* تم تعليق جميع هذه

جدول زمني للتجارب المطروحة في مادة الفيزياء العملية لعلوم الحياة (0332113)

الفصل الدراسي الاول 2011/2010

اسم التجربة	رقم التجربة	الفترة الزمنية
Experimental Error & Data Analysis	–	9/30 – 9/26
Measurements & Uncertainties	1	10/7 – 10/3
Collection and Analysis of Data	2	10/14 – 10/10
Vectors	3	10/21 – 10/17
Simple Pendulum	5	10/28 – 10/24
Motion in one Dimension	4	11/4 – 10/31
Gas Laws	7	11/11 – 11/7
عيد الاضحى المبارك		11/18 – 11/14
Specific Charge of Copper Ions	10	11/25 – 11/21
Measurement of Resistance Ohm's Law	8	12/2 – 11/28
Measurement of Resistance Wheatstone Bridge	8	12/9 – 12/5
Potentiometer	9	12/16 – 12/12
Joule Heat	12	12/23 – 12/17
*سيكون موعد الامتحان منتصف الفصل يوم الخميس المصادف 2010/11/4 الساعة 04:00 – 06:00		
**سيكون موعد الامتحان النهائى يوم الاحد المصادف 2010/12/26 الساعة 03:00 – 06:00		

*سيكون امتحان منتصف الفصل في اول ست تجارب .....** سيكون الامتحان النهائي في جميع التجارب.

ملاحظات هامة جدا:

- يتم شراء دليل المختبر من مركز بيع الكتب في مبنى عمادة البحث العلمي
- على جميع الطلاب إحضار كل ما يلزمهم من قرطاسية في كل مختبر, والتي تتضمن الآلة الحاسبة, دفتر الرسم البياني, قلم رصاص منقلة... الخ. بالإضافة إلى دليل المختبر.
- يمنع حضور أي طالب في شعبة غير مسجل فيها رسميا لأي سبب كان كما ويمنع تعويض التجارب منعا باتا.

Final Exam
Practical Physics (0332113)

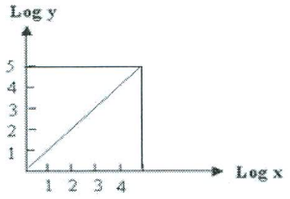
Name:

Q1 a joule heat experiment, 50 g of water at 20.0 C was placed in the calorimeter. A heater current of I = 0.5 amp was allowed to flow for 10 minutes. The heater voltage was measured at 6.0 volt. At the end of the time period, the final temperature reached was T = 25.9 C. If the heat capacity of the calorimeter is 25 Cal/C, the electrical equivalent of heat (in Joule/Cal) is.

3.93 4.07 4.21 4.36

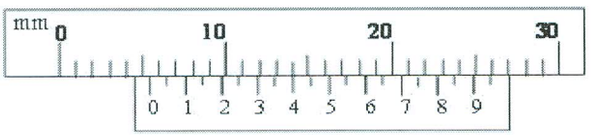
Q2 The relation y = f(x) for the graph shown is

y = x y = 10x^2 y = 10x y = x^2



Q3 The side of a cube was measured by the vernier caliper shown. The volume of the cube (in mm^3) is.

123.6 157.5 136.8 143.7

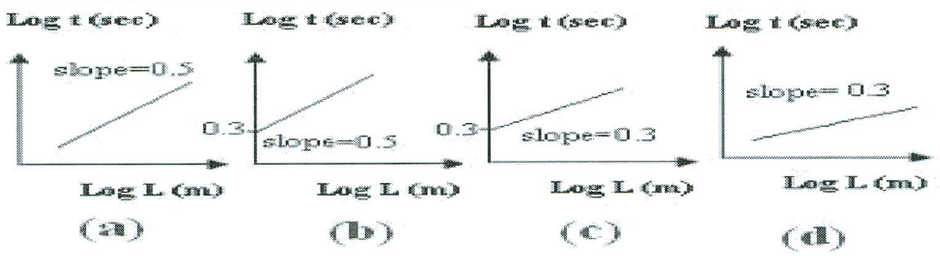


Q4 Two identical resistors were connected in parallel and their equivalent resistance was 4 ohm. If the two resistors were connected in series, then their equivalent resistance (in ohm) would be:

2 4 8 16

Q5 Which graph correctly represents the experimental data for the simple pendulum

a b c d



Q6 The potentiometer is much more accurate than the voltmeter in determining emf because:

Its scale (the wire) may be made as long as we wish.

Its results do not depend on the calibration of the galvanometer

No current is drawn from the unknown emf.

All of the above.

Q7 The mass of deposited copper depends only on:

The voltage across the cell.

The current in the cell.

The current in the cell and the voltage across the cell.

The current in the cell and the time duration of current flow

Q8 Three forces F_1, F_2 and F_3 are acting on a body. The body is in equilibrium if:

The three forces are equal in magnitude.

The angles between the forces are 120 degrees.

The three forces form three sides of a triangle.

One force is equal in magnitude and direction to the sum of the other two.

Q9 In the gas laws experiment, the y intercept of the plot of h versus 1/L is equal to.

The atmospheric pressure

The length of the mercury column directly below the the closed end tube

The length of the mercury column directly below the open end tube

The length of t trapped air column

Q10 In the joule heat experiment, the temperature rise

Depends on the product I.V.t

Only depends on the voltage V

only depends on the time interval t

Only depends on the current I

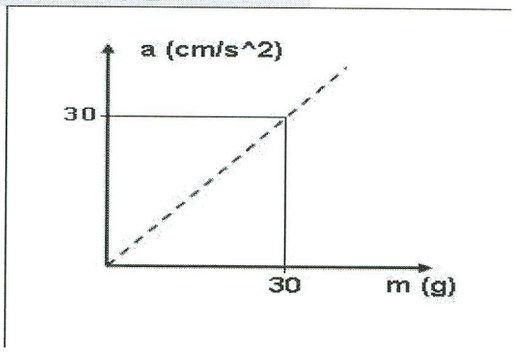
Q11 In a force and motion experiment, a plot of a, the acceleration versus the hanging mass m is shown. The mass of the cart (in g) is. Use g = 1000 cm/s^2

1000

1200

1500

2000

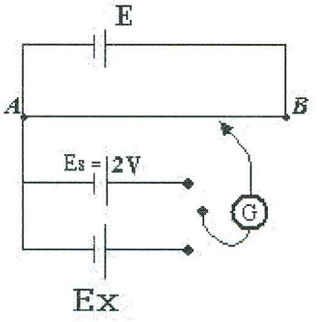


Q12 A simple pendulum has a period of 2 seconds in a location where g = 9.182 m/sec^2 . *The length of the pendulum in m is:*

0.84 0.93 0.87 0.90

Q13 For the circuit shown, when E_s was connected to the galvanometer, the balance point occurred at a point 20 cm from A. When E_x was connected , the balance occurred at a point 15 cm from A.Then Ex in (volt) is :

1.5 3 2.5 1

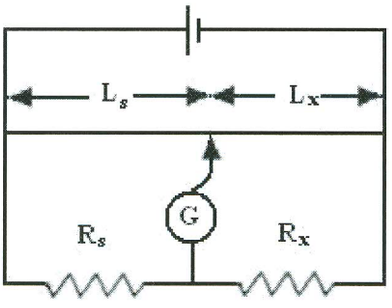


Q14 A current of 0.42 A is passed through the $CuSO_4$ solution for 30.0 minutes. If the specific charge of copper ions K = 3.2x10^6 C/Kg , the amount of copper deposited on the cathode in grams is:

0.325 0.236 0.2 0.423

Q15 In the circuit shown, the balance point was obtained at Ls=40.6cm and Lx=59.4cm. If Rs =12 ohm, the unknown resistance Rx in (ohm) is:

8.2 13.9 17.6 4.3



Q16 In a Wheatstone bridge experiment. The accuracy of the determination of the unknown resistor depends on:

The battery voltage. The accuracy of the standard resistor. The length of the slide wire. All of the above.