

Acc No. UG9T30

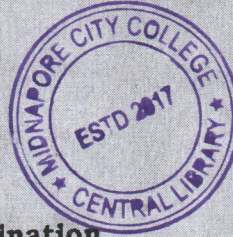
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C/19/PM/BMLT/1stSem(N)/1(U-2)

NEW

2018

BMLT



1st Semester Paramedical Examination

BASIC INSTRUMENTATION

PAPER—I (Unit-2)

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer Q. No. 1 and any three from the rest.

1. Answer any five questions : 5×2

- (a) Write two applications of phase contract microscope.
- (b) What is meant by 'transmittancy' in colorimetry?
- (c) What do you mean by PDCA?
- (d) Establish the relationship between 'g' and 'rpm'.

(Turn Over)

- (e) What do you mean by resolving power of microscope ?
- (f) What is retention factor ?
- (g) What is HEPA filter and state its function ?
- (h) Write the application of coulter counting chamber ?
2. (a) Write the fundamental steps of s-ELISA with line diagram.
- (b) Why s-ELISA is preferred over c-ELISA ?
- (c) State the function of chromogen in ELISA.
- (d) How do you determine the cutoff value (positive and negative) of an ELISA test. 3+3+2+2
3. (a) Write the working principle of Colorimeter ?
- (b) Define Beer-Lambert's law ?
- ~~(c)~~ Discuss the working principle of fluorescent microscope with diagram. 3+3+4
4. (a) What do you mean by semi and full auto-analyzer ?

- (b) What do you mean by 3 parts and 5 parts blood cell coming chamber ?
- (c) Write the working principle of "Blood cell counter"? 4+3+3
5. (a) Write the principle of HPLC reverse phase ?
- (b) Differentiate native gel electrophoresis and SDS-PAGE.
- (c) Write the two application of Electrophoresis in diagnostic laboratory.
- (d) What is Zone-Electrophoresis ? 3+3+3+1
6. (a) What do you mean by TQM ?
- (b) What do you mean laboratory bio-safety level ?
- (c) Classify different level risk groups of microorganism with definition and example.
- (d) How do you perform first aid for acid and alkali splashes in a laboratory ? 2+2+4+2