

**Third Year B.Sc MLT Degree Supplementary Examinations April
(November), 2020**

**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. Plot and explain the working of half wave and full wave rectifier. (5+5)
2. Discuss the principle of Nuclear Magnetic Resonance (NMR). Explain how NMR is used in MRI machine (5+5)

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

3. Differential amplifier
4. Frequency response of an amplifier
5. Input and output devices for computer
6. Heating mantle
7. Spectrophotometer
8. Diathermy unit
9. Suction pump
10. Scintillation detector
11. SPECT
12. LAN

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

13. Walk-in cooler
14. Centrifuge
15. Cardiac defibrillator
16. Multi parameter monitor
17. Heart lung machine
18. Blood gas analyzer
19. Characteristics of Zener diode
20. Echocardiography
21. Endoscope
22. Optical fiber