



BRAINWARE UNIVERSITY

Term End Examination 2023

Programme – B.Pharm-2020

Course Name – Pharmacology III – Theory

Course Code - BP602T

(Semester VI)

Full Marks : 75

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

- (i) Define Dextromethorphan
- a) Analgesic
b) Expectorant
c) Antitussive
d) Antihistaminic
- (ii) Identify Which of the following ingredients has neither specific antitussive nor expectorant nor bronchodilator action, but is commonly present in proprietary cough formulations:
- a) Ambroxol
b) Guaiphenesin
c) Chlorpheniramine
d) Noscapine
- (iii) Identify the following is true for gentamicin:
- a) It is more active in acidic medium
b) It has a wide margin of safety
c) It primarily inhibits gram positive bacteria
d) It is excreted unchanged, mainly by glomerular filtration
- (iv) Select the antibiotic which inhibits bacterial protein synthesis by interfering with translocation of elongating peptide chain from acceptor site back to the peptidyl site of the ribosome so that ribosome does not move along the mRNA and the peptide chain is prematurely terminated
- a) Chloramphenicol
b) Erythromycin
c) Tetracycline
d) Streptomycin
- (v) Explain that the opioid antidiarrhoeal drugs act by the following mechanism(s)
- a) They relax the intestinal smooth muscle
b) They inhibit intestinal peristalsis
c) They promote clearance of intestinal pathogens
d) All of the above
- (vi) Caffeine is more powerful than theophylline in exerting the following action:
- a) Bronchodilatation
b) Cardiac stimulation
c) Diuresis
d) Augmentation of skeletal muscle contractility

- (vii) Multidrug resistant (MDR) tuberculosis is defined as resistance to:
- Any two or more antitubercular drugs
 - Isoniazid + Rifampin + any one or more antitubercular drugs
 - Isoniazid + any other antitubercular drug
 - All five first line antitubercular drugs
- (viii) The polyene antibiotics act by:
- Inhibiting fungal cytochrome P450 enzyme
 - Inhibiting fungal DNA synthesis
 - Disorienting microtubules in fungal cells
 - Binding to ergosterol and creating micropores in fungal cell membrane
- (ix) Identify the following class of gastric antisecretory drug also reduce gastric motility and have primary effect on juice volume, with less marked effect on acid and pepsin content:
- Histamine H2 blockers
 - Proton pump inhibitors
 - Anticholinergics
 - Prostaglandins
- (x) As an antacid, sodium bicarbonate has the observed the following disadvantages except:
- It causes acid rebound
 - It has low acid neutralizing capacity
 - In ulcer patients, it increases risk of perforation
 - It is contraindicated in hypertensives
- (xi) The HIV titer of an AIDS patient was found to be reduced but still detectable after 6 months of triple drug anti-HIV therapy. The best course of action in this patient is:
- Continue the same 3 drugs for another 3 months
 - Replace 2 drugs and continue one previously used drug
 - Replace all 3 drugs with a set of another 3 drugs
 - Replace one drug and continue two previously used drugs
- (xii) Identify the following is true of anti-H.pylori therapy except:
- It is indicated in all patients of peptic ulcer
 - Concurrent suppression of gastric acid enhances efficacy of the regimen
 - Resistance to any single antimicrobial drug develops rapidly
 - Colloidal bismuth directly inhibits H.pylori but has poor patient acceptability
- (xiii) Identify the most effective antiemetic for controlling cisplatin induced vomiting is:
- Prochlorperazine
 - Metoclopramide
 - Ondansetron
 - Promethazine
- (xiv) A 70-year-old patient presented with weakness, tiredness and muscle cramps. The ECG showed Q-T prolongation, flattening of T wave and occasional A-V block. His serum K⁺ was low (2.8 mEq/L). He admitted taking a laxative every day for the past several months. Which laxative could be responsible for the above condition describe:
- Bisacodyl
 - Methylcellulose
 - Liquid paraffin
 - Bran
- (xv) Immunomodulatory sedative drugs used in the management of some forms of leprosy; also effective in managing skin manifestations of lupus erythematosus
- tacrolimus
 - bupropion
 - cyclophosphamide
 - thalidomide
- (xvi) In methyl alcohol poisoning, there is central nervous system depression, cardiac depression and optic nerve atrophy. These effects are produced due to:
- Formaldehyde and formic acid
 - Pyridine
 - Acetaldehyde
 - Acetic acid
- (xvii) Which hormone act to maintain the circadian cycle?
- melanin
 - melatonin
 - heparin
 - bradykinin
- (xviii) Which of the following peaks act at noon?
- insulin
 - renin
 - Growth hormones
 - FSH

- (xix) Identify the characteristic feature(s) of penicillin G is/are:
- a) It is unstable in aqueous solution b) Its antibacterial action is unaffected by pus and tissue fluids
- c) It is equally active against resting and multiplying bacteria d) Both a and b are correct
- (xx) Which of the following is a second generation cephalosporin that is highly resistant to gram negative β -lactamases, and cures penicillinase positive as well as negative gonococcal infection by a single intramuscular dose:
- a) Cephalexin b) Cefuroxime
- c) Cefoperazone d) Ceftazidime

Group-B

(Short Answer Type Questions)

5 x 7=35

2. Describe the mechanism of action of mass cell stabilizer. (5)
3. State mechanism action of Sucralfate (5)
4. Write pharmacokinetic, adverse effect and drug-drug interaction of cimetidine (5)
5. Classify antimalarial agents with example (5)
6. Classify drugs acting as antiemetic. (5)
7. Categorize immunostimulant drugs, adverse effects and uses. (5)
- OR**
- Explain mechanism action of beta lactam antibiotics. (5)
8. Categorize immunostimulant drugs. (5)
- OR**
- Illustrate resistance of benzyl penicillin (5)

Group-C

(Long Answer Type Questions)

10 x 2=20

9. Define circadian rhythms, chrono-pharmacology and chronotherapy also describe the significance of chronotherapy. (10)
10. Evaluate the role of melatonin in circadian rhythms. (10)
- OR**
- Clinical symptoms and management of lead poisoning. (10)

Pharmaco
Biology
Dr. S. S. S. S. S.