

**MANIPAL ACADEMY OF HIGHER EDUCATION****PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2018****SUBJECT: PAPER I: GENERAL PATHOLOGY INCLUDING BASIC MICROBIOLOGY**

Monday, April 02, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✗ **Answer ALL the questions.**
- ✗ **Illustrate your answers with diagrams, flow charts, tables etc. wherever appropriate.**
- ✗ **Write sections A and B in separate answer booklets.**

**SECTION - A: GENERAL PATHOLOGY (50 MARKS)**

1. Discuss immunological tolerance. Describe the mechanisms of autoimmunity and general features of autoimmune diseases.  
(5+5+5 = 15 marks)
2. **Write short notes on:**
  - 2A. Paraneoplastic syndromes
  - 2B. Stem cells
  - 2C. Klinefelter syndrome
  - 2D. Fate of thrombus with a note on antiphospholipid syndrome
  - 2E. Phagocytosis(7 marks × 5 = 35 marks)

**SECTION - B: BASIC MICROBIOLOGY (50 MARKS)**

3. Describe the pathogenesis and laboratory diagnosis of Enteric Fever.  
(7+8 = 15 marks)
4. **Write Short Notes on:**
  - 4A. Immunofluorescence
  - 4B. Intestinal amoebiasis
  - 4C. Opportunistic fungal infections
  - 4D. Laboratory diagnosis of Hepatitis B infection
  - 4E. Antimicrobial susceptibility testing by disc diffusion method(7 marks × 5 = 35 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION**  
**PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2018**  
**SUBJECT: PAPER II: SYSTEMIC PATHOLOGY AND CYTOLOGY**

Tuesday, April 03, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **All questions are compulsory.**

✍ **Draw labeled diagrams wherever appropriate.**

✍ **Essay:**

1. Classify testicular tumors. Discuss the predisposing factors, pathogenesis and morphology of seminoma.

(3+2+3+7 = 15 marks)

2. Discuss the role of sputum cytology in the diagnosis of pulmonary diseases.

(15 marks)

3. **Answer briefly:**

3A. Causes and morphology of bronchiectasis

3B. Types of urinary stones

3C. Morphology of phyllodes tumor

3D. Differences in the morphology of Crohn disease and intestinal tuberculosis

3E. Lab diagnosis of myocardial infarction

3F. Features and causes of nephritic syndrome

3G. Morphology of basal cell carcinoma

3H. Role of immunohistochemistry in breast carcinoma

3I. Cytology of Hashimoto thyroiditis

3J. Papanicolaou stain

(7 marks × 10 = 70 marks)



**MANIPAL ACADEMY OF HIGHER EDUCATION****PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2018****SUBJECT: PAPER III: HAEMATOLOGY, CLINICAL PATHOLOGY AND CLINICAL BIOCHEMISTRY**

Wednesday, April 04, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Draw labeled diagrams wherever appropriate.**

✍ **Essay:**

1. Discuss the hematologic manifestations of HIV.

(15 marks)

2. Explain how thyroid hormone is synthesized. Add a note on various tests available to evaluate thyroid function.

(15 marks)

3. **Write short notes on:**

3A. Neonatal thrombocytopenia

3B. Paroxysmal nocturnal hemoglobinuria

3C. Glucose tolerance test and its interpretation

3D. Automation in urine examination

3E. Plasmapheresis

3F. Chronic lymphocytic leukemia

3G. Principle and applications of FISH

3H. Etiopathogenesis of aplastic anemia

3I. Monoclonal gammopathy

3J. Lab diagnosis of von Willebrand disease

(7 marks × 10 = 70 marks)

