

# Social Intelligence and Electrical Calculations

Physics And Psychology · Practice Test · 21 Questions

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**1. What is the resistivity of copper at 20°C as stated in the text?**

- A) 0.018  $\Omega \cdot m$
- B) 0.00286  $\Omega \cdot m$
- C) 12.1  $\Omega$
- D) 162 V

**2. A coil is wound with 360 meters of copper wire. What is the cross-sectional area of the wire?**

- A) 0.6 mm<sup>2</sup>
- B) 162 mm<sup>2</sup>
- C) 360 mm<sup>2</sup>
- D) 0.018 mm<sup>2</sup>

**3. What is the supply voltage for the coil in the first problem?**

- A) 162 V
- B) 20 V
- C) 75 V
- D) 20°C

**4. What is the temperature coefficient of copper at 20°C?**

- A) 0.00286/°C
- B) 0.018/°C
- C) 20 °C
- D) 75 °C

**5. What is the resistance of the heating element of the kettle?**

- A) 12.1  $\Omega$
- B) 77.1  $\Omega$
- C) 240  $\Omega$
- D) 100  $\Omega$

**6. What is the efficiency of the kettle?**

- A) 77.1%
- B) 12.1%
- C) 240%
- D) 100%

**7. What is the supply voltage to the kettle?**

- A) 240 V
- B) 12.1 V
- C) 77.1 V
- D) 100 V

**8. What is the specific heat capacity of water mentioned in the text?**

- A) 4.2 kJ/kg.K
- B) 2.55 kJ/kg.K
- C) 20.2 kJ/kg.K
- D) 100 kJ/kg.K

**9. What is the boiling point of water given in the problem?**

- A) 100°C
- B) 20.2°C
- C) 75°C
- D) 20°C

**10. How much water needs to be heated in the kettle problem?**

- A) 2.55 kg
- B) 4.2 kg
- C) 20.2 kg
- D) 100 kg

**11. What is the initial temperature of the water to be heated?**

- A) 20.2°C
- B) 100°C
- C) 75°C
- D) 20°C

**12. What is the cost of energy given as 'electrical charge' per kW-h?**

- A) 79.6 c/kW-h
- B) 10 c/kW-h
- C) 240 c/kW-h
- D) 12.1 c/kW-h

**13. In Figure 1, what is the value of E1?**

- A) 10V
- B) 40V
- C) 100?
- D) 7?

**14. In Figure 1, what is the value of E2?**

- A) 40V
- B) 10V
- C) 40?
- D) 160?

**15. In Figure 1, what is the value of R1?**

- A) 100?
- B) 10V
- C) 40?
- D) 7?

**16. In Figure 1, what is the value of R3?**

- A) 7?
- B) 100?
- C) 40?
- D) 80?

**17. Who is credited with tracing the origin of the definition of social intelligence back to 1920?**

- A) Edward Thorndike
- B) Moss and Hunt
- C) Vernon
- D) Gardner

**18. According to Moss and Hunt (1930s), what is social intelligence?**

- A) The ability to get along with others
- B) The ability to understand and manage men and women
- C) Ease in society
- D) Susceptibility to stimuli from other members of a group

**19. Vernon in the 1930s described social intelligence as being reflected in several aspects. Which of the following is NOT one of them?**

- A) Knowledge of scientific theories
- B) Social technique or ease in society
- C) Insight into the temporary moods of strangers
- D) General ability to get along with people

**20. How do good relationships help a person, according to the text?**

- A) Boost their immune system
- B) Increase their IQ
- C) Improve their book smarts
- D) Reduce their need for sleep

**21. What are two dominant views on social intelligence mentioned?**

- A) Psychometric and personality
- B) Cognitive and behavioral
- C) Interpersonal and intrapersonal
- D) Academic and street smarts