

MANIPAL UNIVERSITY

PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2014

SUBJECT: PAPER I: GENERAL PATHOLOGY INCLUDING BASIC MICROBIOLOGY

Tuesday, April 01, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

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

SECTION- A: GENERAL PATHOLOGY (50 marks)

1. Describe the role of free radicals in cell injury. (16 marks)
2. Describe the pathogenesis of septic shock. (16 marks)
3. **Answer briefly:**
 - 3A. Vascular endothelial growth factor.
 - 3B. Chronic rejection of kidney allograft.
 - 3C. Retinoblastoma gene.(6×3 = 18 marks)

PART – B : BASIC MICROBIOLOGY (50 marks)

4. Enumerate bacteria causing acute pyogenic meningitis. Discuss the laboratory work up for diagnosis of acute pyogenic meningitis. (2+14 = 16 marks)
5. Discuss the pathogenesis and laboratory diagnosis of hepatitis B virus infection. (8+8 = 16 marks)
6. **Write short notes on the following:**
 - 6A. Delayed hypersensitivity reaction.
 - 6B. Blood culture – Indications, brief method and interpretation.
 - 6C. Antimicrobial susceptibility testing.(6×3 = 18 marks)



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SUBJECT: PAPER II: SYSTEMIC PATHOLOGY AND CYTOLOGY

Wednesday, April 02, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

- ✍ Answer ALL the questions.
✍ Draw labeled diagrams wherever appropriate.

1. Discuss cystic lesions of the kidney. Health Sciences Library (16 marks)
2. Discuss the pathogenesis of atherosclerosis. (16 marks)
3. Write briefly:
- 3A. Kaposi sarcoma
3B. Barrett esophagus
3C. Solitary fibrous tumor (6×3 = 18 marks)
4. Discuss the molecular model for the evolution of colorectal cancer. (16 marks)
5. Discuss the various cytomorphological features of salivary gland lesions. (16 marks)
6. Write briefly:
- 6A. Sample adequacy assessment in cervical cytology.
6B. Radiation associated cytological changes in the female genital tract.
6C. Automation in cytology. (6×3 = 18 marks)



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PG DIPLOMA IN CLINICAL PATHOLOGY (DCP) EXAMINATION – APRIL 2014

SUBJECT: PAPER III: HAEMATOLOGY, CLINICAL PATHOLOGY AND
CLINICAL BIOCHEMISTRY

Thursday, April 03, 2014

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL the questions.

✍ Draw labeled diagrams wherever appropriate.

Health Sciences Library

1. Discuss normal iron metabolism. Enumerate the stages and lab diagnosis of Iron deficiency anemia.
(16 marks)
2. Discuss the methods of diagnosis of Malaria. Add a note on the advantages and disadvantages of each method.
(16 marks)
3. Answer briefly:
 - 3A. Lab diagnosis of Hemophilia A
 - 3B. CSF in health and disease
 - 3C. Bence Jones protein(6×3 = 18 marks)
4. Explain in detail the biochemical evaluation of renal function.
(16 marks)
5. Discuss the relevance of red cell indices including RDW in evaluating a patient with anemia.
(16 marks)
6. Answer briefly:
 - 6A. Platelet transfusion
 - 6B. Ion selective electrodes
 - 6C. Microangiopathic hemolytic anemia(6×3 = 18 marks)

