

2020

BMLT

1st Semester Paramedical Examination

BASIC INSTRUMENTATION AND APPLICATION

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 any two questions)

20×2

1. Write the basic principle and application of HPLC. What do you mean by forward and reverse HPLC ? Discuss about different laboratory safety equipments. 3+7+4+6
2. Write the name of different types of microscope. What are the different components present in a compound microscope and indicate the functions of these components ? Write the working principle of an ELISA reader. 5+(6+4)+5

(Turn Over)

3. What is cathode and anode? Describe the charged particle movement during electrophoresis with a suitable schematic diagram. How do different factors regulate the movement of an ion in an electrophoresis? 4+10+6
4. What is the working principle of a spectrophotometer? Describe the different parts of spectrophotometer. Write the applications of spectrophotometer. Write the application of 'g' and 'rpm'. 3+7+6+4
5. Write the name of the instrument used to perform sterilization in a pathological laboratory. What are the important components found in this instrument? How does it work? Write the working principle of blood cell counter with a diagrammatic representation. 2+7+3+8
6. What is quality control? What is quality assurance? Explain the quality assurance cycle. Enlist the variable factors that affect the internal quality of a laboratory. 2+2+8+8
-