

Sem-V

Biom-Medical Instrumentation

lib

(3 Hours)

Biom
6/6/11 ✓

RK-2112

[Total Marks : 100

- N.B. (1) Question No. 1 is compulsory.
(2) Figures to the right indicate full marks.

1. (a) Explain the Optical Ray diagram of Spectrophotometer. 5
(b) Give the block diagram of Heart Lung Machine. 5
(c) Explain any one blood cell counter. 5
(d) Explain cell and plasma separator. 5
2. (a) Give the block diagram of evoked response Audiometry and explain in detail. 10
(b) Explain pure tone Audiometry and Speech Audiometry. 10
3. (a) What is Oximetry? Give the block diagram of ear oximeter and explain in detail. 10
(b) Explain the Anaesthesia equipment in detail. 10
4. (a) List various flowmeters and explain any two in detail. 10
(b) What is Cardiac output? Explain in detail dye dilution method. 10
5. (a) Explain in detail with graphical representation various modes of ventilator. 10
(b) What is Spirometry? Explain any one Spirometer in detail. 10
6. (a) Explain in detail the block diagram of Complete Blood Gas Analyser. 12
(b) Explain in brief blood pH measurement. 8
7. Write short notes on (any four) :— 20
 - (a) ELISA Reader and Wash
 - (b) Centrifuge
 - (c) Chromatography
 - (d) Colorimeter
 - (e) pH meter.