

B.Sc. NEURO ELECTRO PHYSIOLOGY
SECOND YEAR
PAPER II – ELECTRONICS

Q.P. Code : 802512

Time: Three Hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. Derive the characteristics of PNP, NPN transistor with corresponding waveform.
2. Draw and label the CRO with necessary explanation.
3. Explain the diagnostic types of equipments with a neat sketch.

II. Write notes on:

(8 x 5 = 40)

1. Elaborate the different types of transducer.
2. Write a note on CRO.
3. Draw the block diagram of voltage regulator and explain.
4. Draw and label the EMG.
5. Explain any one type of Analog to digital convertor.
6. Briefly explain the hazards in medical equipment.
7. Elaborate the certification of medical equipment.
8. Briefly explain the therapeutic type of medical equipments.

III. Short Answers on:

(10 x 3 = 30)

1. Draw the energy band diagram of semi conductors.
2. State the Kirchoff's Law.
3. Draw the reverse bias characteristics of PN-Junction diode.
4. Explain the concept of Polarization in Bio potential electrode.
5. State the difference between band pass filter and low pass filter.
6. List the types of Transducer.
7. What are the dos and don'ts for the usage of medical equipments?
8. Write the various control codes and their meaning in medical equipments.
9. Define valence and conduction band.
10. Explain the certification of medical equipments.
