

**THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY**

**(DCP 0524)**

**MAY 2024**

**Sub. Code: 4006**

**DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION**

**PAPER III – CLINICAL PATHOLOGY, CLINICAL BIOCHEMISTRY  
AND BLOOD BANKING**

***Q.P .Code: 344006***

**Time: Three Hours**

**Maximum: 100 Marks**

**(ANSWER SECTION A & B SEPARATELY)**

**SECTION - A**

**(CLINICAL PATHOLOGY AND BLOOD BANKING)**

**I. Elaborate on:**

**(1 x 15 = 15)**

1. Discuss in detail urine sediment examination and write on automation in urine analysis.

**II. Write notes on:**

**(5 x 7 = 35)**

1. Leukemoid reaction.
2. CSF findings in different types of meningitis.
3. L J chart.
4. Absolute Eosinophil count.
5. Pretransfusion compatibility testing.

**SECTION - B**

**(CLINICAL BIOCHEMISTRY)**

**I. Elaborate on:**

**(1 x 15 = 15)**

1. Describe in detail about the regulation of blood sugar in our body. Add a note on oral glucose tolerance test and its interpretation.

**II. Write notes on:**

**(5 x 7 = 35)**

1. Cryoprecipitate.
2. Hyperbilirubinemia.
3. Homocystinuria.
4. Thyroid function tests.
5. PUFA and their significance.

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**THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY**

**(DCP 1224)**

**DECEMBER 2024  
(OCTOBER 2024 EXAM SESSION)**

**Sub. Code: 4006**

**DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION**

**PAPER III – CLINICAL PATHOLOGY, CLINICAL BIOCHEMISTRY  
AND BLOOD BANKING**

*Q. P. Code: 344006*

**Time: Three Hours**

**Maximum: 100 Marks**

**(ANSWER SECTION A & B SEPARATELY)**

**SECTION - A**

**(CLINICAL PATHOLOGY AND BLOOD BANKING)**

**I. Elaborate on:** **(1 x 15 = 15)**

1. Name the blood components. Discuss the preparation, storage and indications for use of blood components.

**II. Write notes on:** **(5 x 7 = 35)**

1. Prothrombin time.
2. RBC indices in health and disease.
3. Pre transfusion tests.
4. Cytospin.
5. CSF analysis.

**SECTION - B**

**(CLINICAL BIOCHEMISTRY)**

**I. Elaborate on:** **(1 x 15 = 15)**

1. What is the reference range for serum calcium level? Write in detail about the homeostatic mechanisms involved in maintaining the normal calcium level. Add a note on its deficiency disorders.

**II. Write notes on:** **(5 x 7 = 35)**

1. Lipoproteins.
2. Diabetic ketoacidosis.
3. Serum protein electrophoresis.
4. Arterial blood gas analysis.
5. Prenatal screening tests.

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**THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY**

**(DCP 1025]**

**OCTOBER 2025**

**Sub. Code: 4006**

**DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION**

**PAPER III – CLINICAL PATHOLOGY, CLINICAL BIOCHEMISTRY  
AND BLOOD BANKING**

*Q. P. Code: 344006*

**Time: Three Hours**

**Maximum: 100 Marks**

**(ANSWER SECTION A & B SEPARATELY)**

**SECTION - A**

**(CLINICAL PATHOLOGY AND BLOOD BANKING)**

**I. Elaborate on:** **(1 x 15 = 15)**

1. Write on Automation and Internal and External Quality Control in Clinical Pathology laboratory.

**II. Write notes on:** **(5 x 7 = 35)**

1. Red cell indices and their applications.
2. Semen analysis.
3. Blood components and their uses.
4. Microalbuminuria.
5. Reticulin stain in bone marrow study.

**SECTION - B**

**(CLINICAL BIOCHEMISTRY)**

**I. Elaborate on:** **(1 x 15 = 15)**

1. Write in detail about the mechanism involved in regulating calcium homeostasis in our body with a note on its deficiency disorders.

**II. Write notes on:** **(5 x 7 = 35)**

1. Hemoparasites.
2. Hyperuricemia.
3. Lipoproteins.
4. Metabolism of iron in human body.
5. Galactosemia.

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