

1. BMET's do not have a physically demanding job. Physical stamina, standing, crouching, and bending in awkward positions are not common when making repairs to equipment.

Question options:

- True
- False

2. Medical equipment repairers work primarily with machines and have little contact with people. As a result, effective communication of technical information by telephone, in writing, and in person is not essential to the job.

Question options:

- True
- False

3. Many tasks, such as connecting or attaching parts and using hand tools require a steady hand and good hand–eye coordination.

Question options:

- True
- False

4. Pretend you are an employer looking to hire a Biomedical Equipment Technician. Write down the type of industry your company is in, the qualifications a BMET must have, and the typical industry pay of BMETs in the U.S. at this current time.

5. Match the correct ICC certification to the relevant position title.

CRES (Radiology Equipment Specialist)

CBET (Biomedical Equipment Technician)

CLES (Laboratory Equipment Specialists)

6. Hospital-employed BMETs generally have the following responsibilities:

Question options:

- Fixing equipment that is not functioning as expected.
- Evaluating device performance.

- Providing both formal and informal equipment instruction to users of equipment and other BMETs
- Designing new equipment for institutional use.
- Evaluating issues surrounding device malfunctions.

7. What are the five sections of the CBET exam?

8. BMETs work at their own pace. BMETs are repairing vital medical equipment that is not needed immediately, so it is good practice to take one's time to complete the repair.

Question options:

- True
- False

9. At the present time, national standards require one to complete 4 years of college in order to become a licensed BMET?

Question options:

- True
- False

10. BMET's rarely have to take the initiative to find and solve problems that are not immediately apparent.

Question options:

- True

False

11. Technicians use sophisticated diagnostic tools when working on complex medical equipment. They must be familiar with both the equipments' internal parts and the appropriate tools needed to fix them.

Question options:

True

False

12. Vladimir works at NOW manufacturing company, where they specialize in the production and distribution of heart pumps. On yesterday afternoon Vladimir saw one of his co-workers on the floor. According to Vladimir's witness statement, his co-worker had been electrocuted by a machines faulty wiring. Vladimir also stated that he noticed that his co-worker seemed to be out of breath for some reason. Based on the physiological effects of Vladimir's co-worker, one could conclude that Vladimir's co-worker was exposed to:

Question options:

Defibrillation Current

Let Go Current

Paralysis Current

Threshold Current

Fibrillation Current

13. What is a macroshock?

Question options:

A shock from medical devices that are implanted inside the patient

A shock from medical devices that are use a wireless connection

A shock from medical devices that contact the exterior of the patient

A shock from medical devices that are not in contact with the patient

14. Lisa is a world champion triathlete and is in stellar health. Tuesday morning, Lisa went to visit her mom at Crazy-horse Medical Center. Lisa's mother was in a session with her physical therapist in a whirlpool tub. While waiting in her mother's room, Lisa remembered she had to take a test on patient safety for Mrs. Taylor's online class, so she plugged in her laptop. Lisa received an electric shock so massive it knocked her unconscious. According to hospital employee, Lisa had a heart rate of 125 when they checked her immediately following the ordeal. If the normal heart rate of a human being is between 60 to 100, what would you conclude Lisa experienced Tuesday morning?

Question options:

- Defibrillation (1,00-10,000 mA)
- Macroshock (9 $\mu$ A)
- Fibrillation (25-75 mA)
- Paralysis (<20 mA)
- Fibrillation (80- 1,000 mA)

15. What is a GFCI \_\_\_\_\_, and at what point does it activate \_\_\_\_\_?

16. The four categories of leakage current are:

Question options:

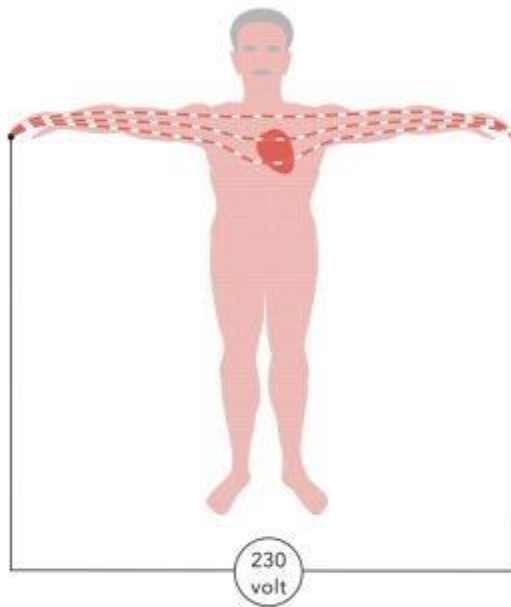
- Let Go, Paralysis, Earth, Defibrillation
- Threshold, Macroshock, Microshock, Pain
- Pain, Let Go, Fibrillation, Defibrillation
- Earth, Enclosure, Patient, Patient Auxiliary
- None of the above

17. As a Human Resource Manager, I am responsible for everything. Today, I am reviewing accident reports. I have run across a report from Donatello S. Under the section that asks the employee to describe what happened to them, Donatello reported that while working on the circuit board for an Automated External Defibrillator, he was injured. According to the

accident report, Donatello described a feeling of being bit by the machine. Which level of current would you say Donatello experienced?

Question options:

- Let Go
- Pain
- Paralysis
- Fibrillation
- Too Much



18. Based on the textbook definitions of electrical shock; what does this picture represent?

Question options:

- Macro-shock
- Both Macro-shock and Micro-shock
- Pain current
- None of the above

19. Sally works as an equipment technician at a hospital in Florida. Thursday afternoon, Sally went to plug in a patient monitor. While plugging in the monitor Sally sensed a tingling feeling pulsating through her hand. This type of sensation can happen at which level of current?

Question options:

- Paralysis
- Fibrillation
- Let Go
- Pain
- Threshold

20. What does LIM stand for? What does it do?

Question options:

- Lower Intake Manifold
- Linear Induction Motor
- Line Isolation Monitor
- Continually checks the impedance from each line of an isolated circuit to ground.  
In this system there are 2 intake tracts, one short and one long operated by a vacuum modulator that may or may not be interfaced by an electric solenoid operated by the engine management computer

21. Under what conditions might a GFCI trip?

Question options:

- Very dry conditions
- Very stormy conditions
- Very dark conditions
- Very wet conditions

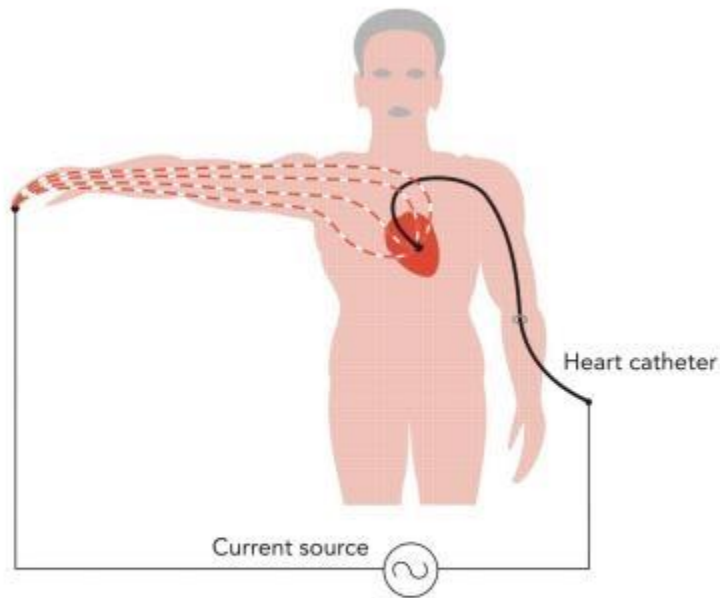
22. The current that flows when the device is broken is \_\_\_\_\_ \_\_\_\_\_?

23. Not all devices have leakage current in them?

Question options:

- True
- False

24. In 1984, the United States saw the need to minimize the hazards of fire, explosions and electricity in health care facilities that provide services to humans. What is the name of the organization responsible for establishing Code 99? \_\_\_\_\_



25. Based on the textbook definitions of electrical shock; what does this picture represent?

Question options:

- Electro-magnetic shock
- Pain Current
- Macro-shock
- Micro-shock
- None of the above

26. Describe the way HIPPA impacts what BMETs do.

Question options:



27. What is a Safety Analyzer?

Question options:

- A device that fixes troubled machines
- A device that will automatically check and then measure variables such as the polarity of an outlet or whether there is chassis leakage and ground resistance.
- A device that checks the polarity of the device.
- A person that goes around hospitals and business, reviewing safety plans and fire hazards.
- A person that reviews the quality of workplace safety

28. There are no specific codes of ethics for BMETs however, according to the Biomedical Engineering Society; biomedical engineers in the fulfilment of their professional duties are required to do what?

Question options:

- Love all patients.
- Protect patient information.
- Promote health and welfare for the public.
- Ensure patient safety.
- Leave the most important work to the doctors

29. ACCE stands for what? \_\_\_\_\_ .

30. Eric Von Erick was admitted to the hospital for surgery on his brain tumor. Unfortunately Eric did not survive the ordeal. Eric's family is big on "helping" others so when the hospital asked for his body parts for research, the family agreed. The medical examiner wanted to do research on Eric's brain tissue; so she did a stereotactic biopsy to scan for the tumor in Eric's



brain. The machine was giving the doctor problems so you were called in. Since Eric is deceased what precautionary standards would you use for his situation?

Question options:

- Assist the doctor with Eric's diagnosis
- Now that Eric is deceased, the precautions have changed and is no longer necessary.
- The patient is not the problem of the BMET, they are strictly the problem of the doctors and nurses.
- Treat the living and the dead with the same precaution- universal precaution.
- A deceased person no longer, have active antibodies, and pathogen's living within them. The precautions are not the same as the living.

31. According to the textbook all fluids with visible blood contamination, and all fluids with or without visible blood contamination should be treated with precaution; what is the one liquid that was left off the list of bodily fluids? \_\_\_\_\_

32. List the textbooks five examples of a PPE.

33. Based on the information in your textbook, the Biomedical Equipment manufacturing world is continuing to develop. Name some of the manufacturers discussed in your weekly reading that produce equipment used to test medical devices.

34. The Health Insurance Portability and Accountability Act of 1996 obliges BMETS to

Question options:

- Do unto others as you would have them do unto you.
- Ensure Patient Privacy.
- Seek the best healthcare option possible for every patient.
- Understand life and death situations, regarding patients.
- Right to Life.

35. What does a PPE do?

Question options:

- It stands for; 'Programmable Priority Encoder'
- It stands for; 'Personal Protective Equipment'
- It is used to calibrate the safety analyzing machine
- It stands for; 'Protective Posture Equipment'
- It provides a barrier between moist body substances

36. You arrived at work at 9 am today. Usually you get at least ten service calls a day, but today you haven't gotten any calls for service. Which plan of action helps you positively impact your work environment?

Question options:

- You sit in your work area quietly and pray no one calls you.
- You initiate ongoing communication by visiting units, and building rapport.
- You sit and chat with the other BMETs.
- Both A and C
- Both B and C

37. What basic health/safety consideration should you assume when dealing with patients and equipment?

Question options:

- Every patient and every piece of equipment has a communicable disease.
- Every good boy does fine.
- Every patient is a human being

- Everyone is the same inside and out

### 38) What is the correct name for the picture above?

When taking the question, it would appear as:



38. What is the correct name for the picture above?

Question options:

- Patient Monitor
- Nurses Workspace
- Doctor's Workstation
- Crash Cart
- All of the above

39. Mary is a nurse practitioner at Cedars Medical Center. She pages you due to an issue with a CT scanner. Nurse Mary tells you that every time she pushes a button to rotate the camera lens on the scanner, she hears the Jon Bon Jovi song... 'Dyin' ain't much of a livin'. You know that there is no way possible this could ever take place. Which plan of action helps you positively impact your work environment?

Question options:

- Tell Nurse Mary, "I will look at the machine, but afterwards, you need to check your own brain for problems".
- Listen to Nurse Mary, and simply check the equipment to see what's going on.
- Tell Nurse Mary, "It is highly unlikely, but please call you if you hear the music again".
- Get back to Nurse Mary later, because you have more pressing projects to handle.

40. After the July 4th barbecue cook off Michael was diagnosed with a mild case of salmonella. Take a moment to google salmonella and determine which transmission-based precaution should you follow?

Question options:

- Lockdown
- Droplet
- Contact isolation
- Airborne

41. What are the two basic classes of standards that have been identified by the CDC?

Question options:

- Transmission-based Precautions
- History Precautions
- Standard Precautions
- Equipment Precautions
- Noticeable Precautions

42. Your textbook describes some bodily fluids that can be found on the precautions list; name them:

43. While swimming in the pool David contracted meningitis. Which transmission-based precaution should you follow?

Question options:

- Biopic
- Droplet
- Contact isolation
- Airborne
- All of the above
- None of the above

44. Jean has the chicken pox. Which transmission-based precaution should you follow?

Question options:

- Quarantine
- Droplet
- Contact isolation
- Airborne
- None of the above

45. It is pouring down rain outside. You hate eating food from the hospital cafeteria, and you forgot to pack a lunch. You need to run to Café Griot to pick up the lunch you ordered an hour ago, but you had several heart monitor's go out today and are back logged. You are in the process of troubleshooting a heart monitor, and for some odd reason your Fluke Biomedical testing machine isn't calibrated correctly, so you stop to fix it. The phone has not stopped ringing off the hook with hospital staff looking for help. Your co-worker is scheduled to come to work in ten minutes to assist you. Which plan of action helps you positively impact your work environment?

Question options:

- Answer the calls when they come in, write down the issues and inform the caller that you will get back to them at a later time that day.
- Let the phone ring until you are finished fixing the problem in front of you.
- Answer the phone and tell the caller's that "you are actually supposed to be at lunch, call back in ten minutes when you have more workers around".
- Handle what's in front of you. Go to lunch and let your co-worker check the voice messages when he/she gets in to work.
- Handle what's in front of you. Go to lunch and let your co-worker check the voice messages when he/she gets in to work.

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