Exam Date & Time: 11-Jul-2019 (10:00 AM - 01:00 PM)



### MANIPAL ACADEMY OF HIGHER EDUCATION

#### SECOND YEAR PHARM D. DEGREE EXAMINATION - JULY 2019 SUBJECT: PPR 2.1T: PATHOPHYSIOLOGY (2014 - REGULATIONS) Thursday, July 11, 2019 (10.00 - 13.00 Hrs.)

Answer ALL questions.

Marks: 70 Duration: 180 mins. Long Answer Questions: 1) Discuss the etiology and pathogenesis of congestive heart failure. (10)2) Explain the TNM classification of malignant tumor and discuss the factors affecting growth of (10)malignant tumor. 3) Classify hypersensitive reactions and explain any two in detail with examples. (10)4) **Short Answer Questions** 4A) Discuss the various mechanisms responsible for increased vascular permeability during (5)inflammation. 4B) Describe the etiology of intrinsic renal damage (failure). (5)4C) Discuss the various types of glycogen storage disease. (5)4D) Discuss the pathophysiology of asthma. (5)4E) Discuss criteria for manic episode as per diagnostic and statistical manual of mental disorder (DSM-(5)4F) Enlist the difference between tuberculoid and lepromatous leprosy. (5)Give Reasons for the Following: 5) 5A) Interferon- y plays important role in the formation of granuloma. (2)5B) Xenografts always undergo hyper-acute rejections. (2)5C) Diabetes ketoacidosis is a complication of type-1 diabetes mellitus. (2)5D) Relapse and reinfection urinary tract infection is different from each other. (2)5E) Hand hygiene is very important for prevention of hepatitis infection. (2)

----End----

Exam Date & Time: 13-Jul-2019 (10:00 AM - 01:00 PM)



### MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND YEAR PHARM D. DEGREE EXAMINATION - JULY 2019 SUBJECT: PBT 2.2T: PHARMACEUTICAL MICROBIOLOGY (REVISED REGULATIONS 2014) Saturday, July 13, 2019 (10.00 - 13.00 Hrs.)

Answer ALL questions.

Marks: 70

Long Answer Questions: Define staining and classify staining techniques. Briefly outline the principle and procedure for Gram's (10) staining. Draw a neat labelled diagram of a Hot air oven and describe its design. 2) (10)3) Define and classify immunity. Explain the structure, classification and functions of immunoglobulins. (10)4) Short Answer Questions: 4A) With a neat labelled diagram, explain the structure of bacteriophage. (5)Enlist the methods of quantitative measurement of bacterial growth and explain any one method used (5) 4B) to determine total count of bacteria. 4C) Enlist the factors affecting the course of disinfection process and explain any two. (5)4D) Explain the principle involved in sandwich ELISA and enlist its applications. (5)4E) Briefly outline the protocol to carry out microbiological assay of antibiotics by tube dilution method. (5)Write the causative organisms, mode of transmission, symptoms and treatment for typhoid. 4F) (5)Give reasons for the following: Resolving power is the limitation for increasing the magnification power of a light microscope. 5A) (2)5B) Bacteria reproduce asexually. Still they can exchange genetic material. (2)5C) Fluid thioglycolate medium is not suitable for growth of molds. (2)Turbidimetric measurement of bacterial growth is not suitable for plotting normal bacterial growth 5D) (2)curve. 5E) Tyndallisation is not suitable to sterilise injections containing thermo labile medicaments. (2)

Duration: 180 mins.

Exam Date & Time: 18-Jul-2019 (10:00 AM - 01:00 PM)



### MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND YEAR PHARM D. DEGREE EXAMINATION - JULY 2019 SUBJECT: PHA 2.4T: PHARMACOLOGY - I (REVISED REGULATIONS 2014) Thursday, July 18, 2019 (10.00 - 13.00 Hrs.)

Answer ALL questions.

Marks: 70

Draw a labeled diagrams wherever necessary.

Long answer questions: Classify adrenergic drugs based on their therapeutic applications. Describe the pharmacological 1) (10)actions of adrenaline on blood vessels and heart. Explain why noradrenaline does not cause tachvcardia. (3+4+3 = 10 marks)2) Describe, with suitable examples, the processes of biotransformation of drugs. Explain the (10)consequences of enzyme inhibition and induction. (6+4 = 10 marks)3) Central dopaminergic pathways are involved in the therapeutic and toxic effects of antipsychotic (10)drugs. Describe the mechanism of action of lithium. Mention its two toxicities. (6+3+1 = 10 marks)4) **Short Answer Questions:** 4A) Mechanism of action of nitroglycerin and adverse effects. (6)Mechanism of action of insulin. Write briefly on insulin preparations. 4B) (6)Why are local anesthetics formulated as salts instead of as free bases? How do they act? 4C) (6)4D) Therapeutic and toxic effects of digitalis, the mechanisms involved (6)4E) Describe the physiology and pathophysiology of eicosanoids. (6)5) Give reasons: 5A) Oral contraceptives fail if given concurrently to patients receiving griseofulvin. (2)A person taking metronidazole should be advised against drinking alcohol. 5B) (2)5C) Finasteride is used in benign prostatic hypertrophy. (2)5D) Oxime administration should not be delayed in organophosphorus poisoning. (2)5E) Bromhexine is prescribed for people having cough with thick mucosal plug. (2)

Duration: 180 mins.

Exam Date & Time: 22-Jul-2019 (10:00 AM - 01:00 PM)



### MANIPAL ACADEMY OF HIGHER EDUCATION

SECOND YEAR PHARM D. DEGREE EXAMINATION - JULY 2019 SUBJECT: PPR 2.5T: COMMUNITY PHARMACY (REVISED REGULATIONS 2014) Monday, July 22, 2019 (10.00 - 13.00 Hrs.)

Answer ALL questions.

Marks: 70

Long Answer Questions: (10)Explain the skills required for pharmacist to provide effective pharmaceutical care. 1) Describe the code of ethics for the pharmacists in relationship with patients, health professionals and (10) 2) society. Define Inventory control. Explain any two methods of inventory control in community pharmacy. (10)3) 4) Short Answer Questions: Explain maintenance of various registers in community pharmacy. (5)4A) (5)Explain the role of community pharmacist in family planning. 4B) (5)Discuss the clinical presentation and prevention of Leprosy. 4C) (5)Explain FDA criteria for over the counter (OTC) medications. 4D) Discuss WHO complementary indicators for promoting rational drug use. (5)4E) Describe pharmacokinetic drug interactions with examples. (5)4F) 5) Give reason for the following: (2)Beta blockers and sympathomimetic drugs containing anti-cold preparations should not be 5A) administered together. (2)Essential drug concept is important for ensuring drug safety. 5B) (2)Physical limitation can affect patient compliance. 5C) Long term use of potassium containing laxatives is not advisable. (2)5D) Viral conjunctivitis does not require antibiotic therapy. (2)5E)

----End-----

Duration: 180 mins.