

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

PHYSICAL SETTING
PHYSICS

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ANSWER SHEET

Student Electrostatics Key Sex: Male Female Grade

Teacher School

Record your answers to Part A and Part B-1 on this answer sheet.

Part A

- | | | | |
|----|---|----|---|
| 1 | 4 | 12 | 1 |
| 2 | 2 | 13 | 2 |
| 3 | 1 | 14 | 1 |
| 4 | 2 | 15 | 3 |
| 5 | 1 | 16 | 1 |
| 6 | 4 | 17 | 2 |
| 7 | 1 | | |
| 8 | 4 | | |
| 9 | 3 | | |
| 10 | 2 | | |
| 11 | 3 | | |

Part B-1

- | | | | |
|----|---|----|---|
| 18 | 2 | 29 | 2 |
| 19 | 2 | | |
| 20 | 1 | | |
| 21 | 2 | | |
| 22 | 1 | | |
| 23 | 3 | | |
| 24 | 3 | | |
| 25 | 2 | | |
| 26 | 4 | | |
| 27 | 3 | | |
| 28 | 3 | | |

Part A Score

Part B-1 Score

The declaration below should be signed when you have completed the examination.

I do hereby affirm, at the close of this examination, that I had no unlawful knowledge of the questions or answers prior to the examination and that I have neither given nor received assistance in answering any of the questions during the examination.

Signature

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PHYSICAL SETTING PHYSICS

ANSWER BOOKLET

Student Sex: Male
 Female
 Teacher.....
 School..... Grade

Answer all questions in Part B-2 and Part C. Record your answers in this booklet.

Part	Maximum Score	Student's Score
A	17	
B-1	12	
B-2	2	
C	5	
Total Written Test Score (Maximum Raw Score: 36)		<input type="text"/>
Final Score (From Conversion Chart)		<input type="text"/>
Raters' Initials:		
Rater 1		Rater 2

Part B-2

30-31

G

$$V = 2.5 \times 10^4 \text{ V}$$

$$q = 1.6 \times 10^{-19} \text{ C}$$

$$\frac{U}{W}$$

$$V = \frac{W}{q} \Rightarrow W = Vq$$

$$W = (2.5 \times 10^4 \text{ V})(1.6 \times 10^{-19} \text{ C})$$

$$W = 4 \times 10^{-15} \text{ J}$$

For Raters Only

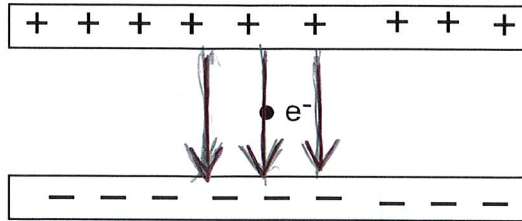
30

31

Part C

For Raters
Only

32



32

33 Towards positive plate or \uparrow

33

34-35

$$\frac{G}{E} = \frac{U}{E}$$

$$F_e = 3 \times 10^{-16} \text{ N}$$

$$q_e = 1.6 \times 10^{-19} \text{ C}$$

$$E = \frac{F_e}{q}$$

$$E = \frac{3.8 \times 10^{-16} \text{ N}}{1.6 \times 10^{-19} \text{ C}}$$

$$E = 2.38 \times 10^3 \text{ N/C} \text{ or } 2375 \text{ N/C}$$

34

35

36

Remains the same

36

