

**BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY,PUNE-INDIA
POST GRADUATE DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY
(P.G.D.M.L.T.)**

**P.G.D.M.L.T. :SUMMER- 2022
SUBJECT : CLINICAL BIO-CHEMISTRY**

Day : Monday
Date : 4/7/2022

S-25041-2022

Time : 01:30 PM-04:30 PM
Max. Marks : 100

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw **NEAT** and **LABELLED** diagrams **WHEREVER** necessary.
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- Q.1** Define enzymes. Discuss the diagnostic, therapeutic and analytical applications of enzymes. [15]
- Q.2** Describe the role of automation in clinical biochemistry laboratory. Add a note on external quality assessment scheme in clinical biochemistry laboratory. [15]
- Q.3** Define electrophoresis. Describe the principle, working and clinical applications of electrophoresis. [15]
- Q.4** Classify and explain the kidney function tests. [15]
- Q.5** Write **short notes** on **Any FOUR** (out of **FIVE**) [20]
- a) Biological Specimen collection in clinical biochemistry laboratory
 - b) Liver function tests based on synthetic function
 - c) Colorimetry: principle and applications
 - d) Phospholipids: classification and functions
 - e) Biochemical analysis of Cerebrospinal fluid (CSF)
- Q.6** Write **short notes** on **Any FOUR** (out of **FIVE**) [20]
- a) Abnormal Hemoglobins
 - b) Lipids: Definition, Classification and Functions
 - c) Diabetes Mellitus: Definition, Types, Acute and chronic complications
 - d) Measurement and clinical significance of serum electrolytes
 - e) Incubator, Hot air oven, Temperature water bath

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