

(17)

TE/V/CBSGS/BIOMED/BI-I

Q.P. Code : 564300

(3 Hours)

[Total Marks : 80

N.B. : (1) Question No 1 is **Compulsory**(2) Attempt any **three** questions from the remaining **five**(3) **Figures** to the right indicate **full** marks(4) **Assume** data wherever **necessary**

1. (a) Explain dye dilution method of cardiac output. 5
- (b) What is meant by positive and negative pressure ventilator? 5
- (c) Explain Impedance plethysmography. 5
- (d) What are the different types of microscopes? Give their applications. 5

2. (a) Explain Anaesthesia equipment in detail. 14
- (b) Explain with block diagram working of colorimeter. 6

3. (a) Explain pure tone Audiometry and speech audiometry. 10
- (b) Explain coulter blood cell counter with neat diagram. 10

4. (a) Draw and explain block diagram of autoanalyser. 10
- (b) Explain working of ear oximeter. 10

5. (a) Define various lung volumes and capacities with Spirogram. 10
- (b) Describe ultrasonic blood flow method for blood flow measurement. 10

6. Write short notes on (Any four) 20
 - (a) ELISA reader and wash
 - (b) Electrophoresis
 - (c) Oxygenator in heart lung machine
 - (d) pCO₂ electrode
 - (e) Masking in audiometry