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MANIPAL UNIVERSITY

SECOND YEAR B.P.T./B.O.T./B.Sc. R.T./ B.Sc. C.V.T./ B.Sc. R.R.T. & D.T/ FOURTH SEMESTER B. PFT DEGREE EXAMINATION – JUNE 2016

SUBJECT: PATHOLOGY

(2010 REGULATION/2011 BATCH/2010 SCHEME/2011 SCHEME/BDT 201/CBS-PFT 204)

Wednesday, June 15, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ Answer ALL questions.

✍ Illustrate your answers with diagrams wherever necessary.

1. Define osteomyelitis. Mention the etiology and discuss the morphology of bone osteomyelitis.

(1+2+5 = 8 marks)

2. Define neoplasia. Give four differences between a benign and a malignant tumour.

(3+4 = 7 marks)

3. Write short notes on:

3A. Granuloma

3B. Metaplasia

3C. Types of embolism

3D. Morphology of lepromatous leprosy

3E. Etiology of gastric ulcer

(5 marks × 5 = 25 marks)



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MANIPAL UNIVERSITY

SECOND YEAR BPT/BOT/B.Sc. RT/B.Sc. CVT/B.Sc. RRT & DT/ FOURTH SEMESTER B. PFT DEGREE EXAMINATION – JUNE 2016

SUBJECT: MICROBIOLOGY

(COMMON FOR 2010 REGULATION/2011 BATCH/2010 SCHEME/2011 SCHEME/BDT 202/PFT 206)

Friday, June 17, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

 **Draw Diagrams wherever appropriate.**

1. Classify immunity. Discuss the mechanism of innate immunity.
(2+5 = 7 marks)

2. Discuss the investigation of nosocomial infections. State the importance of MRSA in nosocomial infections.
(6+2 = 8 marks)

3. **Write short notes on:**
 - 3A. Laboratory diagnosis of tuberculosis
 - 3B. Pathogenesis of tetanus
 - 3C. Laboratory diagnosis of streptococcal skin infection
 - 3D. Laboratory diagnosis of urinary tract infections
 - 3E. Constituents and significance of cell mediated immunity(5 marks × 5 = 25 marks)



MANIPAL UNIVERSITY
SECOND YEAR B.P.T./B.O.T./B.Sc. M.I.T./B.Sc. C.V.T./B.Sc. R.R.T. & D.T.
DEGREE EXAMINATION – JUNE 2016

SUBJECT: PHARMACOLOGY
(COMMON FOR 2010 REGULATION/2011 BATCH/2012 SCHEME/2011 SCHEME/BDT 203)

Monday, June 20, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

Answer the following questions:

- 1A. Mention two classes of anti-anginal drugs and explain the mechanism of action of any one of them.
- 1B. Enumerate two aminoglycosides and list their four therapeutic uses.
- 1C. List two first line anti-tubercular drugs and explain the mechanism of action of any one of them.
- 1D. List three advantages each of oral and intravenous routes of drug administration.

(3 marks \times 4 = 12 marks)

2. Mention two examples of the following groups of drugs and mention two uses of any one of them.

- 2A. β -lactam antibiotics
- 2B. Selective β_2 - agonists
- 2C. Proton pump inhibitors
- 2D. Angiotensin converting enzyme inhibitors
- 2E. Statins

(2 marks \times 5 = 10 marks)

- 3A. Explain the pharmacological basis for combining levodopa with carbidopa.
- 3B. List two second generation antihistaminics and mention their two advantages over first generation antihistaminics.
- 3C. Enumerate two oral iron preparations and list their two adverse effects.
- 3D. Mention one each of oral and parenteral anticoagulants and list two therapeutic uses of any one of them.
- 3E. List four differences between aspirin and paracetamol.

(2 marks \times 5 = 10 marks)

4. List two drugs used in the following conditions:

- 4A. Malaria
- 4B. HIV
- 4C. Cancer
- 4D. Type II diabetes mellitus
- 4E. Epilepsy
- 4F. Rheumatoid arthritis
- 4G. Congestive heart failure
- 4H. Constipation

(1 mark \times 8 = 8 marks)



MANIPAL UNIVERSITY**SECOND YEAR B.Sc. RRT & DT DEGREE EXAMINATION – JUNE 2016****SUBJECT: BDT 204 – RENAL DISEASE, PRINCIPLES OF RENAL REPLACEMENT THERAPY & WATER TREATMENT PLANT**

Wednesday, June 22, 2016

Time: 10.00-13.00 Hrs.

Max. Marks: 80

1. Long essay questions.

- 1A. Write about the complications during Hemodialysis treatment and their management.
- 1B. Classify nutrients. Describe the properties of carbohydrates.
- 1C. Discuss the chronic peritoneal dialysis regimens.

(10 marks × 3 = 30 marks)

2. Short essay questions.

- 2A. Discuss the mineral bone disorder of chronic kidney disease.
- 2B. What you mean by extracorporeal blood circuit? Brief the parts and their functions.
- 2C. Discuss the various white blood cell (WBC) cross match techniques.
- 2D. Discuss the complications of end stage renal disease.
- 2E. Discuss hollow fiber dialyzer structure and function.
- 2F. What is dialyser reuse? Explain the sterilization/disinfection steps.

(5 marks × 6 = 30 marks)

3. Short notes questions.

- 3A. Define biocompatibility.
- 3B. Name four side effects of heparin.
- 3C. What is heparin induced thrombocytopenia?
- 3D. What is a balanced diet?
- 3E. Which is the best vascular access? Why?
- 3F. What are the sources of protein in the diet?
- 3G. What is the role of carbon filters in water treatment for hemodialysis?
- 3H. What are the technical requirements for doing high flux dialysis?
- 3I. Name two immediate complications of central vein catheterization.
- 3J. How is intradialytic hypotension managed?

(2 marks × 10 = 20 marks)

