

**P.G. Diploma Examinations in Clinical Pathology (DCP) April 2019**

**Paper III – Clinical Biochemistry and Basic Microbiology**

**Time: 3 hrs**

**Max marks:100**

- *Answer all questions*
- *Draw diagram wherever necessary*
- *Write SECTION A and SECTION B in separate answer books (32 pages). Do not mix up questions from Section A and Section B*

**QP Code:103177**

**SECTION A – Biochemistry**

**Marks: 50**

**Essay:**

**(15)**

1. Describe the procedure of internal quality control in clinical biochemistry laboratory. Explain the method of plotting Levey Jennings chart and its significance. Add a note on resolution of outliers.

**Short notes:**

**(7x5=35)**

2. Electrophoresis and its applications
3. Renal function tests
4. Biochemical analysis of cerebrospinal fluid
5. Glycated haemoglobin
6. What are bile acids and bile pigments. Add a note on tests done to detect bile salts and bile pigments in the urine
7. Cardiac biomarkers
8. Polyunsaturated fatty acids (PUFAs)

**QP Code: 104177**

**SECTION B – Microbiology**

**Marks: 50**

**Essay:**

**(15)**

1. Enlist the sexually transmitted diseases. Describe in detail the morphology, pathogenesis and lab diagnosis of HIV

**Short notes:**

**(7x5=35)**

2. Type III hypersensitivity
3. Laboratory diagnosis of pulmonary tuberculosis
4. Enzyme – linked immunosorbent assay
5. Moist heat methods of sterilisation
6. Antibiotic sensitivity testing methods
7. C-reactive protein
8. Serological assays for monoclonal gammopathies