



Tanta University  
Faculty of Pharmacy  
Department of Pharmacology & Toxicology  
Examination for 5<sup>th</sup> Level Pharmacy Students

Course Title:

Final Exam  
Clinical Pharmacology

Course Code:  
PO906

DATE:

18/1/2020

Term: 1

Total Assessment Marks: 50

Time Allowed: 2 Hours

- This exam consists of pages numbered 1-7.

**For question I:**

- Select only ONE best answer for each question.
- Transfer your selection properly to this answer sheet.
- Answers outside this answer sheet will not be marked.
- Each question equals (0.5) mark for a total of (41.5) marks for (83) questions.

1	A	B	C	D	E	43	A	B	C	D	E
2	A	B	C	D	E	44	A	B	C	D	E
3	A	B	C	D	E	45	A	B	C	D	E
4	A	B	C	D	E	46	A	B	C	D	E
5	A	B	C	D	E	47	A	B	C	D	E
6	A	B	C	D	E	48	A	B	C	D	E
7	A	B	C	D	E	49	A	B	C	D	E
8	A	B	C	D	E	50	A	B	C	D	E
9	A	B	C	D	E	51	A	B	C	D	E
10	A	B	C	D	E	52	A	B	C	D	E
11	A	B	C	D	E	53	A	B	C	D	E
12	A	B	C	D	E	54	A	B	C	D	E
13	A	B	C	D	E	55	A	B	C	D	E
14	A	B	C	D	E	56	A	B	C	D	E
15	A	B	C	D	E	57	A	B	C	D	E
16	A	B	C	D	E	58	A	B	C	D	E
17	A	B	C	D	E	59	A	B	C	D	E
18	A	B	C	D	E	60	A	B	C	D	E
19	A	B	C	D	E	61	A	B	C	D	E
20	A	B	C	D	E	62	A	B	C	D	E
21	A	B	C	D	E	63	A	B	C	D	E
22	A	B	C	D	E	64	A	B	C	D	E
23	A	B	C	D	E	65	A	B	C	D	E
24	A	B	C	D	E	66	A	B	C	D	E
25	A	B	C	D	E	67	A	B	C	D	E
26	A	B	C	D	E	68	A	B	C	D	E
27	A	B	C	D	E	69	A	B	C	D	E
28	A	B	C	D	E	70	A	B	C	D	E
29	A	B	C	D	E	71	A	B	C	D	E
30	A	B	C	D	E	72	A	B	C	D	E
31	A	B	C	D	E	73	A	B	C	D	E
32	A	B	C	D	E	74	A	B	C	D	E
33	A	B	C	D	E	75	A	B	C	D	E
34	A	B	C	D	E	76	A	B	C	D	E
35	A	B	C	D	E	77	A	B	C	D	E
36	A	B	C	D	E	78	A	B	C	D	E
37	A	B	C	D	E	79	A	B	C	D	E
38	A	B	C	D	E	80	A	B	C	D	E
39	A	B	C	D	E	81	A	B	C	D	E
40	A	B	C	D	E	82	A	B	C	D	E
41	A	B	C	D	E	83	A	B	C	D	E
42	A	B	C	D	E						

**Question I (41.5 Marks)**

- 1-CNS bacterial pathogens produce extensive polysaccharide capsule to:  
 A-Enhance neutrophil phagocytosis.      B-Improve complement opsonization.  
 C-Stimulate antibodies production.  
 D-All of the above.      E-None of the above.
- 
- 2-The clinical presentation of acute meningitis include:  
 A-Neck rigidity.      B-Fever.      C-Photophobia.  
 D-All of the above.      E-None of the above.
- 
- 3-The recommended antibiotics for meningitis are:  
 A-Penicillins.      B-Vancomycin.      C-Sulfonamides.  
 D-Both A & C.      E-Both A & B.
- 
- 4-The signs of impetigo are:  
 A-Pus filled blister.      B-Goldeny yellow crusts.  
 C-Enlarged lymph nodes.  
 D-All of the above.      E-None of the above.
- 
- 5-The drugs indicated in impetigo include:  
 A-Cephalosporins.      B-Sulphonamides.      C-Nitrofurantoin.  
 D-Both A & C.      E-Both A & B.
- 
- 6-The clinical presentation of lymphangitis are:  
 A-Fever.      B-Chills.      C-Malaise.  
 D-Peripheral oedema.      E-All of the above.
- 
- 7-The treatment of lymphangitis include:  
 A-Penicillin G orally.      B-Penicillin V.      C-Trimethoprim.  
 D-All of the above.      E-None of the above.
- 
- 8-The complication of cellulitis are:  
 A-Otitis media.      B-Osteomyelitis.      C-Septic arthritis.  
 D-Both A & C.      E-Both B & C.
- 
- 9-The clinical presentation of cellulitis are:  
 A-Hypertension.      B-Hypothermia.      C-Erythema.  
 D-Both A & B.      E-Both B & C.
- 
- 10-The drug of choice for cellulitis is:  
 A-Oxacillin.      B-Cefazolin.      C-Ceftriaxone.  
 D-Cefalexin.      E-All of the above.
- 
- 11-The risk factors for infective endocarditis are:  
 A-Valvular dysfunction.      B-Prosthetic valve.  
 C-Hypertrophic cardiomegaly.  
 D-All of the above.      E-None of the above.
- 
- 12-The major symptoms for endocarditis are:  
 A-Dyspnoea.      B-Weight gain.      C-Night sweats.  
 D-Both A & B.      E-Both A & C.
- 
- 13-The microscopic examination of urine sediment can give quantitative value for:  
 A-Bacteria.      B-Fungi.      C-Erythrocytes.  
 D-All of the above.      E-None of the above.
- 
- 14-Pyuria in the absence of bacteruria is an indication for:  
 A-Pyelonephritis.      B-Cystitis.      C-Vaginal infection.  
 D-Both A & B.      E-Both B & C.

15-Agents for treatment of pylonephritis should be:

- A-Suitable for prostaatitis. B-Concentrated in the kidney.  
 C-Highly active against bacterial flora.  
 D-Both A & B. E-Both B & C.

16-The recommended drug for urinary tract infection is:

- A-Fluoroquinolone. B-Trimethoprim. C-Cephalosporins.  
 D-All of the above. E-None of the above.

17-Concerning amoxicillin and urinary tract infection:

- A-Is the drug of choice. B-Has low bacterial resistance.  
 C-Has slow excretion rate in the kidney.  
 D-All of the above. E-None of the above.

18-The following drugs are used in the treatment of uncomplicated cystitis:

- A-Fosfomycin. B-Nitrofurantoin. C-Fluoroquinolones.  
 D-All of the above. E-None of the above.

19-In the treatment of uncomplicated pyelonephritis, the drug of choice is:

- A-Nitrofurantoin. B-Ampicillin. C-Amoxacillin.  
 D-All of the above. E-None of the above.

20-The prophylactic therapy for urinary tract infection is indicated in the following cases:

- A-Vesicoureteric reflux. B-Pregnancy.  
 C-Women with high level of oestrogen.  
 D-All of the above. E-None of the above.

21-The microscopic examination of urine sediment can give quantitative value for:

- A-Bacteria. B-Fungi. C-Erythrocytes.  
 D-All of the above. E-None of the above.

22-Pyuria in the absence of bacteruria is an indication for:

- A-Pyelonphritis. B-Cystitis. C-Vaginal infection.  
 D-Both A & B. E-Both B & C.

**Q23 – Q 27:**

23-Etiology of nausea and vomiting may include:

- A-Gastrointestinal pseudo-obstruction. B-Radiation therapy.  
 C-Water intoxication.  
 D-Both A & B. E-All of the above.

24-Emesis could be induced by drugs such as:

- A-Opiates. B-Theophylline. C-Digoxin.  
 D-Cytotoxic chemotherapy. E-All of the above.

25-GERD may be produced due to:

- A-Increased gastric PH. B-Decreased LES pressure.  
 C-Decreased intra-abdominal pressure.  
 D-All of the above. E-None of the above.

26-Risk factors that may increase development of peptic ulcer may include:

- A-Alcohol consumption. B-Use of corticosteroids.  
 C-Age younger than 20 years.  
 D-Both A & B. E-All of the above.

27-Drug regimen to eradicate H.pylori may include:

A-Clarithromycin, metronidazole, omeprazole.

B-Amoxicillin, metronidazole, ranitidine.

C-Clarithromycin, metronidazole, lansoprazole, Bismuth subgallate.

D-A or C.

E-Any of the above.

**Q28 – Q 32**

-Match prokinetic agent from column (I) with its potential mechanism of action from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
28-Mosapride	A-5HT4 receptor agonist.
29-Domperidone	B-Motilin receptor agonist.
30-Metoclopramide	C-5HT4 receptor agonist and 5HT3 receptor antagonist.
31-Prucalopride	D-D2 receptor antagonist and release myenteric acetylcholine.
32-Erythromycin	E-D2 receptor antagonist.

**Q33 – Q37:**

-Match Drug from column (I) with its potential adverse reactions from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
33-Cisapride	A-Hypotension; Sedation; Extrapyramidal disorders.
34-Mosapride	B-Headache; Constipation; Dizziness.
35-Prucalopride	C-Diarrhea; Cardiovascular disorders.
36-Chlorpromazine	D-Headache; Abdominal pain; Nausea.
37-Ondansetron	E-Dry mouth; Insomnia; Malaise; Abdominal pain; Dizziness.

**Q38 – Q42:**

-Match Drug from column (I) with its potential therapeutic uses from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
38-Granisetron	A-Nausea and vomiting in pregnant woman.
39-Metoclopramide	B-Acute emesis in chemo-and radiotherapy.
40-Antacid/Alginic acid	C-Gastro-esophageal reflux; Irritable bowel Syndrome.
41- Baclofen	D-GERD.
42- Mosapride	E-None of the above.

**Q43 – Q47:**

-Match Drug from column (I) with its potential mechanism of action from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
43- Aluminum hydroxide 44-Alginic acid	A-Proton pump inhibitor. B-Forms highly viscous solution protecting Gastric mucosa.
45-Baclofen	C-Adheres to gastric ulcer crater and stimulate Formation of PGs.
46-Lansoprazole	D-GABA receptor type B agonist.
47-Sucralfate	E-Neutralization of gastric hyperacidity.

**Q48 – Q 52:**

-Match Drug from column (I) with its potential adverse reaction from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
48-Bismuth compounds 49-Octereotide 50-Proton pump inhibitors 51-Metronidazole 52-Sucralfate	A-Taste disturbance. B-Constipation. C-Encephalopathy; Osteodystrophy. D-Gall stone;Abdominal pain. E-Hypergastrinemia.

**Q53 – Q62:**

-Indicate which of the following statements are True (A) or False (E).

-Transfer your selection for question properly to the answer sheet.

- 53-Proton pump inhibitors could be used in the management of Zollinger-Ellison syndrome.
- 54-Clarithromycin is preferred over Amoxicillin in H.pylori eradication due to absence of bacterial resistance.
- 55-Misoprotol should be used in management of NSAID-induced peptic ulcer.
- 56-Probiotics have been used to control H.pylori colonization.
- 57-H<sub>2</sub> blockers could not be used effectively in triple therapy protocol to eradicate H.pylori induced gastric ulcer.
- 58-Treatment goals for peptic ulcer should consider preventing ulcer recurrence.
- 59-Prokinetic effect of metoclopramide and cisapride could be blocked by Atropine.
- 60-Metoclopramide increases bioavailability of concurrently administered drugs.
- 61-Mosapride possesses an anti-inflammatory effect on GIT.
- 62-Mosapride inhibits neurogenesis in the GIT.

**Q63 – Q 67**

-Match each drug from column (I) with its potential mechanism of action from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
63- Zileuton	A- Phospholipase A <sub>2</sub> inhibitor.
64- Omalizumab	B- Mast cell stabilizer.
65- Fluticasone	C- 5-lipoxygenase inhibitor.
66- Terbutaline	D-β <sub>2</sub> sympathomimetic.
67- Nedocromil	E- Anti-IgE Antibody.

**Q68– Q70:**

Match drug from column (I) with its potential adverse reactions from column (II).

-Transfer your selected match for each question properly to the answer sheet.

(I)	(II)
68- Budesonide (inhaled)	A- Gastrointestinal distress, tremor, insomnia.
69- Theophylline	B- Elevation of liver enzymes.
70- Zileuton	C- Oropharyngeal candidiasis & dysphonia.

**Questions 71 to 74:**

Match each of the following descriptions (71 through 74) with the options given below (A through D).

- 71- Moderately potent bronchodilator, producing central nervous system depression.
- 72- When asthma symptoms occur ≤ 2 times/week and nocturnal awakenings ≤ 2 times/month.
- 73- When asthma symptoms occur > 2 times/week and nocturnal awakenings > 2 times/month.
- 74- Inert gas of low density that can lower resistance to gas flow and increase ventilation, converting turbulent flow to laminar flow.

- A- Helium.
- B- Magnesium sulfate.
- C- Mild intermittent asthma.
- D- Mild persistent asthma.

**Questions 75 to 83:**

-Indicate which of the following statements are True (A) or False (E).

-Transfer your selection for question properly to the answer sheet.

- 75- Loperamide may prolong fever in patients with Shigella, may lead to toxic megacolon in patients with Clostridium difficile.
- 76- Many patients with chronic bronchitis complain of a frequent bad taste in their mouth and of halitosis.
- 77- Ketotifen causes sedation due to its antihistaminic effect.

- 78- Hyperreactivity describes a shift to the stimulus–response curve to the left, while hypersensitivity describes an upward shift.
- 79- Montelukast causes occasional elevation of liver enzymes.
- 80- In an acute asthma attack, frequent administration of inhaled  $\beta_2$ -agonists (every 20 minutes or continuous nebulization) is superior to the same dosage administered at 1-hour intervals.
- 81- Long-acting inhaled  $\beta_2$ -agonists can be used alone in controlling chronic asthma.
- 82- Antihistamines and decongestants are highly recommended for patients suspected of having acute bacterial rhinosinusitis.
- 83- Guaifenesin is a reflexly acting expectorant.

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**Question II (8.5 Marks)**

Complete each of the following statements:

- 1- The mechanism of action of Mepolizumab is .....  
whereas, Pitracinra acts as.....
- 2- The first-line treatment for acute bacterial rhinosinusitis in children and adults (without  $\beta$ -lactam allergy) is.....
- 3- Viral and bacterial rhinosinusitis can be differentiated on the basis of:
  - a-.....
  - b-.....
  - c-.....
- 4- The duration of therapy for GABHS pharyngitis is 10 days, except for ..... and .....
- 5- Inflammatory diarrhea is characterized by .....
- 6- The most common risks associated with diarrheal diseases are ..... and .....
- 7- Mucociliary transport can be depressed by ....., .....  
and .....
- 8- Mycoplasma pneumonia can be treated by.....
- 9- Depressed diaphragm on chest X-ray is characteristic for .....
- 10- In case of bacterial pneumonia, the chest radiograph reveals .....

Best Wishes