|  |  |
| --- | --- |
| UBND HUYỆN TIÊN LÃNG  **PHÒNG GD** - **ĐT TIÊN LÃNG** | **ĐỀ THI CHỌN HỌC SINH GIỎI**  **MÔN: VẬT LÍ TIẾNG ANH 9**  Năm học 2017 – 2018 |

1. **Complete the answer**

**Ex1:** If the segment is like a drawing, where R1 = 4Ω ; R3 = 12Ω and the second circuit voltage is 14V. For the power consumption on all 28w, the value of Rx value is:

R1

A

Rx

R3

B

|  |
| --- |
| Answer: |

**Ex2:** Resistor R1 = 3 , R2 = 6  in series, then connected to the power supply with a voltage of 4.5 V. Power consumption on resistor R2 is:

|  |
| --- |
| Answer: |

**Ex3:** A metal conductor of resistor R is cut into two equal segments, and then paralleled, the equivalent resistance is 10 Ω. The value of R is

|  |
| --- |
| Answer: |

**Ex4:** Resistor R1 = 4; R2 = 6; R3 = 12 parallel to each other. The equivalent resistance R of the circuit segment is

|  |
| --- |
| Answer: |

**Ex5:** For the circuit as shown: Know R1 = R2 = 12, R3 = 6. The equivalent resistance of the AB circuit is

|  |
| --- |
| Answer: |

**Ex6:** Resistor R1= 10Ω withstand the maximum voltage set at its two ends is U1 = 6V. Resistor R2= 5Ω withstand the largest voltage set at its two ends is U2 = 4V. The circuit consisting of R1 and R2 in series with the largest voltage applied at both ends of this circuit is:

|  |
| --- |
| Answer: |

**Ex7:** Place a needle magnet near the tube (see picture). What happens when we close the K key?



|  |
| --- |
| Answer: |

**Ex8:** Apply the left hand rule to determine the electromagnetic force acting on the wire passing through the current (see below).



**Ex9:** Two resistors R1= 30Ω and R2= 60Ω in parallel to the voltage U = 120V. The power consumption of the parallel circuit is as follows:

|  |
| --- |
| Answer: |

**Ex10:** Simultaneously parallel two resistors R1= 30Ω ; R2= 20Ω to the circuit with a voltage of 30V. The current in the main circuit is:

|  |
| --- |
| Answer: |

1. **Answer Ex11 in English**

**Ex11:** For side drawings:Lamp 1: 6V-12W, resistance R = 6Ω. Connect the power to the normal 2 lights, the voltmeter is only 12V. Calculate power on two lights?

**Đ2**

**Đ1**

C

**R**

**A**

**B**

V

**Solusion**

**Answer**

**Ex1:** If the segment is like a drawing, where R1 = 4Ω ; R3 = 6 Ω and the second circuit voltage is 14V. For the power consumption on all 28w, the value of Rx value is:

R1

A

Rx

R3

B

|  |
| --- |
| Answer: Rx= 6Ω |

**Ex2:** Resistor R1 = 3 , R2 = 6  in series, then connected to the power supply with a voltage of 4.5 V. Power consumption on resistor R2 is:

|  |
| --- |
| Answer: P1= 4Ω |

**Ex3:** A metal conductor of resistor R is cut into two equal segments, and then paralleled, the equivalent resistance is 10 Ω. The value of R is

|  |
| --- |
| Answer: 40Ω |

**Ex4:** Resistor R1 = 4; R2 = 6; R3 = 12 parallel to each other. The equivalent resistance R of the circuit segment is

|  |
| --- |
| Answer: 2Ω |

**Ex5:** For the circuit as shown: Know R1 = R2 = 12, R3 = 6. The equivalent resistance of the AB circuit is

|  |
| --- |
| Answer: 12Ω |

**Ex6:** Resistor R1= 10Ω withstand the maximum voltage set at its two ends is U1 = 6V. Resistor R2= 5Ω withstand the largest voltage set at its two ends is U2 = 4V. The circuit consisting of R1 and R2 in series with the largest voltage applied at both ends of this circuit is:

|  |
| --- |
| Answer: 9 V |

**Ex7:** Place a needle magnet near the tube (see picture). What happens when we close the K key?



|  |
| --- |
| Answer: The magnet is pushed by the tube |

**Ex8:** Apply the left hand rule to determine the electromagnetic force acting on the wire passing through the current (see below).



**Ex9:** Two resistors R1= 30Ω and R2= 60Ω in parallel to the voltage U = 120V. The power consumption of the parallel circuit is as follows:

|  |
| --- |
| Answer:720W |

**Ex10:** Simultaneously parallel two resistors R1= 30Ω ; R2= 20Ω to the circuit with a voltage of 30V. The current in the main circuit is:

|  |
| --- |
| Answer: 2,5A |

**Ex11:** For side drawings:Lamp 1: 6V-12W, resistance R = 6Ω. Connect the power to the normal 2 lights, the voltmeter is only 12V. Calculate power on two lights?

**Đ2**

**Đ1**

C

**R**

**A**

**B**

V

**Solusion**

Because a normal light 1 should:

U1=6v, P1=12W

=> I1 =2A ;



We have U1 +U2=12v => U2 =6v

Calculate power on two lights is: P1=U2I2=6.3= 18W

**By Le Quoc Huy - THCS Dong Hung**