

ASSIGNMENT ON MODULE 8

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Student Name:

Date:

Q1. The 60/40 in solder stands for 60% lead and 40% tin?

- a. True
- b. False

Answer:_____

Q2. What is the minimum temperature of the soldering iron required to solder?

- a. 200 °C
- b. 250 °C
- c. 300 °C
- d. 310 °C

Answer:_____

Q3. What are the elements most common in solder?

- a. Copper and Zinc
- b. Iron and Tin
- c. Tin and Zinc
- d. Tin and Lead

Answer:_____

Q4. What is the wet sponge used for in the soldering process?

- a. Clean the PCB to keep a good connection between components.
- b. Clean the solder of impurities.
- c. Clean the tip of the soldering iron.
- d. None of the above.

Answer:_____

Q5. Does it matter which way you place a resistor in a Printed Circuit Board (PCB)?

- a. Yes
- b. No

Answer:_____

Q6. How much solder is required (in general) to solder each connection?

- 1-3mm of solder (below the tip of the soldering iron)
- 1-3mm of solder (above the tip of the soldering iron)
- 4-5mm of solder (below the tip of the soldering iron)
- 4-5mm of solder (above the tip of the soldering iron)

Answer:_____

Q7. How long does it take for solder to cool down its stopped being heated on the Printed Circuit Board (PCB)?

- About 1 second
- About 2 seconds
- More than 2 seconds
- Instantly

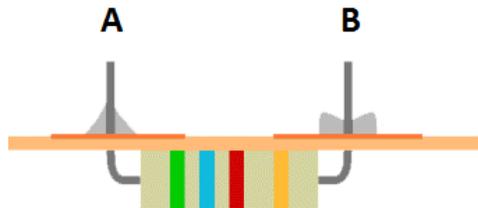
Answer:_____

Q8. Does it matter which component you solder onto the Printed Circuit Board (PCB) first?

- Yes
- No

Answer:_____

Q9. Which is the correct soldering technique as shown in the diagram below, A or B?



- A
- B

Answer:_____

Q10. When soldering a joint, what does the tip of the soldering iron need to be in contact with?

- The component wire
- The PCB pad
- Both A and C
- None of the above

Answer:_____

Q11. How hot should a soldering iron be in order to solder leaded solder?

- a. 400-600 degrees Fahrenheit
- b. 900-1000 degrees Fahrenheit
- c. 800-1000 degrees Fahrenheit
- d. 650-800 degrees Fahrenheit

Answer:_____

Q12. What tools are needed to solder circuit boards?

- a. Soldering iron, solder, flux
- b. Pliers, soldering iron, magnet
- c. Screwdriver, heat tape, soldering iron
- d. Soldering iron, adhesive, pipe cleaners

Answer:_____

Q13. What is a "cold" solder joint?

- a. Solder that was not heated adequately to make a strong bond with the board.
- b. A piece of solder lain across two parts without heating.
- c. Solder that has cooled to room temperature.
- d. A refrigerated solder connection

Answer:_____

Q14. What can be used to clean circuit boards when you are finished soldering?

- a. A cotton ball with alcohol on it
- b. Window cleaner or multipurpose cleaner
- c. Defluxer spray, compressed air, or water
- d. An abrasive pad

Answer:_____

Q15. Should solder be reheated on a circuit board (keeping the same solder, not resoldering with new metal)?

- a. Yes, as many times as you want. Solder will always liquefy.
- b. Yes, once or twice using flux but only with prototype boards.
- c. No, you only get one try, the solder will not reheat.
- d. No, once solder cools it becomes brittle.

Answer:_____

Q16. When soldering, a technician needs to take care not to damage the board by wearing a wrist strap to protect the board from ESD. What is ESD?

- a. Electrostatic discharge
- b. Electro Superficial Discharge
- c. Electrical Stationary Damage
- d. Electrical Sweeping Damage

Answer:_____

Q17. Where do you put the soldering iron when you have finished with it?

- a. On the desk
- b. On a piece of paper
- c. On the floor
- d. In the stand
- e. In the cupboard

Answer:_____

Q18. What part shouldn't you touch?

- a. The Plug
- b. The metal part
- c. The handle
- d. The wire
- e. Other

Answer:_____

Q19. Approximately how far should we stay away from the iron, to avoid being poisoned?

- a. 30–40 cm
- b. 30-40 meters
- c. 30-40 km
- d. 30-40 mm

Answer:_____

Q20. Roughly how long do you have to leave the iron to cool down?

- a. 1 second
- b. 1 minute
- c. 1 hour
- d. 1 day
- e. 1 week

Answer:_____

Q21. De-soldering requires a higher temperature than soldering?

- a. True
- b. False

Answer:_____

Q22. You should always add flux to the joint when using solder wick?

- a. True
- b. False

Answer:_____

Q23. Which of the following is true in regards to cleaning a joint before de-soldering?

- a. Either uses a fibreglass pen or flux.
- b. Mechanically and chemically clean the joint.
- c. The joint should be nice and shiny.
- d. If the joint looks good, no need to clean it.

Answer:_____

Q24. Oxidation occurs when oxygen comes in contact with metal and heat amplifies the process?

- a. True
- b. False

Answer:_____

Q25. After cleaning the joint you can just heat it up and yank the wire or diode out?

- a. True
- b. False

Answer:_____

Q26. You only need to clean the iron's tip once at the beginning?

- a. True
- b. False

Answer:_____

Q27. It's OK to use the iron's tip to pry loose a wire or diode?

- a. True
- b. False

Answer:_____

Q28. Which of the following are good ideas if you're having trouble de-soldering a joint?

- c. Increase the temperature.
- d. Make sure the joint is clean.
- e. Add a little solder to the joint.
- f. Add a little flux.

Answer:_____