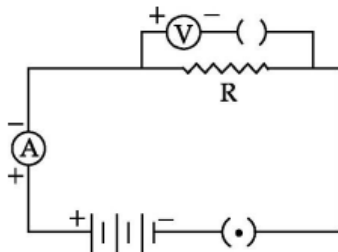
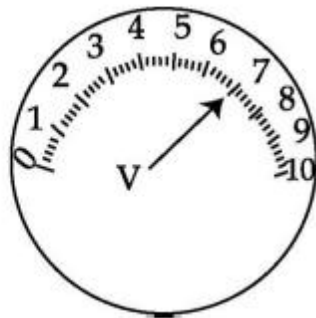
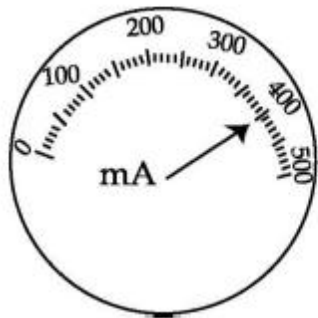


ASSIGNMENT (PHYSICS)
CLASS X
PRACTICAL PRACTICE ASSIGNMENT

1. For the circuit arrangement, shown above the student would observe

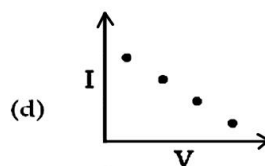
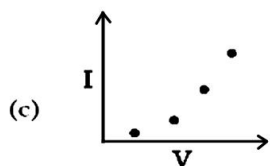
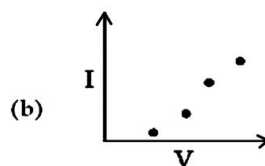
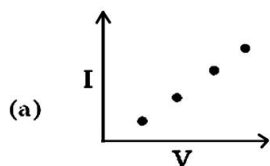


- (a) some reading in both the ammeter and the voltmeter
 - (b) no reading in either the ammeter or the voltmeter
 - (c) some reading in the ammeter but no reading in the voltmeter
 - (d) some reading in the voltmeter but no reading in ammeter
2. The current flowing through a conductor and the potential difference across its two ends are as per readings of the ammeter and the voltmeter shown below. The resistance of the conductor would be :

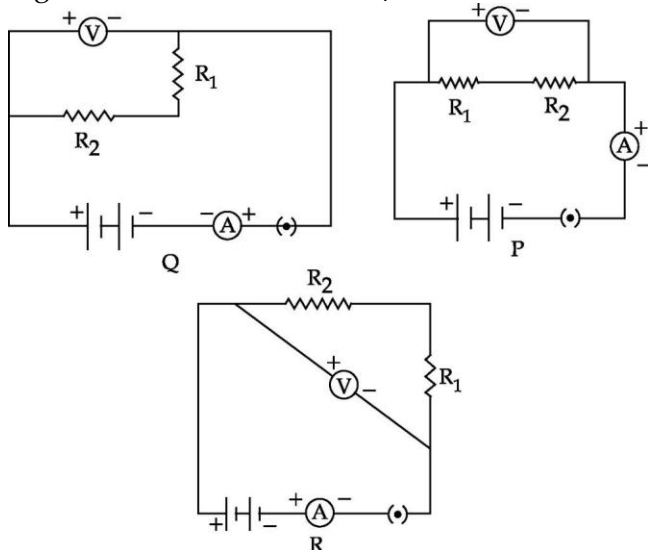


- (a) 0.175 (b) 1.75 (c) 17.5 (d) 175

3. Which one of the following plot correctly shows the dependance of the current I on the potential difference V across a resistor R ?

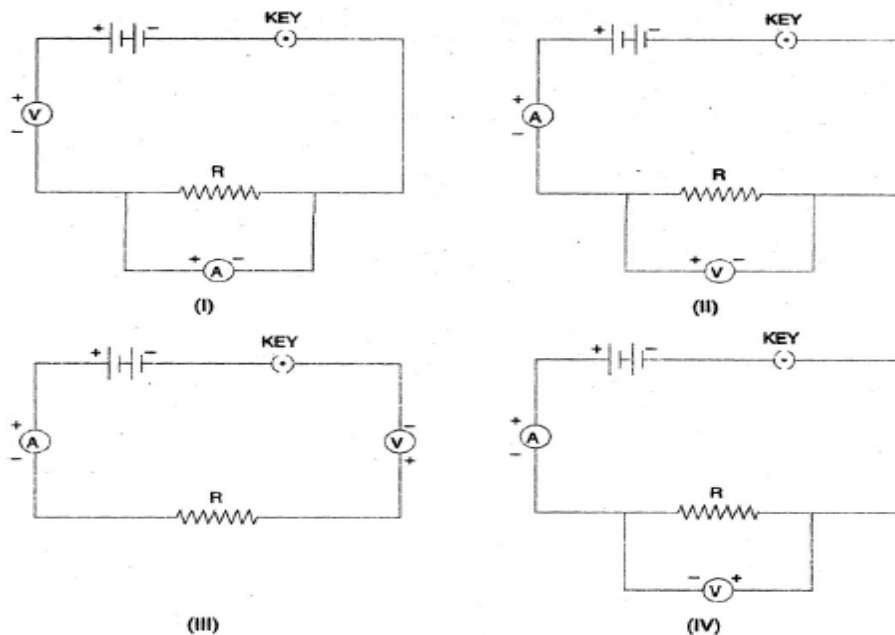


4. For determining the equivalent resistance of two resistors R_1 and R_2 connected in series, three circuits are shown in the figure. The correct circuit is/are :



- (a) only Q and R. (b) only P and R. (c) All the three. (d) only P and Q.

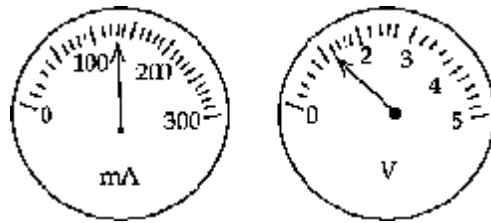
5. While performing the experiment on studying the dependence of current (I) on the potential difference (V) across a resistor, four students I, II, III and IV set up the circuits as shown :



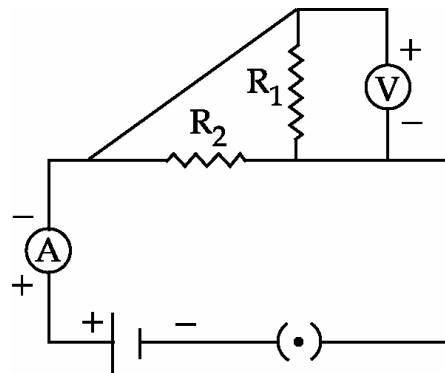
The correct result will be obtained by student :

- (a) I (b) II (c) III (d) IV

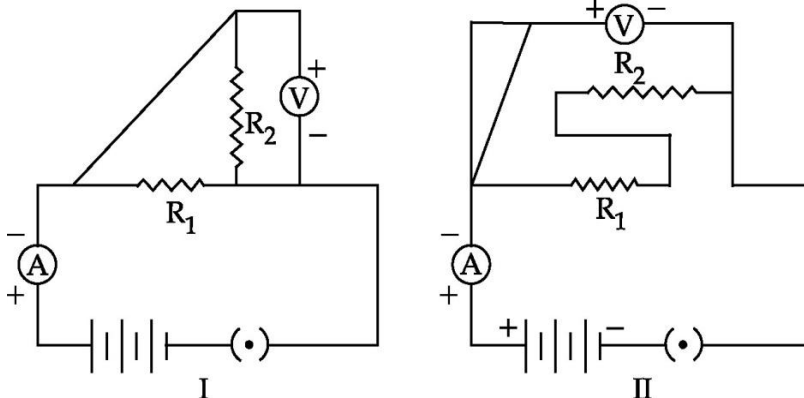
6. The figures given below show the readings of a milliammeter and a voltmeter connected in an electric circuit. Assuming that the instruments do not have any zero error, the current flowing through the circuit and the potential difference across the conductor respectively are



- (a) 160 mA and 1.1 V (b) 130 mA and 1.2 V (c) 130 mA and 1.1 V (d) 130 mA and 1.5 V
7. An ammeter can read current upto 5A and it has 20 divisions between mark 0 and mark 2 on its scale. The least count of the ammeter is :
- (a) 0.02 A (b) 0.01 A (c) 0.2 A (d) 0.1 A
8. Which of the circuit components in the adjoining circuit diagram are connected in parallel?



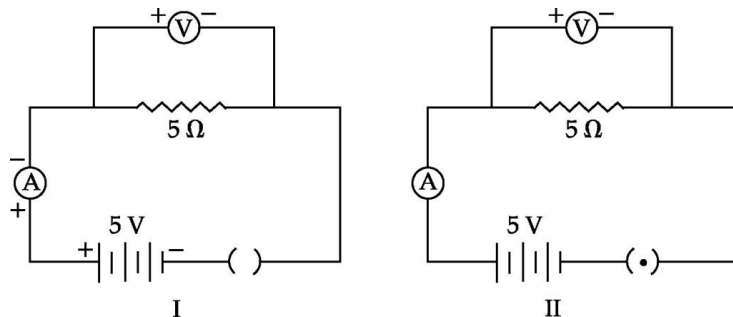
- (a) R1 and R2 only (b) R2 and V only (c) R1 and V only (d) R1, R2 and V
- 9.



The resistors R1 and R2 are connected in :

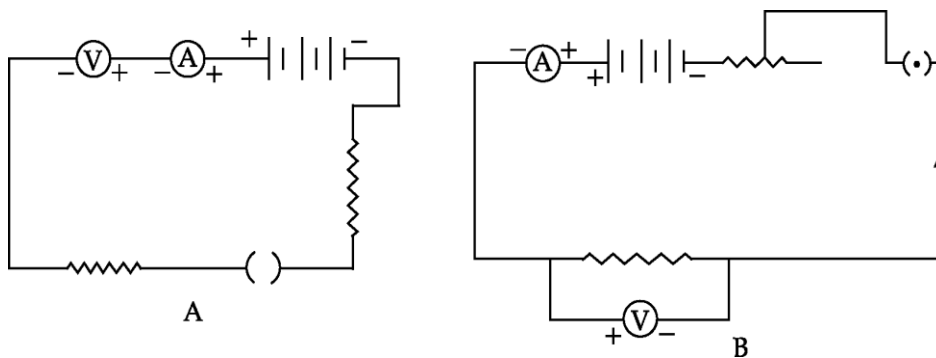
- (a) parallel in both circuits. (b) series in both circuits.
(c) parallel in circuit I and in series in circuit II. (d) series in circuit I and in parallel in circuit II.

10. For the circuits shown in figure I and II the ammeter readings would be :



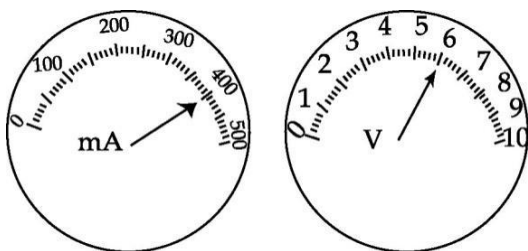
- (a) 1A in circuit I and 0A in circuit II
- (b) 0A in both circuits
- (c) 1A in both circuits
- (d) 0A in circuit I and 1A in circuit II

11. Which of the following experimental set up is correct for verification of Ohm's law ?



- (a) A
- (b) B
- (c) both A and B
- (d) Neither A nor B

12. The current flowing through a conductor and the potential difference across its two ends are as per readings of the ammeter and the voltmeter shown below.



The resistance of the conductor would be :

- (a) 0.15
- (b) 1.5
- (c) 15.0
- (d) 150.0

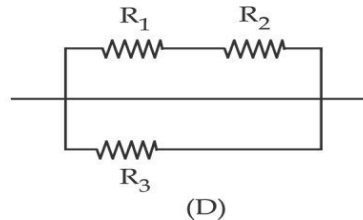
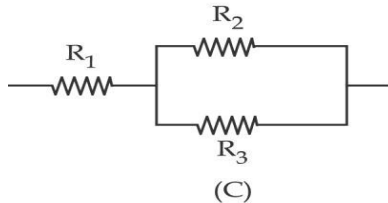
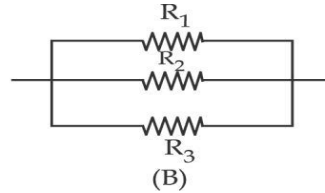
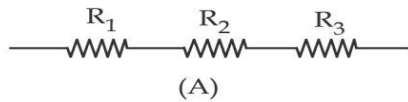
13. A student has to connect 4 cells of 1.5 V each to form a battery of 6V.



The correct way of connecting these cells is shown in figure :

- (a) A
- (b) B
- (c) C
- (d) D

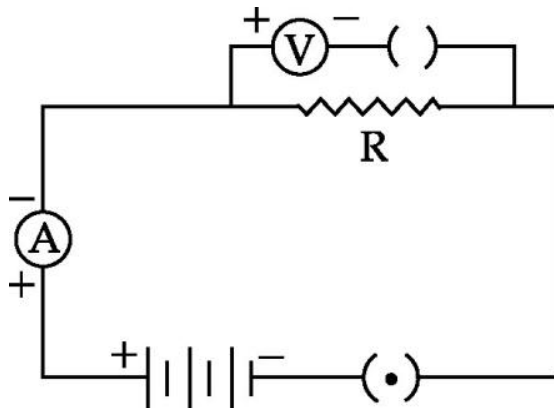
14. To determine the equivalent resistance of three resistors arranged in parallel four students connected the resistors as shown in figures A, B, C and D.



The correct set up is that of student:

- (a) A (b) B (c) C (d) D
15. The following instruments are available in a laboratory :
- Milliammeter A1 : range 0-300 mA and least count 10 mA
 - Milliammeter A2 : range 0-200 mA and least count 20 mA
 - Voltmeter V1 : range 0-5 V and least count 0.2 V
 - Voltmeter V2 : range 0-3 V and least count 0.3 V
- Out of the above instruments, which pair of milliammeter and voltmeter would be the best choice to determine the equivalent resistance of two resistors connected in series ?
- (a) Milliammeter A1 and Voltmeter V1 (b) Milliammeter A2 and Voltmeter V2
 (c) Milliammeter A1 and Voltmeter V2 (d) Milliammeter A2 and Voltmeter V1

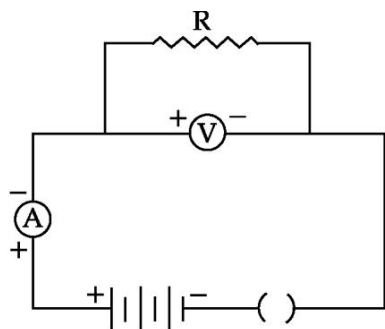
16.



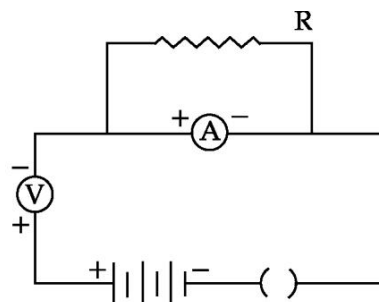
For the circuit arrangement, shown above the student would observe

- (a) some reading in both the ammeter and the voltmeter
 (b) no reading in either the ammeter or the voltmeter
 (c) some reading in the ammeter but no reading in the voltmeter
 (d) some reading in the voltmeter but no reading in ammeter

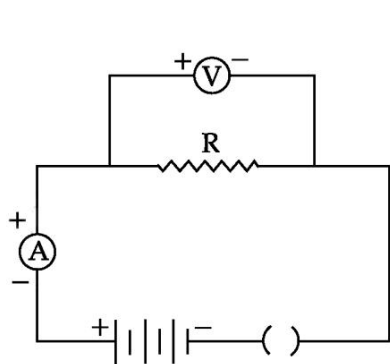
21. The correct set up for studying the dependence of the current on the potential difference across a resistor is :



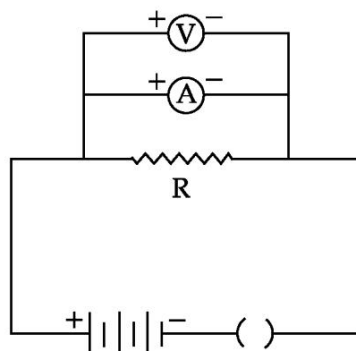
(A)



(B)



(C)



(D)

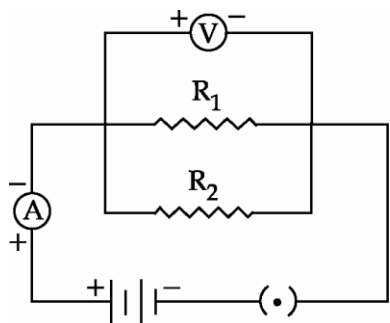
(a) A

(b) B

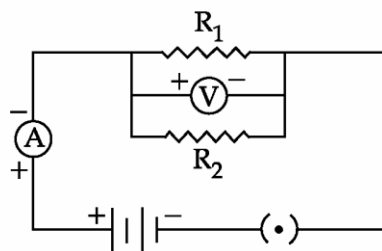
(c) C

(d) D

22. Two students are using the circuits shown here. They are doing the experiment to find the equivalent resistance of a :



(I)



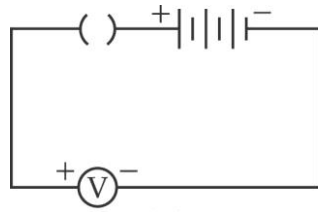
(II)

- (a) series combination and a parallel combination respectively of the two given resistors.
 (b) parallel combination and a series combination respectively of the two given resistors.
 (c) series combination of the two given resistors in both the cases.
 (d) parallel combination of the two given resistors in both the cases.

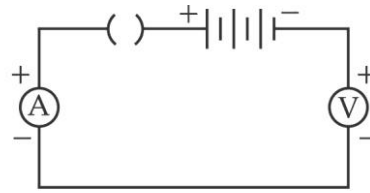
23. You are given four voltmeters of given ranges. The correct choice of voltmeter for doing the experiment with a battery of 4.5 V is :

- (a) Voltmeter with range of 0 - 1V (b) Voltmeter with range of 0 - 3V
 (c) Voltmeter with range of 0 - 4V (d) Voltmeter with range of 0 - 5V

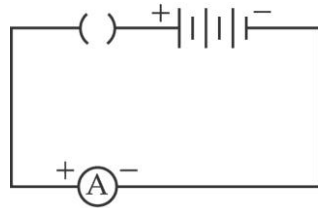
24. On plugging the key the voltmeter/ammeter is likely to be damaged in the circuit/circuits shown in figure :



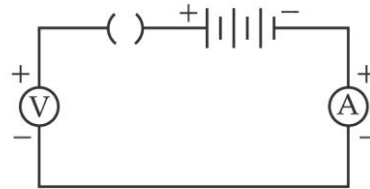
(A)



(B)



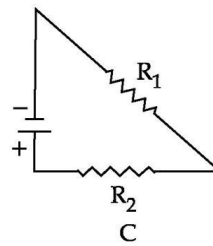
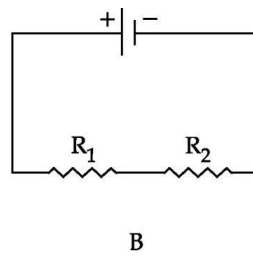
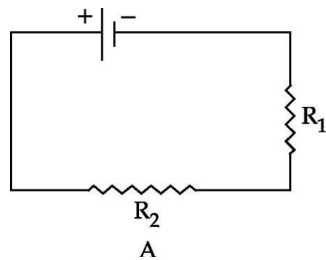
(C)



(D)

- (a) A and C (b) A (c) C (d) B and D

25. Two resistances R_1 and R_2 are to be connected in series combination. Out of the following the correct combination is shown in :



- (a) only A (b) only B (c) only C (d) all of them A, B and C