

Third Year B.Sc MLT Degree Supplementary Examinations October 2022
Electronics, Computer Science & Biomedical Instrumentation Technology
(2010 & 2015 Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers • Draw diagrams wherever necessary

Essay**(2x10=20)**

1. What are oscillators. Why are their applications in electronic circuits. With the help of a diagram explain the principle of operation of a LC oscillator. (2+3+5)
2. With the help of a block diagram explain the instrumentation of magnetic resonance imaging system. What are the maintenance procedures. (5+5)

Short notes**(10x5=50)**

3. Diode characteristics
4. Zener diode a voltage regulator
5. LED Display
6. Instrumentation amplifier
7. Internet protocol
8. Digital multimeter
9. Spectrophotometer
10. CO2 Laser
11. Echocardiography
12. Pure tone audiometer

Answer briefly**(10x3=30)**

13. Sigmoidoscope
14. Hearing aids
15. Atrial fibrillation
16. EEG waves
17. Indications of mechanical ventilation
18. Visual evoked potential recording
19. CT detectors
20. Gamma camera
21. Radio Isotopes in PET
22. Peritoneal dialysis