density is 46.6g/m.

question C $\boldsymbol{\omega}$ Ũ for Rubrics

Khwaja Yunus Ali University

School of Science and Engineering Department of CSE & EEE

Mid-term Examination: Summer 2022

Program: B.Sc. in CSE & EEE (Batch - 14th) 1st Year 1st Semester

Course Title: Physics - I Course Code: PHY 1101

-: Solution Sheet :-

Part - B: SAQ

1. a) Soln .: We know,

For the cylindrical capacitor,

= 0.0129J

(Ans.)

$$C = 4\pi\varepsilon_0 \frac{ab}{b-a}$$
 Given that,
$$= 4 \times 3.14 \times 8.85 \times 10^{-12} \times \frac{0.30 \times 0.31}{0.31 - 0.30}$$
 Inner radius, $a = 30cm = 0.30m$
$$= 1.0338 \times 10^{-7}F$$
 Outer radius, $b = 31cm = 0.31m$ Again, the energy stored in the capacitor is
$$U = \frac{1}{2}CV^2$$
 Potential, $V = 500volt$
$$= \frac{1}{2} \times 1.0338 \times 10^{-7} \times 500^2$$
 And $\varepsilon_0 = 8.85 \times 10^{-12}Fm^{-1}$

Stored energy, U = ?

Criteria	1 Marks	0.5 Mark	0 Marks
Formula and variable	Correctly	Identified with minor	Incorrectly
identification	Identified	error	Identified
Calculation and result	Accurately	Calculated with minor	Major errors in
accuracy	Calculated	error	calculations

1. b) Soln .: We know.

The free charge,
$$q_0 = C_0 V \\ = 1.0338 \times 10^{-7} \times 500 \\ = 5.169 \times 10^{-5} C \\ \text{Induced capacitance is } C_{ind} = C_0 k = 1.0338 \times 10^{-7} \times 1.5 \\ C_{ind} = 1.5507 \times 10^{-7} F \\ \text{Again, the induced charge,} \\ q_{ind} = C_{ind} V \\ = 1.5507 \times 10^{-7} \times 500 \\ = 7.7535 \times 10^{-5} C \\ \\ \text{Here,} \\ C_0 = 1.0338 \times 10^{-7} F \\ \varepsilon_0 = 8.854 \times 10^{-12} \ C^2 / N - m^2 V \\ k = 1.5 V \times 10^{-12} \ C^2 / N - m^2 V \\ V = 500 \ volt V = 500 \ volt$$

Finally, the comparison between free charge and induced charge is -

$$\frac{q_{ind}}{q_0} = 1.5$$

Rubrics

Criteria	1.5 Marks	1 Mark	0 Marks
Formula and variable	Correctly	Identified with minor	Incorrectly
identification	Identified	error	Identified
Calculation and result	Accurately	Calculated with minor	Major errors in
accuracy	Calculated	error	calculations

2. a) Soln.: Electric flux: The closed surface integral of electric field is called the electric flux.

i.e.:
$$\varphi = \oint_{S} \overrightarrow{E} \cdot d\overrightarrow{a}$$

Criteria	1 Marks	0.5 Mark	0 Marks
Definition	Accurately defines	Partially correct	Incorrect definition
Accuracy	electric flux	definition	
Use of	Correct and clear	Notation mostly correct	Incorrect or
Notation	notation, with all symbols	but with minor errors	missing notation

(Specify, Clarify, Define, Classify, State, etc)

Understanding

(Relate, Explain, Illustrate, Summarize, etc)

Khwaja Yunus Ali University

School of Science and Engineering

Department of Computer Science and Engineering

Mid-term Examination: Summer 2022
Program: B.Sc. in CSE (Batch – 14th) 1st Year 1st Semester

Course Title: Physics - I Course Code: PHY 1101

Time: 1 Hour and 20 Minutes

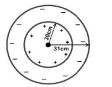
Total Marks: 20

Part 2: SAQ

(Answer Question No. 1 and any three from the rest.)

[The figures in the right margin indicate full marks for the respective question]

See the stem carefully and answer the question that follows:
 A capacitor consisting of two concentric spheres –



a) Estimate the amount of energy stored in the capacitor.

[2]

[2]

b) Compare the amount of free charge and induced charge, if dielectric material (K=1.5) is placed between two plates.

a) Specify electric flux by surface integration. [1]

b) Formulate the Coulomb's law from Gauss law. [2

 A silver wire 1 mm in diameter carries a charge of 90 C in 1 hr. Silver contains 5.8 × 10²⁸ free electrons/m³. Calculate –

(i) the current density of the wire.

(ii) the drift velocity of electrons in the wire.

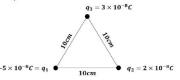
Potential difference between two

a) Identify the limitations of Coulomb's law. [1]

b) Relate electric field with charge density and current density. [2]

c) Calculate the electric field strength at a point when there is an electron experienced $89.18 \times 10^{-31} N$ force.

4. See the stem and answer the question that follows:



a) Illustrate if there is no q_1 charge in the above system then what will be the structure of electric lines of force?

b) Find the electric potential energy for the above system.

State leming's right-hand rule. [1]

b) Summarize the Oersted's Experiment. [2]

c) A straight horizontal segment of copper wire carries I = 28A. Its linear mass density is 46.6g/m. Is it possible to float the wire? Answer with your mathematica analysis.

[2]

[3]

(Specify, Clarify, Define, Classify, State, etc.)

Understanding

(Relate, Explain, Illustrate, Summarize, etc)

Application

(Estimate, Calculate, Find, Determine, etc)

Analysis

(Analyze, Compare, Create, Justify, etc)

Khwaia Yunus Ali University

School of Science and Engineering Department of Computer Science and Engineering

Mid-term Examination: Summer 2022

Program: B.Sc. in CSE (Batch - 14th) 1st Year 1st Semester Course Title: Physics - I Course Code: PHY 1101

Time: 1 Hour and 20 Minutes

Total Marks: 20

[3]

[2]

Part 2: SAQ

(Answer Question No. 1 and any three from the rest.)

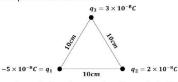
[The figures in the right margin indicate full marks for the respective question]

1. See the stem carefully and answer the question that follows: A capacitor consisting of two concentric spheres -



difference between two

- Estimate the amount of energy stored in the capacitor.
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- Specify electric flux by surface integration.
- [1] Formulate the Coulomb's law from Gauss law.
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 - (i) the current density of the wire.
- (ii) the drift velocity of electrons in the wire. [2]
- Identify the limitations of Coulomb's law. [1]
 - Relate electric field with charge density and current density Calculate the electric field strength at a point when there is an electron experienced
- 4. See the stem and answer the question that follows:



- a) Illustrate if there is no q₁charge in the above system then what will be the structure of electric
- Find the electric potential energy for the above system
- State Fleming's right-hand rule. [1] Summarize the Oersted's Experiment. [2]
- c) A straight horizontal segment of copper wire carries I = 28A. Its linear mass density is 46.6g/m.
- Is it possible to float the wire? Answer with your mathematica analysis.

(Specify, Clarify, Define, Classify, State, etc)

Criteria	1 Marks	0.5 Mark	0 Marks
Accuracy of Definition/Statement/ Classification, etc	Provides a correct and precise Definition/Statement/Classification, etc	Provides a Definition/Statement/Cl assification, etc with lack some detail	Incorrect Definition/Statement /Classification, etc
Clarity and Structure	Clearly articulated, well- structured, and easy to understand	Poorly structured or contain minor ambiguities	Definition is unclear, disorganized

Understanding

(Relate, Explain, Illustrate, Summarize, etc)

Criteria	1 Marks	0.5 Mark	0 Marks
Depth of Explanation/III ustration	Provides a thorough explanation or illustration that clearly conveys the concept, supported by relevant examples or diagrams.	Provides a basic explanation or illustration that captures some key points but lacks detail or supporting examples.	Provides little to no explanation or illustration; lacks relevance or clarity.
Relevance and Connection	Effectively relates the concept to other ideas or principles, demonstrating a deep understanding of its context and implications.	Attempts to relate the concept to other ideas, but connections may be weak or unclear.	Fails to relate the concept to other ideas, showing little to no understanding of its broader implications.

Application

(Estimate, Calculate, Find, Determine, etc)

Criteria	1.5 Marks	1 Mark	0 Marks
Formula and variable identification	Correctly Identified	Identified with minor error	Incorrectly Identified
Calculation and result accuracy	Accurately Calculated	Calculated with minor error	Major errors in calculations

Analysis

(Analyze, Compare, Create, Justify, etc)

Criteria	Excellent (1)	Good (0.7)	Poor (0.3)	Irrelevant/ Wrong (0)
Strategic Approach with exact equations	Approach chosen is correct & selected the exact equations with all valid elements. (1)	Approach chosen is correct but selected the equations with minor errors. (0.7)	Approach chosen is correct but selected the equations with multiple errors. (0.3)	Invalid approach & selected the wrong equations. (0)
Identifying the values of all variables	All variables identified properly. (1)	All variables identified with minor errors. (0.7)	Variables identified with multiple errors. (0.3)	Failed to identify the variables. (0)
Solving steps & finding correct answer	Followed all steps for solving & found the exact answer (1)	Followed steps & found the answer with minor errors. (0.7)	Followed steps are not sufficient & found the partial answer. (0.3)	Missed steps & found the wrong answer. (0)
Using proper units & making the decision from answer	Used proper units and made the adequate decision (1)	Used partially correct units but made the adequate decision (0.7)	Used partially correct units and made the inadequate decision (0.3)	Used incorrect units and made the inaccurate decision (0)

(Specify, Clarify, Define, Classify, State, etc)

Understanding

(Relate, Explain, Illustrate, Summarize, etc)

Application

(Estimate, Calculate, Find, Determine, etc)

Analysis

(Analyze, Compare, Create, Justify, etc)

Criteria	Criteria 1 Marks		0 Marks
Accuracy of Definition/Statement/Cl assification, etc	Provides a correct and precise Definition/Statement/Classi fication, etc	Provides a Definition/Statement/Clas sification, etc with lack some detail	Incorrect Definition/Statement/C lassification, etc
Clarity and Structure	Clearly articulated, well- structured, and easy to understand	Poorly structured or contain minor ambiguities	Definition is unclear, disorganized

Criteria	1 Marks	0.5 Mark	0 Marks
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Criteria	1.5 Marks	1 Mark	0 Marks
Formula and variable identification	Correctly Identified	Identified with minor error	Incorrectly Identified
Calculation and result accuracy	Accurately Calculated	Calculated with minor error	Major errors in calculations

Criteria	Excellent (1)	Good (0.7)	Poor (0.3)	Irrelevant/ Wrong (0)
Strategic Approach with exact equations	Approach chosen is correct & selected the exact equations with all valid elements. (1)	Approach chosen is correct but selected the equations with minor errors. (0.7)	Approach chosen is correct but selected the equations with multiple errors. (0.3)	Invalid approach & selected the wrong equations. (0)
Identifying the values of all variables	All variables identified properly. (1)	All variables identified with minor errors. $ (0.7) \\$	Variables identified with multiple errors. (0.3)	Failed to identify the variables. (0)
Solving steps & finding correct answer	Followed all steps for solving & found the exact answer (1)	Followed steps & found the answer with minor errors. (0.7)	Followed steps are not sufficient & found the partial answer. (0.3)	Missed steps & found the wrong answer. (0)
Using proper units & making the decision from answer	Used proper units and made the adequate decision (1)	Used partially correct units but made the adequate decision (0.7)	Used partially correct units and made the inadequate decision (0.3)	Used incorrect units and made the inaccurate decision (0)

List of the Assessment Strategy:

Critical Thinking

Problem Solving

Assignment

Presentation

Project work

Dissertation

Demonstration

Communication Skills

Viva voce

etc

Critical Thinking

Evaluating, analyzing, and/or synthesizing relevant information to form an argument or reach a conclusion supported with evidence.

Category	0	1		3		5
Evaluating		Minimally determined the relevance and reliability of information that might be used to support a conclusion or argument		Partially determined the relevance and reliability of information that might be used to support a conclusion or argument		Extensively determined the relevance and reliability of information that might be used to support a conclusion or argument
Analyzing		Inaccurately interpreted information to determine meaning and to extract relevant evidence		Interpreted information to determine meaning and to extract relevant evidence with some errors		Accurately interpreted information to determine meaning and to extract relevant evidence
Synthesizing		Inaccurately connected or integrated information to support an argument or reach a conclusion		Connected or integrated information to support an argument or reach a conclusion with some errors		Accurately connected or integrated information to support an argument or reach a conclusion
Forming Arguments (Structure)		Made a claim and provided incomplete evidence to support it.		Made a claim and provided partial evidence to support it.		Made a claim and provided complete evidence to support it.
Forming Arguments (Validity)		The claim, evidence, and reasoning were minimally consistent with accepted disciplinary ideas and practices		The claim, evidence, and reasoning were partially consistent with accepted disciplinary ideas and practices		The claim, evidence, and reasoning were fully consistent with accepted disciplinary ideas and practices

Comments:

Research Paper Rubric	Name:	Date:	S	Score:	
1					

Category	Exceeds Standard	Meets Standard	Nearly Meets Standard	Does Not Meet Standard	No Evidence	Score
Title Page	Title Your Name, Teacher's Name, Course Period, Date, Neatly finished-no errors	Evidence of four	Evidence of 3	Evidence of 2 or less	Absent	
Thesis Statement	Clearly and concisely states the paper's purpose in a single sentence, which is engaging, and thought provoking.	Clearly states the paper's purpose in a single sentence.	States the paper's purpose in a single sentence.	Incomplete and/or unfocused.	Absent, no evidence	
Introduction	The introduction is engaging, states the main topic and previews the structure of the paper.	The introduction states the main topic and previews the structure of the paper.	The introduction states the main topic but does not adequately preview the structure of the paper.	There is no clear introduction or main topic and the structure of the paper is missing.	Absent, no evidence	
Body	Each paragraph has thoughtful supporting detail sentences that develop the main idea.	Each paragraph has sufficient supporting detail sentences that develop the main idea.	Each paragraph lacks supporting detail sentences.	Each paragraph fails to develop the main idea.	Not applicable	
Organization- Structural Development of the Idea	Writer demonstrates logical and subtle sequencing of ideas through well-developed paragraphs; transitions are used to enhance organization.	Paragraph development present but not perfected.	Logical organization; organization of ideas not fully developed.	No evidence of structure or organization.	Not applicable	
Conclusion	The conclusion is engaging and restates the thesis.	The conclusion restates the thesis.	The conclusion does not adequately restate the thesis.	Incomplete and/or unfocused.	Absent	
Mechanics	No errors in punctuation, capitalization and spelling.	Almost no errors in punctuation, capitalization and spelling.	Many errors in punctuation, capitalization and spelling.	Numerous and distracting errors in punctuation, capitalization and spelling.	Not applicable	
Usage	No errors sentence structure and word usage.	Almost no errors in sentence structure and word usage.	Many errors in sentence structure and word usage.	Numerous and distracting errors in sentence structure and word usage.	Not applicable	
Citation	All cited works, both text and visual, are done in the correct format with no errors.	Some cited works, both text and visual, are done in the correct format. Inconsistencies evident.	Few cited works, both text and visual, are done in the correct format.	Absent	Not applicable	
Bibliography	Done in the correct format with no errors. Includes more than 5 major references (e.g. science journal articles, books, but no more than two internet sites. Periodicals available on-line are not considered internet sites)	Done in the correct format with few errors. Includes 5 major references (e.g. science journal articles, books, but no more than two internet sites. Periodicals available on-line are not considered internet).	Done in the correct format with some errors. Includes 4 major references (e.g. science journal articles, books, but no more than two internet sites. Periodicals available on-line are not considered internet).	Done in the correct format with many errors. Includes 3 major references (e.g. science journal articles, books, but no more than two internet sites. Periodicals available on-line are not considered internet sites.)	Absent or the only sites are internet sites.	

ORAL PRESENTATION

		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Non-Verbal Skills	Eye Contact while reading	Student reads with no eye contact.	Student occasionally uses eye contact.	Generally looks at the audience, but generally to the teacher.	Student is able to present the project looking at the audience and making them feel included.
	Posture	Sumps or leans during presentation.	Sways or fidgets during much of presentation.	Occasionally sways or fidgets, but stands up straight with both feet on the ground most of the time.	Stands up straight and still with both feet on the ground, and moves the hands for emphasis.
Oral Skills	Elocution	Student mumbles, very low voice and do not use any tonal differences.	Student's voice is low- medium, but part of the audience still has some difficulty hearing presentation. Tonality barely changes.	Student's voice is clear, and most of the audience members can easily hear the presentation. The tone used changes.	Student uses a clear voice, rhythm and tone, so that all audience members can hear presentation.
	Pronunciation	Student does not do any effort regarding pronunciation.	Student pronounces incorrectly some terms, mostly vocabulary of the unit.	Pronunciation is good, but some constructions and terms are incorrect.	Student pronounces mostly everything clearly and correctly.
Contents	Organization	Audience cannot understand the presentation because there is no sequence of information.	Audience has some difficulty following presentation because student jumps around.	Students presents information in a logical sequence which audience can follow.	Student has a good hook and presents information in logical, interesting sequence which audience can easily follow.
	Subject Knowledge	Student does not appear to have a grasp of information; cannot answer questions about subject.	Student is comfortable with information, but is only able to answer simple questions.	Student is at ease with information and answers questions satisfactorily, but fails to elaborate.	Student demonstrates full knowledge and can answer and elaborate on most/all questions asked
Presentation	Visual	The presentation had small fonts and blurry pictures. It has been difficult to follow.	The images used changed from blurry to high- resolution. Text varied depending on parts.	The audience could read the slides and the images were generally good.	Visual aid showing effort and creativity is used thus improving overall presentation.
<u>Teamwork</u>	Coordination	The team did not know when to speak, or what role were having. Only one person leads the group.	One or two members of the group have focused most of the presentation. The rest of the group did not have clear instructions about their role.	The team was mostly coordinated, but there were some moments of doubt and/or unbalance. A minority of the members of the group did not know what to do.	The team run perfectly coordinated, with clear guidelines about each member's role. Each member has participated

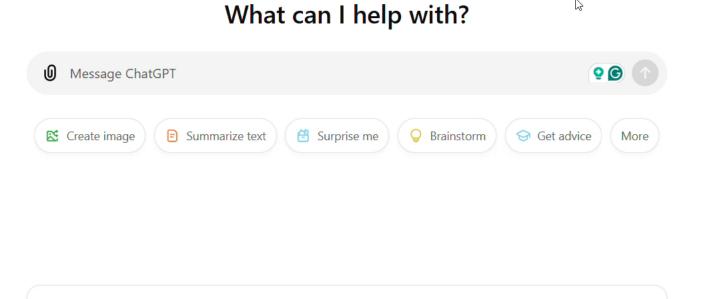


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You've hit the Free plan limit for GPT-4o.

Responses will use another model until your limit resets after 2:13 AM.

References:

- 1) https://www.uen.org/rubric/
- 2) https://resources.depaul.edu/teaching-commons/teaching-guides/feedback-grading/rubrics/Pages/types-of-rubrics.aspx
- 3) https://www.teach-nology.com/web tools/rubrics/general/
- 4) https://www.brown.edu/sheridan/teaching-learning-resources/teaching-resources/course-design/classroom-assessment/grading-criteria/rubrics-scales
- 5) https://www.yumpu.com/en/document/read/19194873/oral-presentation-rubric
- 6) https://www.queensu.ca/teachingandlearning/modules/assessments/35 s4 05 types of rubrics
- 7) https://www.youtube.com/watch?v=eiVfghWVQ88
- 8) https://www.youtube.com/watch?v=kp3rANE8z6s
- 9) https://www.youtube.com/watch?v=P1JtXmQ-CeA

Thank you...