



QP CODE: 26019350



26019350

Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026
Fourth Semester
ELECTIVE - EL810402 - BIO-MEDICAL ELECTRONICS
M Sc ELECTRONICS, M Sc APPLIED ELECTRONICS
2019 Admission Onwards
601D58B0

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Explain Silver-Silver chloride electrode.
2. What is microelectrode?
3. Discuss about strain gauge transducer.
4. Discuss about silicon diode temperature sensor.
5. Explain vectrocardiography.
6. Describe EEG evoked potentials,
7. What is auto-analyzer?
8. Write any four applications of CT scan.
9. Describe about laser.
10. Explain Photorefractive Keratectomy (PRK).

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. With diagram explain circuit model of electrodes.
12. Discuss about displacement position and motion transducer.
13. What are biosensors?
14. Discuss the blood pressure measurement procedure.





15. With figure explain electromagnetic blood flowmeter.
16. Explain about defibrillator
17. Discuss about intelligent patient monitoring system.
18. Explain the importance of telemedicine.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Write note on resting potential, action potential, polarization, depolarization and repolarization of a cell with the cell structure.
20. Briefly explain different type transducers. Write a note on temperature and pressure transducers.
21. Explain Electromyograph. Explain EMG procedure and signal analysis. What is Audiometer?
22. Describe in detail about Ultrasonic Imaging. Briefly explain various modes of ultrasonic imaging and its applications. Write a note on Flame Photometer.

(2×5=10 weightage)

