

[LF 0212]

AUGUST 2014

Sub.Code :2512

**B.Sc. NEURO ELECTROPHYSIOLOGY
SECOND YEAR
PAPER II – ELECTRONICS**

Q.P. Code : 802512

Time: Three hours

Maximum : 100 Marks

Answer All questions

I. Elaborate on:

(3x10=30)

1. Explain about Operational Amplifier and Its applications.
2. Explain about all Universal Gates with Truth table and Boolean Expression.
3. What are the sources of Bio electric Signals? Explain each one.

II. Write notes on:

(8x5=40)

1. Define Resistance, Capacitance and Impedance
2. What is Semiconductor and its types?
3. Explain about P Type & N Type Transistor.
4. What is a Half wave Rectifier? Explain.
5. Write about Shock hazards from Electrical equipments.
6. What are the types of protection in medical Equipments?
7. What are the sources of biomedical Signals?
8. What is a transducer and types of transducers in biomedical applications?

III. Short Answers on:

(10x3=30)

1. Define Power, Power factor.
2. Draw the symbol and colour code representation of Resistor.
3. Define Kirchoff's Voltage Law.
4. Explain transistor as an amplifier.
5. Convert the decimal number 111 to Hexadecimal.
6. Boolean Expression for EXOR, NOT.
7. What is a Action Potential?
8. What is Passive Transducer?
9. What is a Pen Amplifier in EEG?
10. What is CRO?
