



# BRAINWARE UNIVERSITY

**Term End Examination 2021 - 22**  
**Programme – Bachelor of Pharmacy**  
**Course Name – Pharmacology III**  
**Course Code - BP602T**  
**( Semester VI )**

**Time allotted : 1 Hrs.30 Min.**

**Full Marks : 75**

[The figure in the margin indicates full marks.]

## Group-A

(Multiple Choice Type Question)

1 x 75=75

*Choose the correct alternative from the following :*

(1) Mucokinetic is a drug which:

- |   |  |
|---|--|
| a) Reduces airway mucus secretion           | b) Increases airway mucus secretion                            |
| c) Makes respiratory secretions more watery | d) Stimulates mucociliary activity of bronchia<br>l epithelium |

(2) Dextromethorphan is an:

- |                |                   |
|----------------|-------------------|
| a) Analgesic   | b) Expectorant    |
| c) Antitussive | d) Antihistaminic |

(3) Which of the following ingredients has neither specific antitussive nor expectorant n or bronchodilator action, but is commonly present in proprietary cough formulations:

- |                     |                 |
|---------------------|-----------------|
| a) Ambroxol         | b) Guaiphenesin |
| c) Chlorpheniramine | d) Noscapine    |

(4) Inhaled salbutamol is useful in bronchial asthma for:

- |  |                       |
|--|-----------------------|
| a) Round the clock prophylaxis of asthma | b) Status asthmaticus |
| c) Aborting/terminating asthma attacks   | d) All of the these   |

(5) In comparison to inhaled  $\beta_2$  adrenergic agonists, the inhaled anticholinergics:

- |  |   |
|--|---|
| a) Are more effective in bronchial asthma      | b) Are better suited for control of an acute attack of asthma |
| c) Produce slower response in bronchial asthma | d) Produce little benefit in chronic obstructive lung disease |

(6) Budesonide is a:

- |                                       |                          |
|---------------------------------------|--------------------------|
| a) Nonsteroidal antiinflammatory drug | b) High ceiling diuretic |
| c) Inhaled corticosteroid for asthma  | d) Contraceptive         |

- (7) Gynaecomastia can occur as a side effect of:
- a) Bromocriptine
  - b) Cimetidine
  - c) Famotidine
  - d) Levodopa
- (8) Choose the drug which blocks basal as well as stimulated gastric acid secretion without affecting cholinergic, histaminergic or gastrin receptors:
- a) Omeprazole
  - b) Famotidine
  - c) Loxatidine
  - d) Pirenzepine
- (9) 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:
- a) Histamine H<sub>2</sub> blockers
  - b) Anticholinergics
  - c) Proton pump inhibitors
  - d) Prostaglandins
- (10) The primary mechanism by which prostaglandins promote ulcer healing is:
- a) Inhibition of gastric acid secretion
  - b) Augmentation of bicarbonate buffered mucus layer covering gastroduodenal mucosa
  - c) Increased bicarbonate secretion in gastric juice
  - d) Increased turnover of gastric mucosal cell
- (11) As an antacid, sodium bicarbonate has the following disadvantages except:
- a) It causes acid rebound
  - b) In ulcer patients, it increases risk of perforation
  - c) It has low acid neutralizing capacity
  - d) It is contraindicated in hypertensives
- (12) Sucralfate promotes healing of duodenal ulcer by:
- a) Enhancing gastric mucus and bicarbonate secretion
  - b) Coating the ulcer and preventing the action of acid-pepsin on ulcer base
  - c) Promoting regeneration of mucosa
  - d) Both '1' and '2' are correct
- (13) The following is true of anti-H.pylori therapy except:
- a) It is indicated in all patients of peptic ulcer
  - b) Resistance to any single antimicrobial drug develops rapidly
  - c) Concurrent suppression of gastric acid enhances efficacy of the regimen
  - d) Colloidal bismuth directly inhibits H.pylori but has poor patient acceptability
- (14) The most effective anti-motion sickness drug suitable for short brisk journeys is:
- a) Promethazine theoclate
  - b) Cinnarizine
  - c) Prochlorperazine
  - d) Hyoscine
- (15) Chlorpromazine and its congeners suppress vomiting of following etiologies except:
- a) Radiation sickness
  - b) Post-anaesthetic
  - c) Motion sickness
  - d) Uremic
- (16) The fastest symptomatic relief as well as highest healing rates in reflux esophagitis are obtained with:
- a) Prokinetic drugs
  - b) H<sub>2</sub> receptor blockers
  - c) Proton pump inhibitors
  - d) Sodium alginate
- (17) The most effective antiemetic for controlling cisplatin induced vomiting is:
- a) Prochlorperazine
  - b) Ondansetron
  - c) Metoclopramide
  - d) Promethazine
- (18) Prolonged treatment with the following drug can promote dissolution of gallstones if the gall bladder is functional:



- (29) Superinfections are more common with:
- a) Use of narrow spectrum antibiotics
  - b) Short courses of antibiotics
  - c) Use of antibiotics that are completely absorbed from the small intestines
  - d) Use of antibiotic combinations covering both gram positive and gram negative bacteria
- (30) Prophylactic use of antibiotics is not justified in the following condition:
- a) To prevent secondary infection in common cold
  - b) Thoroughly cleaned contaminated wound
  - c) Rheumatic fever in a child of 10 years
  - d) Catheterization of urethra in an elderly male
- (31) That sulfonamides act by inhibiting folate synthesis in bacteria is supported by the following findings except:
- a) Paraaminobenzoic acid antagonises the action of sulfonamides
  - b) Methionine antagonises the action of sulfonamides
  - c) Purines and thymidine present in pus antagonize the action of sulfonamides
  - d) Bacteria that utilise folic acid taken up from the medium are insensitive to sulfonamides
- (32) Trimethoprim inhibits bacteria without affecting mammalian cells because:
- a) It does not penetrate mammalian cells
  - b) It has high affinity for bacterial but low affinity for mammalian dihydrofolate reductase enzyme
  - c) It inhibits bacterial folate synthetase as well as dihydrofolate reductase enzymes
  - d) All of the these
- (33) The fluoroquinolones have improved over nalidixic acid in the following respect(s):
- a) They have higher antimicrobial potency
  - b) They have extended antimicrobial spectrum
  - c) Development of bacterial resistance against them is slow and infrequent
  - d) All of the these
- (34) A single oral dose of the following drug can cure most cases of uncomplicated gonorrhoea:
- a) Ciprofloxacin
  - b) Cotrimoxazole
  - c) Spectinomycin
  - d) Doxycycline
- (35) Currently the drug of choice for empiric treatment of typhoid fever is:
- a) Chloramphenicol
  - b) Cotrimoxazole
  - c) Ampicillin
  - d) Ciprofloxacin
- (36) The most likely explanation of differing sensitivities of different bacteria to various penicillins is:
- a) Differing susceptibilities of the various penicillins to  $\beta$ -lactamases produced by different bacteria
  - b) Differing affinities of penicillin binding proteins present in different bacteria towards various penicillins
  - c) Differing penetrability of various penicillins into different bacteria
  - d) Differing rates of cell wall synthesis by different bacteria
- (37) 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 '1' and '2' are correct

- (38) Indicate the disease in which penicillin G continues to be used as first line treatment in all cases (unless contraindicated), because the causative organism has not developed resistance so far:
- a) Gonorrhoea  
b) Staphylococcal abscess  
c) Staphylococcal aureus  
d) Syphilis
- (39) The most frequent side effect of oral ampicillin is:
- a) Loose motions  
b) Nausea and vomiting  
c) Constipation  
d) Urticaria
- (40) Clavulanic acid is combined with amoxicillin because:
- a) It kills bacteria that are not killed by amoxicillin  
b) It retards renal excretion of amoxicillin  
c) It counteracts the adverse effects of amoxicillin  
d) It inhibits beta lactamases that destroy amoxicillin
- (41) Which of the following is a second generation cephalosporin that is highly resistant to gram negative  $\beta$ -lactamases, and cures penicillinase positive as well as negative gonococcal infection by a single intramuscular dose:
- a) Cephalexin  
b) Cefuroxime  
c) Cefoperazone  
d) Ceftazidime
- (42) The most important mechanism by which tetracycline antibiotics exert antimicrobial action is:
- a) They bind to 30S ribosomes and inhibit bacterial protein synthesis  
b) They bind to 50S ribosomes and interfere with translocation of the growing peptide chain in the bacteria  
c) They chelate  $Ca^{2+}$  ions and alter permeability of bacterial cell membrane  
d) They interfere with DNA mediated RNA synthesis in bacteria
- (43) The following antibiotic penetrates blood-CSF barrier the best:
- a) Chloramphenicol  
b) Erythromycin  
c) Gentamicin  
d) Tetracycline
- (44) Which aminoglycoside antibiotic causes more hearing loss than vestibular disturbance as toxic effect:
- a) Streptomycin  
b) Kanamycin  
c) Sisomicin  
d) Gentamicin
- (45) 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
- (46) The following antibiotic is a first line drug for treatment of Mycobacterium avium complex infection in AIDS patients
- a) Clindamycin  
b) Roxithromycin  
c) Erythromycin  
d) Clarithromycin
- (47) 'Red man syndrome' has been associated with rapid intravenous injection of the following antibiotic:
- a) Vancomycin  
b) Clindamycin  
c) Cefoperazone  
d) Piperacillin
- (48) The drug of choice for penicillinase producing Neisseria gonorrhoeae urethritis is:

- a) Amoxicillin  
c) Doxycycline
- b) Erythromycin  
d) Ceftriaxone
- (49) The most important reason for using a combination of chemotherapeutic agents in the treatment of tuberculosis is:
- a) To obtain bactericidal effect  
c) To broaden the spectrum of activity
- b) To prevent development of resistance to the drugs  
d) To reduce adverse effects of the drugs
- (50) Multidrug resistant (MDR) tuberculosis is defined as resistance to:
- a) Any two or more antitubercular drugs  
c) Isoniazid + Rifampin + any one or more antitubercular drugs
- b) Isoniazid + any other antitubercular drug  
d) All five first line antitubercular drugs
- (51) Which antileprotic drug suppresses lepra reaction and reversal reaction as well:
- a) Clofazimine  
c) Dapsone
- b) Rifampin  
d) Minocycline
- (52) The polyene antibiotics act by:
- a) Inhibiting fungal cytochrome P450 enzyme  
c) Inhibiting fungal DNA synthesis
- b) Disorienting microtubules in fungal cells  
d) Binding to ergosterol and creating micropores in fungal cell membrane
- (53) The most important toxicity of amphotericin B is:
- a) Neurotoxicity  
c) Bone marrow depression
- b) Hepatotoxicity  
d) Nephrotoxicity
- (54) The most probable mechanism of action of imidazole antifungal drugs is:
- a) They bind to ergosterol in fungal cell membrane and make it leaky  
c) They interfere with fungal mitosis
- b) They interfere with ergosterol synthesis by fungi  
d) They block oxidative phosphorylation in fungi
- (55) Adverse effects of ketoconazole include the following except:
- a) Gynaecomastia  
c) Oligozoospermia
- b) Kidney damage  
d) Menstrual irregularities
- (56) Select the drug that is fungicidal and acts by inhibiting fungal squalene epoxidase enzyme:
- a) Ketoconazole  
c) Tolnaftate
- b) Terbinafine  
d) Hamycin
- (57) 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:
- a) Continue the same 3 drugs for another 3 months  
c) Replace 2 drugs and continue one previously used drug
- b) Replace all 3 drugs with a set of another 3 drugs  
d) Replace one drug and continue two previously used drugs
- (58) The following drug is a causal prophylactic for falciparum malaria and suppressive prophylactic for vivax malaria:
- a) Chloroquine  
c) Proguanil
- b) Mepacrine  
d) Quinine
- (59) Recrudescence of malaria refers to recurrence of malarial fever due to:

- a) Reinfection of the patient by mosquito bite      b) Reinfection of blood by exoerythrocytic hypozoites
- c) Incomplete clearance of schizonts from blood      d) Any of these
- (60) In addition to amoebiasis, metronidazole is used for:
- a) Roundworm infestation      b) Giardiasis
- c) Kala-azar      d) Hookworm infestation
- (61) Diethyl carbamazine citrate has the following action in filariasis:
- a) Promotes phagocytosis of circulating microfilariae      b) Kills circulating microfilariae
- c) Kills microfilariae present in nodules and serous fluids      d) Rapidly kills adult filarial worms and stops production of microfilariae
- (62) Which anthelmintic drug acts through a specific glutamate gated Cl<sup>-</sup> ion channel found only in nematodes:
- a) Niclosamide      b) Ivermectin
- c) Pyrantel pamoate      d) Praziquantel
- (63) The following anticancer drug has high emetogenic potential:
- a) Cisplatin      b) Vincristine
- c) Chlorambucil      d) 6-Mercaptopurine
- (64) Methotrexate has the following attributes except:
- a) Folic acid reverses its toxic effects      b) It is cell cycle specific and kills cells in the S phase
- c) Its toxicity primarily affects bone marrow and epithelial structures      d) It is the drug of choice for choriocarcinoma
- (65) The characteristic toxicity of doxorubicin is:
- a) Kidney damage      b) Cardiomyopathy
- c) Liver damage      d) Pulmonary fibrosis
- (66) Mesna is administered with cyclophosphamide and ifosfamide to:
- a) Potentiate their cytotoxic action      b) Retard their renal excretion
- c) Ameliorate cystitis caused by them      d) Block their emetic action
- (67) Immunomodulatory sedative drugs used in the management of some forms of leprosy; also effective in managing skin manifestations of lupus erythematosus
- a) tacrolimus      b) cyclophosphamide
- c) bupropion      d) thalidomide
- (68) Drug of choice in treating autoimmune hemolytic anemia:
- a) cyclophosphamide plus factor XIII      b) Rho(D) immune globulin
- c) OKT3 monoclonal antibody      d) prednisone
- (69) Useful in management of idiopathic thrombocytopenic purpura refractory to prednisone
- a) vincristine      b) dactinomycin
- c) cyclophosphamide      d) azathioprine
- (70) Which one Inhibits antigen recognition of B-cell
- a) azathioprine      b) prednisone
- c) methotrexate      d) Rho(D) immune globulin

(71) Clinical uses of immunosuppressive drugs:

- a) organ transplantation
- b) hemolytic disease of the newborn
- c) autoimmune disorders
- d) All of the these

(72) Which of the following is NOT an initiating event in carcinogenesis?

- a) DNA adduct formation
- b) DNA strand breakage
- c) mutation of proto-oncogenes
- d) mitogenesis

(73) Which of the following toxicity can occur due to single exposure?

- a) Chronic toxicity
- b) Sub-chronic toxicity
- c) Acute toxicity
- d) Sub-acute toxicity

(74) The phrase that best defines "toxicodynamics" is the

- a) linkage between exposure and dose
- b) linkage between dose and response
- c) dynamic nature of toxic effects among various species
- d) dose range between desired biological effects and adverse health effects

(75) The use tamoxifen in certain breast cancer is an example of

- a) receptor antagonism
- b) chemical antagonism
- c) dispositional antagonism
- d) functional antagonism