



UNIVERSITY OF THE PUNJAB

Third Prof. A/2015

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II
PAPER: 2

TIME ALLOWED: 3 hrs.
MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

- Q1. What is monoamine theory of depression. Classify antidepressants. Describe mechanism of action, pharmacological properties, unwanted effects and interactions of tricyclic antidepressants. 20
- Q2. (a) Describe mechanism of action, antibacterial spectrum and adverse effects of macrolides
(b) Describe bacterial mechanisms of antibiotic resistance with examples 20
- Q3. (a) What is diabetes mellitus. Explain types of diabetes mellitus.
(b) Give detailed account on sulphonylurea. 20
- Q4. Illustrate diagrammatically cell-cycle specificity of antineoplastic drug classes. Discuss mechanism of action, therapeutic uses and adverse effects of Doxorubicin. 20
- Q5. Classify antifungal drugs. Discuss the mechanism of action and resistance of Amphotericin B. 20
- Q6. Discuss various principles of treatment of poisoning. Explain salicylates poisoning. 20
- Q7. Write notes on the following 20
- (a) Diazepam
(b) Digitalis poisonings



UNIVERSITY OF THE PUNJAB

Third Prof. A/2016

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II
PAPER: 2

TIME ALLOWED: 3 hrs.
MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

1. Classify **Narcotics Analgesics**. Discuss the Pharmacology of **Morphine**. (20)
2. Classify **General Anesthetic**? Explain in Detail the Pharmacokinetics and pharmacodynamics of **Thiopental & Nitrous Oxide**. (20)
3. Classify **Anxiolytics**. Describe the pharmacological action, clinical uses and adverse effects of **Benzodiazepines**. (20)
4. Classify **Alkylating agents**. Discuss the mechanism of action, therapeutic uses and adverse effects of **Cyclophosphamide & Doxorubicin**. (20)
5. Classify **Antiretroviral Drugs**. Discuss the mechanism (s) of action and resistance of **Zidovudine & Amantadine**. (20)
6. Classify **β -Lactum Antibiotics**. Discuss the mechanism of action and therapeutic uses of **Cephalosporins**? (20)
7. Define **POISON**. Discuss various principles of treatment of Poisoning. Explain **ORGANOPHOSPHOROUS COMPOUND**. (20)



UNIVERSITY OF THE PUNJAB

Third Prof. 2nd A/2016

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II
PAPER: 2

TIME ALLOWED: 3 hrs.
MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

1. Classify **NSAIDs**. Discuss the Mechanism of action, Pharmacological and untoward effects of **Aspirin**. (20)
2. Classify **Antidepressant** Drugs. Discuss the Pharmacology of **SSRIs** and **MAOIs**. (20)
3. Describe the Life cycle of **Malarial Parasite Plasmodium falciparum**. Discuss the Mechanism of action, Pharmacokinetic and Anti-malarial spectrum of **Chloroquine & Primaquine**. (20)
4. a) What are different classes of natural compounds used as **Cytotoxic agents**? (10)
b) Discuss the Mechanism of action of **Paclitaxel (Taxol) & Cisplatin**. (10)
5. Discuss the Mechanism of action, Antibacterial spectrum and contraindication of **Macrolides**. (20)
6. a) Classify **Antifungal** drugs. (08)
b) Discuss the mechanism of action and adverse effects of **Amphotericin B & Griseofulvin**. (12)
7. Classify **Antiviral** drugs. Discuss the Mechanism of action and therapeutic uses of **Acyclovir & Interferons**. (20)



UNIVERSITY OF THE PUNJAB

Third Prof: Annual - 2017
Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II (Old & New Course) TIME ALLOWED: 3 hrs.
PAPER: 2 MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

- Q1. a) Classify antifungal drugs. (10)
b) Discuss the mechanism of action and adverse effects of Azoles. (10)
- Q2. Describe the life cycle of Plasmodium and discuss the mechanism of action, pharmacokinetic and antimalarial spectrum of Artemesinin. (20)
- Q3. a) What are the different classes of natural compounds used as cytotoxic agents? (10)
b) Discuss the mechanism of action and adverse effects of Vinca alkaloids. (10)
- Q4. Discuss the mechanism of action and resistance of Penicillins. (20)
- Q5. Describe different types of epileptic seizures. Write down the mechanism of action, pharmacokinetic, clinical uses and adverse effects of phenytoin. (20)
- Q6. Classify antiviral drugs. Discuss the mechanism of action and therapeutic uses of amantadine (20)
- Q7. a) Discuss the treatment strategies of Acetaminophen-induced toxicities. (10)
b) Discuss the pharmacology of levodopa. (10)



UNIVERSITY OF THE PUNJAB

Third Prof: 2nd Annual - 2017

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II (Old & New Course) TIME ALLOWED: 3 hrs.
PAPER: 2 MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

- Q1. Classify antimetabolite agents. Discuss the mechanism of action, therapeutic uses and adverse effects of methotrexate. (20)
- Q2. Classify antidepressant drugs. Discuss the pharmacological actions, and adverse effects of tricyclic antidepressants. (20)
- Q3. Classify general anesthetics? Explain in detail the Pharmacokinetics and pharmacodynamics of thiopental (20)
- Q4. Classify β -lactam antibiotics. Discuss the mechanism of action, clinical uses and adverse effects of cephalosporins. (20)
- Q5. Classify antifungal drugs. Discuss the mechanism of action, clinical uses and adverse effects of amphotericin B. (20)
- Q6. Classify antiretroviral drugs. Discuss the mechanism(s) of action and resistance of Zidovudine (20)
- Q7. Classify NSAIDs. Describe mechanism of action, pharmacokinetics and unwanted effect of Aspirin. (20)



UNIVERSITY OF THE PUNJAB

Third Prof: Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II (New Course)
PAPER: 2 (Part – II)

TIME ALLOWED: 2 Hrs. & 30 min.
MAX. MARKS: 80

Attempt this Paper on Separate Answer Sheet provided.

Attempt any 4 questions. Each question carry equal marks.

Q 2. Classify antimetabolites. Discuss the mechanism of action, therapeutic uses and adverse effects of methotrexate. (20)

Q 3. Classify antifungal drugs. Discuss the mechanism(s) of action and resistance of Azoles. (20)

Q 4. a) Classify antibiotics which inhibit Protein and Cell wall synthesis. (10)

b) Discuss the mechanism of action and adverse effects of Aminoglycosides? (10)

Q 5. Classify Anxiolytics. Describe the pharmacological actions, clinical uses and adverse effects of Benzodiazepines. (20)

Q 6. Classify general anesthetics? Explain in detail the pharmacokinetics and pharmacodynamics of Thiopental? (20)

Q 7 a) Discuss the mechanism of action and adverse effects of Metronidazole. (10)

b) Describe the mechanism(s) of action, clinical uses and adverse effects of Albendazole. (10)



UNIVERSITY OF THE PUNJAB

Roll No.

Third Prof: Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Subject: Pharmacology & Therapeutics-II (New Course)
PAPER: 2 Part – I (Compulsory)

TIME ALLOWED: 30 min.
MAX. MARKS: 20

Attempt this Paper on this Question Sheet only.

Please encircle the correct statement. Each MCQ carries 1 Mark. This Paper will be collected back after expiry of time limit mentioned above.

Q 1. MCQs

20

I. Regarding acyclovir, which of the following statements is correct?

- a) It acts to inhibit viral entry into cells
- b) It is a guanosine analogue
- c) It is commonly given in doses of 10-20 mg TDS
- d) It is used to treat CMV

II. Regarding amantadine, which of the following statements is correct?

- a) It potentiates dopaminergic function
- b) It is an antiviral drug
- c) It causes acute psychosis
- d) All of the above

III. Zidovudine is an analogue of

- a) Thymidine
- b) Uracil
- c) Guanosine
- d) Cytosine

IV. One of the following drugs binds with tubulin & arrest the cell cycle in metaphase

- a) Mechlorethamine
- b) Methotrexate
- c) Vincristine
- d) Chlorambucil

V. The drug used to treat Methotrexate toxicity is

- a) Mesna
- b) Folic acid
- c) Folinic acid
- d) Acetylcysteine

VI. One of the following drugs causes cardiotoxicity

- a) Paclitaxel
- b) Vinblastine
- c) Adriamycin
- d) Methotrexate

VII. Drug of Choice for CMV infection is

- a) Lamivudine
- b) Ganciclovir
- c) Acyclovir
- d) Abacavir

VIII. Use of metronidazole in hepatic encephalopathy is due to its ability to

- a) Inhibit the production of intestinal toxins
- b) Convert ammonia into urea
- c) Decrease intestinal absorption of ammonia
- d) Bind with serum ammonia

IX. Clofazimine is associated with the following features EXCEPT,

- a) Anti-inflammatory activity
- b) Skin discoloration
- c) Effective in multibacillary leprosy
- d) Major renal excretion

X. Indicate the local anesthetic agent which has a shorter duration of action

- a) Lidocaine
- b) Procaine
- c) Bupivacaine
- d) Ropivacaine

XI. The primary mechanism of action of local anesthetics is

- a) Activation of ligand-gated K^+ channels
- b) Blockade of voltage-gated Na^+ channels
- c) Stimulation of voltage-gated Na^+ channels
- d) Blockade of GABA-gated Cl^- channels

XII. Which drug inhibits the protein synthesis in bacteria

- a) Tetracyclines
- b) Penicillins
- c) Cephalosporins
- d) Monobactams

XIII. Resistance to Chloramphenicol is due to one of the following mechanisms

- a) Efflux of drug
- b) Production of transferases
- c) Inactivation by β lactamases
- d) Both a and c

XIV. One of the following is not Penicillinase susceptible

- a) Amoxicillin
- b) Penicillin G
- c) Piperacillin
- d) Cloxacillin

XV. Macrolides

- a) Have enhanced activity at acidic pH
- b) Have little activity against legionella
- c) Have half lives which increase in patients with anuria
- d) Induce cytochrome p450 enzymes

XVI. Which of the following opioid analgesics is a partial μ receptor agonist?

- a) Morphine
- b) Methadone
- c) Buprenorphine
- d) Sufentanyl

XVII. For which of the following conditions could aspirin be used prophylactically?

- a) Non cardiogenic pulmonary edema
- b) Peptic ulcers
- c) Thromboembolism
- d) Metabolic acidosis

XVIII. Indicate the psycho-stimulant, which is a methylxanthine derivative

- a) Caffeine
- b) Cocaine
- c) Amphetamine
- d) LSD

XIX. Intravenous Flumazenil

- a) Has intermediate onset and duration of action about 2 hours
- b) Acts rapidly but has a short half-life
- c) Has an effect lasting 3-5 hours
- d) Has duration of action longer than 6 hours

XX. Ivermectin exerts antihelminthic effect via

- a) Blockage of nicotinic receptors
- b) Inhibition of cholineesterase
- c) Inhibition of acetylcholine secretion
- d) Increased GABA transmission



UNIVERSITY OF THE PUNJAB

Third Prof: 2nd Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II (Old Course)
PAPER: 2

MAX. TIME: 3 Hrs.
MAX. MARKS: 100

NOTE: Attempt any FIVE questions. All questions carry equal marks.

- Q 1. Classify NSAIDs. Give mechanism of action, therapeutic uses and adverse effects of Asprin. (20)
- Q 2. a) Classify Anticancer drugs? (10)
b) Discuss the mechanism of action and clinical uses of Methotrexate. (10)
- Q 3. Classify Antiviral drugs. Discuss the mechanism of action and therapeutic uses of Acyclovir. (20)
- Q 4. a) Discuss the mechanism of action and untoward effects of Fluoxetine. (10)
b) Discuss the mechanism of action and clinical uses of Morphine. (10)
- Q 5. Classify β -lactam antibiotics. Discuss the mechanism of action, clinical uses and adverse effects of Penicillin G. (20)
- Q 6. a) What are General Anesthetics? Classify Inhalation and Intravenous Anesthetics. (10)
b) Discuss the pharmacology of Nitrous oxide. (10)
- Q 7. a) Describe the mechanism of action and adverse effects of Artemisinin. (10)
b) Describe the mechanism of action and adverse effects of Rifampicin. (10)



UNIVERSITY OF THE PUNJAB

Third Prof: 2nd Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No.

Subject: Pharmacology & Therapeutics-II (New Course)

PAPER: 2 Part – II

MAX. TIME: 2 Hrs. 30 Min.

MAX. MARKS: 80

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

NOTE: ATTEMPT ANY FOUR QUESTIONS. EACH QUESTION CARRIES EQUAL MARKS.

Q 2. a) What are different sub classes of Alkylating agents used as Anticancer drugs? (10)

b) Discuss the mechanism of action and clinical uses of Cyclophosphamide. (10)

Q 3. Classify Antiviral drugs. Discuss the mechanism of action and therapeutic uses of Acyclovir. (20)

Q 4. a) Discuss the mechanism of action and untoward effects of Amitriptyline. (10)

b) Discuss the mechanism of action and clinical uses of Morphine. (10)

Q 5. Classify β -lactam antibiotics. Discuss the mechanism of action, clinical uses and adverse effects of Penicillins. (20)

Q 6. a) What are General Anesthetics? Classify Inhalation and Intravenous Anesthetics. (10)

b) Discuss the pharmacology of Nitrous oxide. (10)

Q 7. a) Describe the mechanism of action and adverse effects of Artemisinin. (10)

b) Describe the mechanism of action and adverse effects of Rifampacin. (10)



UNIVERSITY OF THE PUNJAB

Third Prof: 2nd Annual – 2018

Examination: Doctor of Pharmacy (Pharm.D.)

Roll No. in Fig.

Roll No. in Words.

Subject: Pharmacology & Therapeutics-II (New Course)
PAPER: 2 Part – I (Compulsory)

MAX. TIME: 30 Min.
MAX. MARKS: 20

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Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the right answer cutting and overwriting is not allowed.

(20x1=20)

i. What are the two main targets currently used in anti-HIV therapy?

- a) Reverse transcriptase and protease
- b) Reverse transcriptase and integrase
- c) Protease and integrase
- d) The viral glycoproteins gp120 and gp41

ii. Regarding Zidovudine (AZT), which of the following statements is CORRECT?

- a) It has a similar mechanism of action to amantadine
- b) It is not used to treat retroviruses
- c) It has a short half life
- d) It blocks thymidine kinase

iii. Which of the following is Tyrosine Kinase Inhibitor?

- a) Infliximab
- b) Imatinib
- c) Acyclovir
- d) Idoxuridine

iv. One of the following drugs binds with tubulin & arrest the cell cycle in metaphase

- a) Paclitaxel
- b) Cyclophosphamide
- c) Methotrexate
- d) Busulfan

v. All are correctly paired except

- a) Cyclophosphamide-Cystitis
- b) Busulphan-Pulmonary fibrosis
- c) Paclitaxel-Neurotoxicity
- d) Vincristine-Bone marrow suppression

vi. Which enzyme combination is involved in Ergosterol biosynthesis?

- a) Lanosterol 14alpha demethylase and Squalene epoxidase
- b) Lanosterol epoxidase and Squalene 16alpha demethylase
- c) Lanosterol epoxidase and Squalene 14alpha demethylase
- d) Lanosterol 16alpha demethylase and Squalene epoxidase

vii. The mode of action of Polyenes involve

- a) Loss of membrane integrity and influx of Ca²⁺
- b) Inhibition of reproductive function
- c) Binds to Ergosterol d) Destruction of pore-like molecular aggregates

- viii. Prophylactic drug in meningococcal meningitis
- a) Penicillin
 - b) Ceftriaxone
 - c) Erythromycin
 - d) Rifampicin
- ix. Ceftriaxone is a
- a) First generation, oral antibiotic
 - b) Third generation, parenteral antibiotic
 - c) Second generation, oral antibiotic
 - d) Fourth generation, parenteral antibiotic
- x. Drug of choice for bacterial Vaginosis is
- a) Metronidazole
 - b) Ampicillin
 - c) Acyclovir
 - d) Fluconazole
- xi. Which drug inhibits the protein synthesis in bacteria
- a) Tetracyclines
 - b) Penicillins
 - c) Cephalosporins
 - d) Monobactams
- xii. Indicate the local anesthetic agent which has a shorter duration of action
- a) Lidocaine
 - b) Procaine
 - c) Bupivacaine
 - d) Ropivacaine
- xiii. The anesthetic, which is used intravenously
- a) Propofol
 - b) Halothane
 - c) Desflurane
 - d) Nitrous oxide

xiv. The inhaled anesthetic, which reduces arterial pressure and heart rate is

- a) Isoflurane
- b) Halothane
- c) Desflurane
- d) Nitrous oxide

xv. All of the following are undesirable effects of aspirin EXCEPT

- a) Gastritis with focal erosions
- b) Tolerance and physical addiction
- c) Bleeding due to a decrease of platelet aggregation
- d) Reversible renal insufficiency

xvi. Which of the following opioid analgesics is a partial μ receptor agonist?

- a) Morphine
- b) Methadone
- c) Buprenorphine
- d) Sufentanyl

xvii. All of the hypnotic drugs

- a) Increase the duration of REM sleep
- b) Decrease the duration of REM sleep
- c) Do not alter the duration of REM sleep
- d) Increase the duration of slow wave sleep

xviii. Indicate the psychostimulant, which is a methylxantine derivative

- a) Caffeine
- b) Cocaine
- c) Amphetamine
- d) LSD

xix. One of the following is also used for the prophylaxis of *Haemophilus influenzae* infection

- a) Isoniazid
- b) Rifampicin
- c) Pyrazinamide
- d) Ethambutol

xx. Clofazimine is associated with the following features EXCEPT

- a) Major renal excretion
- b) Anti-inflammatory activity
- c) Skin discolouration
- d) Effective in multibacillary leprosy



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Third Prof: Annual-2019

Subject: Pharmacology & Therapeutics-II (New Course)
Paper: 2 Part - I (Compulsory)

Time: 15 Min. Marks: 20

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

(20x1=20)

Q.1. Encircle the correct option.

i. All the following are metabolized to desmethyldiazepam except:

- a) Prazepam
- b) Diazepam
- c) Flurazepam
- d) Clorazepate

ii. Which benzodiazepine has the shortest half-life:

- a) Zaleplon
- b) Triazolam
- c) Zolpidem
- d) Eszopiclone

iii. Hypnotic dose of Estazolam is:

- a) 0.5 - 2 mg
- b) 2 - 4 mg
- c) 0.125 - 0.5 mg
- d) 2.5 - 10mg

iv. Benzodiazepines are clinically used for all the conditions except:

- a) Panic attacks
- b) Insomnia
- c) Seizure disorders
- d) Muscle relaxant

v. _____ is used for absence seizures:

- a) Vigabatrin
- b) Tiagabine
- c) Retigabine
- d) Ethosuximide

vi. Duration of action of Ketamine is:

- a) 5 - 10 min
- b) 10 - 20 min
- c) 15 - 30 min
- d) 60 - 120 min

vii. Which antiparkinsonian is a MAO-B inhibitor:

- a) Levodopa
- b) Selegiline
- c) Amantadine
- d) Orphenadrine

viii. Which antipsychotic drug has very low hypotensive action:

- a) Chlorpromazine
- b) Thiothixene
- c) Clozapine
- d) Fluphenazine

ix. What is the minimum effective therapeutic dose (mg) of Clozapine:

- a) 5
- b) 10
- c) 30
- d) 50

P.T.O.

- x. All the following cephalosporins are given intravenously except:
- a) Cefazolin
 - b) Cephalexin
 - c) Cefoxitin
 - d) Cefuroxime
- xi. Vancomycin is given in:
- a) Pneumonia
 - b) Urinary tract infection
 - c) Endocarditis
 - d) Soft tissue infections
- xii. All the following drugs bind to 50s ribosomal subunit except:
- a) Tetracycline
 - b) Erythromycin
 - c) Clindamycin
 - d) Linezolid
- xiii. Which statement is correct regarding Gentamycin:
- a) It causes reversible Nephrotoxicity
 - b) It causes reversible Ototoxicity
 - c) It causes irreversible Ototoxicity
 - d) It causes irreversible Nephrotoxicity
- xiv. Which antimycobacterial drug inhibits the synthesis of Mycolic acid:
- a) Rifampicin
 - b) Pyrazinamide
 - c) Isoniazid
 - d) Ethambutol
- xv. Which antifungal drug inhibits the conversion of Lanosterol to Ergosterol:
- a) Itraconazole
 - b) Terbinafine
 - c) Flucytosine
 - d) Amphotericin B
- xvi. All the following antifungal drugs are eliminated via the liver except:
- a) Ketoconazole
 - b) Itraconazole
 - c) Fluconazole
 - d) Voriconazole
- xvii. Which antifungal drug blocks fungal P450 enzymes:
- a) Flucytosine
 - b) Ketoconazole
 - c) Caspofungin
 - d) Terbinafine
- xviii. Recommended adult dosage of Entecavir for the treatment of chronic Hepatitis-B infection is:
- a) 100 mg qd orally
 - b) 200 mg qd orally
 - c) 300 mg qd orally
 - d) 500 or 1000 mg qd orally
- xix. One of the following cell cycle specific drug that acts on S phase of cell cycle:
- a) Paclitaxel
 - b) Cytarabine
 - c) Vincristine
 - d) Bleomycin
- xx. Which general anesthetic is given intravenously:
- a) Propofol
 - b) Halothane
 - c) Desflurane
 - d) Nitrous oxide



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Third Prof: Annual-2019

Roll No.

Subject: Pharmacology & Therapeutics-II (New Course)

Paper: 2 Part - II

Time: 2 Hrs. 45 Min. Marks: 80

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any *FOUR* questions. Each question carries equal marks.

- Q-2** a) Classify anticancer drugs. (10)
b) Discuss the mechanism of action and clinical uses of Vincristine. (10)
- Q-3** Classify Antiviral drugs. Discuss the mechanism of action and therapeutic uses of Interferons. (20)
- Q-4** a) Discuss the mechanism of action and untoward effects of Fluoxetine. (10)
b) Discuss the mechanism of action and adverse effects of Aspirin. (10)
- Q-5** Classify Cell wall synthesis inhibiting antibiotics. Discuss the mechanism of action, and adverse effects of Cephalosporins. (20)
- Q-6** a) What are General Anesthetics? Give the pharmacology of Halothane. (10)
b) Discuss the pharmacology of Cocaine. (10)
- Q-7** a) Describe the management of Arsenic intoxication. (10)
b) Describe the management of Morphine poisoning. (10)



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Third Prof: Annual-2019

Roll No.

Subject: Pharmacology & Therapeutics-II (Old Course)
Paper: 2

Time: 3 Hrs. Marks: 100

Note: Attempt any FIVE questions. Each question carries equal marks.

- Q-1 Write down the Pharmacology of Morphine. (20)
- Q-2 Classify antimetabolites. Discuss the mechanism of action, therapeutic uses and adverse effects of methotrexate. (20)
- Q-3 Classify antiviral drugs. Discuss the mechanism(s) of action and resistance of acyclovir. (20)
- Q-4 a) Discuss the mechanism of action and untoward effects of Amitriptyline. (10)
b) Discuss the mechanism of action and adverse effects of Aspirin. (10)
- Q-5 Classify Protein synthesis inhibiting antibiotics. Discuss the mechanism of action, clinical uses and adverse effects of Tetracyclines. (20)
- Q-6 a) What are General Anesthetics? Classify Inhalation and Intravenous Anesthetics. (10)
b) Discuss the pharmacology of Nitrous oxide. (10)
- Q-7 a) Describe the management of lead intoxication. (10)
b) Describe the management of digitalis poisoning. (10)



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Third Prof: Annual-2021

Roll No.

Subject: Pharmacology & Therapeutics-II (New Course)

Paper: 2 Part – II

Time: 2 Hrs. 30 Min. Marks: 80

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Note: Attempt any *FOUR* questions. Each question carries equal marks.

2	Classify cell wall synthesis inhibitors antibiotics. Describe mechanism of action, antimicrobial spectrum, therapeutic uses and adverse effects of Penicillin.	20
3	Write Short Note on: a) Vancomycin b) Azithromycin c) Ciprofloxacin d) Gentamicin	5x4= 20
4	Classify protein synthesis inhibitors antibiotics and discuss MOA spectrum of activity uses and adverse effect of Aminoglycosides.	20
5	Classify Anti-fungal drugs. Discuss Pharmacology of Amphotericin B and Flucytosine	20
6	Classify Anti-viral drugs. Write down mechanism of action of Oseltamivir, amantadine, lamivudine and adefovir	20
7	Define Toxicology. Discuss various factors influencing Toxicity. Explain Environmental & Occupational Toxicology.	20



UNIVERSITY OF THE PUNJAB

Doctor of Pharmacy (Pharm.D.) Third Prof: Annual-2021

Subject: Pharmacology & Therapeutics-II (New Course)

Paper: 2 Part – I (Compulsory)

Time: 30 Min. Marks: 20

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the correct option.

(20x1=20)

1. Dissociative anesthesia is produced by a) Ketamine b) Fentanyl + droperidol c) Propofol d) Both (a) and (b)	2. Which of the following antiviral is non-nucleoside reverse transcriptase inhibitor? a) Acyclovir b) Zidovudine c) Nevirapine d) Ribavirin
3. Flucytocin a) Anti-fungal drug b) Anti-viral drug c) Anti-cancer drug d) Anti angina drug	4. Which is the humanized monoclonal antibody used as antiviral agent against RSV virus: a) Amantadine b) Palivizumab c) Interferon alpha d) Lamivudine
5. Absorption of oral iron preparations can be facilitated by co-administration of a) Antacids b) Tetracyclines c) Phosphates d) Ascorbic acid	6. Interferones a) Interfere with ability of virus to infect the cell b) Frequently causes diarrhoea c) Inhibit bacterial cell wall d) Depresses the cough reflex
7. Tolerance of opioids can be documented except a) Constipation b) respiratory depressant c) Addiction d) All above	8. Amantadine a) Antiviral drug b) Anti fungal drug c) Anti bacterial drug d) Anti depressant drug
9. Which one of the COX isoforms is found in the brain? a) COX 3 b) COX 2 c) COX 1 d) IL-4	10. Which one of the following statements about fluconazole is most accurate? a) It is highly effective in treatment of aspergillosis b) It does not penetrate the blood – brain barrier c) Its oral bioavailability is less than that of ketoconazole d) It inhibits demethylation of lanosterol
11. The anesthetic, which is used intravenously is ----- a) Propofol b) Halothane c) Desflurane d) Nitrous oxide	12. Which of the following general anesthetics belongs to inhalants? a) Thiopental b) Desfluran c) Ketamine d) Propofol

<p>13. which of the following inhaled anesthetics can produce hepatic necrosis?</p> <p>a) Soveflurane b) Desflurane c) Halothane d) Nitrous oxide</p>	<p>14. Metronidazole is least likely to be effective in the treatment of</p> <p>a) Amebiasis b) Giardiasis c) Pneumocystosis d) Psudomembranous colitis</p>
<p>15. The antibiotic that prevents peptidoglycan synthesis by blocking the transport of peptidoglycan monomer is:</p> <p>a) Cephamycin b) Cephalosporin c) Bacitracin d) Vancomycin</p>	<p>16. Which of the following is not a protein synthesis inhibitor by binding to 30 S small ribosomal subunit?:</p> <p>a) Kanamycin b) Streptomycin c) Erythromycin d) Tetracycline</p>
<p>17. Which of the following statements about vancomycin is accurate?</p> <p>a) It is bacteriostatic b) It binds to PBPs c) It is not susceptible to penicillinase d) It has the advantage of oral bioavailability</p>	<p>18. This antibiotic binds to the D-ala residues preventing cross linking of cell wall strands by preventing the binding of cross linking enzyme. The antibiotic is:</p> <p>a) Erythromycin b) Vancomycin c) Cephalosporin d) Chloramphenicol</p>
<p>19. Drug of choice for Brucella infection is</p> <p>a) Tetracycline b) Gentamycin c) Ampicillin d) Sulfonamides</p>	<p>20. Chloramphenicol is the drug of choice in</p> <p>a) Staphylococcal infection b) Salmonella infection c) Viral infection d) Amoebic dysentery</p>