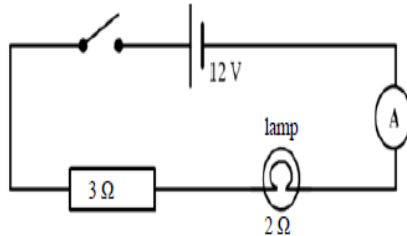


RATU NAVULA COLLEGE
Y12 PHYSICS WORKSHEET 7 QP

2020 SAMPLE

1.

A lamp of $2\ \Omega$ resistance is connected to a $3\ \Omega$ resistor in series as shown below.

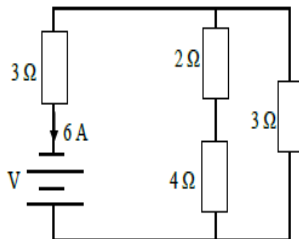


The total resistance of the circuit is

- A. $2\ \Omega$
- B. $5\ \Omega$
- C. $6\ \Omega$
- D. $12\ \Omega$

2.

Sera connects various resistors as shown in a combination as shown below. The current from the power supply is $6\ \text{A}$.



- (i) Calculate the effective resistance of the circuit. (2 marks)
- (ii) Calculate the voltage of the power supply. (1 mark)
- (iii) Calculate the voltage across the $3\ \Omega$ resistor. (1 mark)

3.

The diagram below shows an electrical safety device that melts when too much current flows through it.



The device above is known as

- A. fuse.
- B. switch.
- C. circuit breaker.
- D. junction box.

2014

4.

Which of the electrical symbols given below is for a fuse?

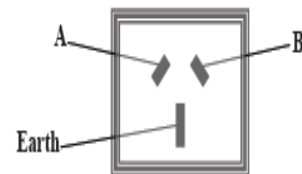
- A.
- B.
- C.
- D.

5. Give one advantage of using a circuit breaker instead of a fuse.

2008

6.

The basic outline of a three pin electric socket is shown below.



- (i) What do pins A and B represent? (1 mark)
- (ii) State the colour of wire that would be connected to the earth pin and pin A. (1 mark)

THE END

