

**Third Year B.Sc MLT Degree Examinations October 2017**

**ELECTRONICS, COMPUTER SCIENCE & BIOMEDICAL INSTRUMENTATION  
TECHNOLOGY**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essay**

**(2x10=20)**

1. Explain in detail the hardware and software components in a computer system. What is the role of memory in the functioning of computer. (6+4)
2. Substantiate the importance of maintenance of equipments. Compare between preventive and breakdown maintenance (4+6)

**Short notes**

**(10x5=50)**

3. NPN transistor
4. Half wave rectifier
5. LAN
6. Electrodes
7. Transducers
8. EMG machine
9. Incubator
10. Calorimeter
11. Echocardiography
12. Collimator

**Answer briefly**

**(10x3=30)**

13. Infusion pump
14. GM counter
15. Photomultiplier tube
16. PET
17. Optical fiber
18. International colouring of Blood labels
19. Digital angiography
20. Deep freezer
21. Pulse oximeter
22. Common base amplifier