

Jansons Institute of Technology

Karumathampatti, Coimbatore – 641 659

R17-EC8073/MEDICAL ELECTONICS

B.E-ECE

Semester :05

Max Mark: 50

CIA - I

30.07.2019

Time: 90 Min

Instructions

1. Answer all the questions in Part – A, B & C

Part A

Mark: 5 x 2 =10

- 1.State All or nothing law
- 2.List the electrodes used for measuring EEG,ECG & EMG.
- 3.Draw the graphical representation of Action and Resting potential.
- 4.Write the principle of EM bloodflowmeter.
- 5.What is Calorimeter & state it uses?

Part B

Mark: 2 x 13 =26

- 6.a i) Explai in detail about 10-20 lead system (5)
ii)Discuss about ECG recording setup in detail. (8)

(or)

- 6.b Explain in detail about different heart sounds and discuss about its signal characteristics (13)

- 7.a Explain in detail about the measurement of PO_2 & PCO_2 (13)

(or)

- 7.b Explain how bloodflow velocity is measured using ultrasound method (13)


Part C

Mark: 1 x 14 = 14

- 8.a Explain in detail about EMG recording setup and also discuss about (14)
determination of conduction velocity

(or)

- 8.b Explain how the colorimeter is useful in medicine. (14)


Mrs.V.Vidhyagowri &
Ms.M.Surya/ECE


HoD/ECE