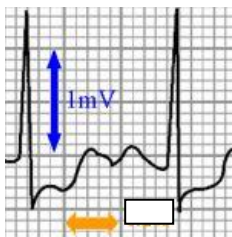


ECG Test
Minimum passing score is 80%

1. What is an Electrocardiograph used for?
 - a. Pulse Rate
 - b. Diagnosing Heart Conditions
 - c. Measuring Electrical Voltage in the Heart
 - d. All of the Above
2. An ECG machine is most like a
 - a. Blood Pressure Machine
 - b. Safety Analyzer
 - c. Galvanometer
 - d. Vital Sign Monitor
3. Up to how many leads does an ECG unit measure compared to how many it can use?
 - a. It measures up to 12 and can use up to 12.
 - b. It measures up to 12 and can use up to 10.
 - c. It measures up to 3 and can use up to 3.
 - d. It measures up to 10 and can use up to 10.
4. What is the correct definition of a "lead"?
 - a. The stretch between two limb (arm or leg) electrodes.
 - b. A measurement device.
 - c. A sticky electrode attached to the body.
 - d. An electronic tracing on a graph.
5. Which is not an actual ECG wave?
 - a. P Wave.
 - b. QRS Complex
 - c. T Wave
 - d. N Wave.
6. How many seconds does the yellow arrow represent?

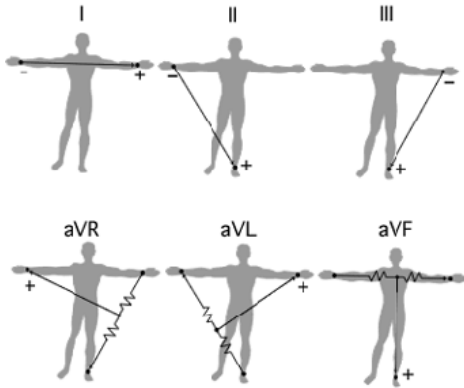


- a. 2
 - b. 0.2
 - c. 1
 - d. 10
7. What does an electrocardiogram represent?
 - a. Voltage versus Time

- b. Current versus Voltage
- c. Current versus Time
- d. Strength versus Time

8. What do the waves on an electrocardiogram represent?
- a. Stimulation of ventricles.
 - b. Stimulation of Atria.
 - c. Re-polarization of ventricles.
 - d. All of the above are represented by at least one wave.

9. What do the top three figures represent in the picture below?



- a. Standard leads.
 - b. The three sides of Einthoven's Triangle.
 - c. Augmented leads.
 - d. Both a and b.
10. How many beats a minute is it when the body is at rest?
- a. 30
 - b. 40
 - c. 60
 - d. 70
11. Which of the following checks are NOT part of PM procedures?
- a. Broken receptacle
 - b. Check frequency response
 - c. Cut or frayed power cord
 - d. Blown fuse

SCENARIO. You get a frantic call to the emergency department about an ECG unit having a problem with "erratic" or "no" ECG readings. Upon your arrival you notice the machine has been set to the side with a DO NOT Touch tag placed on it. Immediately you perform an incident investigation and hook-up the reads to take measurement readings. Upon your assessment of the display you notice a perfect 60 beat per minute ECG signal. You change the dial to 120 beat per minute and still the unit appears to be working fine. What should you do? (Circle all the apply)

- a. Close the work order as "no problem found" and return it back to the ER.
- b. Talk to the user and ask detailed questions about what/why this happened
- c. Check the accessories
- d. Check for low batteries
- e. Replace the ECG leads

Name_____ Date_____

Answer Key:

1. D
2. C
3. B
4. A
5. D
6. B
7. A
8. D
9. D
10. D
11. B

SCENARIO ANSWER: B,C

"A. Close the work order as "no problem found" and return it back to the ER" is not the right answer because you have not ruled out all the different problems. Yes, it could be an intermittent problem but perform troubleshooting techniques and rule out every small detail. Remember, it can be you or a loved one hooked up next to this machine and do you want it to fail then. Next, B. Talk to the user and ask detailed questions about what/why this happened" is correct and can help you investigate the problem further rather than quickly dismissing it as a "no problem found" work order. Never take a shortcut but take the time to find out what is causing the problem and fix it. Next, C. Check the accessories" also is correct and can be one of the problems such as the alligator clips could have debris between them creating an improper contact between the gel pads and ECG leads...this is a common problem. Next, D. Check for low batteries" is not correct because the symptom is no ECG signal. A dead or low battery signal would have a different symptom such as "no power". Lastly, "E. Replace the ECG leads" also is an incorrect technique and would ultimately cost you more time ordering parts and the organization more money once you replaced the part and discovered the replacement part still did not fix the problem.