

17544

11718

2 Hours / 50 Marks

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Illustrate your answers with neat sketches wherever necessary.
 - (3) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. (A) Attempt any THREE :

12

- (a) List any four analytical Instruments based on Beer & Lambert's law.
- (b) Which sterilizing equipments are used for following application ?
Justify.
 - (i) For removing microdust, clots, blood stains on the instrument.
 - (ii) Various powder in medical use.
 - (iii) For sterilizing medical waste.
- (c) List any four technical specification of Blood Gas Analyzer.
- (d) State types of electronic microscope. Also list its different parts.

(B) Attempt any ONE :

6

- (a) Draw a neat labelled diagram of TEM. Also state the function of each part.
- (b) What is sterilization ? Write stepwise procedure to sterilize medical instruments using autoclave. Also list any two clinical applications of autoclave.

2. Attempt any FOUR :**16**

- (a) Draw neat diagram of Gas chromatography & describe it.
- (b) With neat diagram of optical method for cell counting. Also write its working principle.
- (c) Draw neat labelled diagram of hot air Oven. Also explain its working.
- (d) Describe construction of Auto analyzer with help of neat diagram.
- (e) Draw block diagram of Blood gas Analyzer.
- (f) Describe working of capillary electrophoresis with help of neat diagram.

3. Attempt any FOUR :**16**

- (a) Compare single beam spectrophotometer with dual beam spectrophotometer.
(any four points)
 - (b) What is centrifuge ? Describe the working of preparative ultracentrifuge.
 - (c) With neat labelled diagram, explain working of Liquid Chromatography.
 - (d) Draw block diagram of analytical instrument. Give function of each block.
 - (e) Describe working of flame photometer with neat diagram.
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