

Reg. No.

MANIPAL UNIVERSITY

PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2017

SUBJECT: PAPER I: GENERAL PATHOLOGY INCLUDING BASIC MICROBIOLOGY

Monday, April 03, 2017

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ Answer ALL the questions.
- ✍ Draw labeled diagrams wherever appropriate.
- ✍ Write sections A and B in separate answer booklets.

SECTION - A: GENERAL PATHOLOGY (50 MARKS)

1. Discuss the pathways of spread of malignant tumors. Add a note on the metastatic cascade.
(6+9 = 15 marks)
2. Answer briefly:
 - 2A. Type III hypersensitivity
 - 2B. Physical and chemical nature of amyloid
 - 2C. Klinefelter syndrome
 - 2D. Role of complement in inflammation
 - 2E. Definition and pathogenesis of thrombus formation(7 marks × 5 = 35 marks)

SECTION - B: BASIC MICROBIOLOGY (50 MARKS)

3. Describe the pathogenesis and laboratory diagnosis of cholera.
(7+8 = 15 marks)
4. Answer briefly:
 - 4A. Trichomonas vaginalis
 - 4B. Varicella Zoster virus
 - 4C. Laboratory diagnosis of candidiasis
 - 4D. Role of PCR in the diagnosis of microbial diseases
 - 4E. Chemical sterilization(7 marks × 5 = 35 marks)



MANIPAL UNIVERSITY**PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2017****SUBJECT: PAPER II: SYSTEMIC PATHOLOGY AND CYTOLOGY**

Tuesday, April 04, 2017

Max. Marks: 100

Time: 14:00 – 17:00 Hrs.

- ✍ All questions are compulsory.
✍ Illustrate your answers with diagrams, flow charts, tables etc. wherever appropriate.

✍ **Essay:**

1. Discuss the role of immunofluorescence in Crescentic Glomerulonephritis. (15 marks)

2. Discuss the pitfalls in the diagnosis of Warthin tumor on cytology. (15 marks)

3. **Write short notes on the following:**

3A. Gastrointestinal Stromal Tumor

3B. Merkel Cell Carcinoma

3C. Gleason Scoring system

3D. Differential diagnosis of vegetations in the heart

3E. Role of cytokeratins in diagnosis of malignant tumors

3F. Brenner tumor of the ovary

3G. Histoid Leprosy

3H. Benign cartilage producing tumors of the bone

3I. Thin Prep

3J. Role of Fine needle Aspiration Cytology in benign breast disease

(7 marks × 10 = 70 marks)



MANIPAL UNIVERSITY**PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2017****SUBJECT: PAPER III: HAEMATOLOGY, CLINICAL PATHOLOGY AND CLINICAL BIOCHEMISTRY**

Wednesday, April 05, 2017

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ **Answer ALL the questions.**

✍ **Draw labeled diagrams wherever appropriate.**

✍ **Essay:**

1. Discuss the pathogenesis and laboratory diagnosis of anemia of chronic disease.
(7+8 = 15 marks)

2. Classify jaundice. Describe the investigations to differentiate types of jaundice.
(4+11 = 15 marks)

3. **Answer briefly:**
 - 3A. Hemophilia
 - 3B. Estimation and significance of packed cell volume
 - 3C. Acute promyelocytic leukemia
 - 3D. Levey – Jennings Chart
 - 3E. Philadelphia chromosome
 - 3F. Types, principles and applications of Coombs test
 - 3G. Hemoglobin electrophoresis
 - 3H. Casts in urine
 - 3I. International normalized ratio
 - 3J. Laboratory investigations in sickle cell anemia

(7 marks × 10 = 70 marks)

