



Library
Brainware University
398, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125

BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Sc.(CCT)-2022/B.Sc.(CCT)-2023

Course Name – Clinical Microbiology, Infection Control and Clinical Pharmacology

Course Code - BCCTC302

(Semester III)

Full Marks : 60

Time : 2:30 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 15=15

1. Choose the correct alternative from the following :

- (i) Identify the anti retroviral drug amongst the following.
 - a) Acyclovir
 - b) Azidothymidine
 - c) Remdesivir
 - d) Streptomycin
- (ii) Identify the drug which is not an antihypertensive amongst the following.
 - a) Olmesartan
 - b) Amlodipine
 - c) Metoprolol
 - d) Ipratropium
- (iii) Select the neuromuscular blocker amongst the following.
 - a) d-tubocurarine
 - b) Valsartan
 - c) Salbutamol
 - d) Atenolol
- (iv) Which of the following names represent an antifungal drug?
 - a) Posaconazole
 - b) Ibuprofen
 - c) Tramadol
 - d) Amlodipine
- (v) Which of the following represent an ionotropic drug?
 - a) L-Ornithine
 - b) Dopamine
 - c) Insulin
 - d) Hypertonic saline
- (vi) Which of the following represent a catecholamine?
 - a) Adrenaline
 - b) Dopamine
 - c) Atropine
 - d) Timolol
- (vii) Which of the following represent truth about chloroquine?
 - a) Vomiting is never a side effect
 - b) Can induce QT prolongation in ECG
 - c) Causes haemolysis
 - d) Is used in falciparum malaria
- (viii) Choose the antimalarial drug amongst the following.
 - a) Valsartan
 - b) Artesunate
 - c) Metoprolol
 - d) Verapamil
- (ix) Distinguish a plasmid from a normal DNA.
 - a) Shape of plasmid
 - b) Plasmid is extrachromosomal dna

- c) Both 1 & 2
 (x) Select the correct statement regarding neuromuscular blocking agents.
 a) Succinyl choline is an ultra short acting blocker
 b) d-tubocurarine is a non competitive blocker
 c) Succinylcholine is a long acting blocker
 d) None of these
 (xi) Choose the group of drug that is known to cause interstitial nephritis as a side effect if consumed over a longer period of time.
 a) NSAIDS
 b) Opioids
 c) Anticholinergics
 d) Muscarinic drugs
 (xii) Select the option which represents a side effect of steroids.
 a) Hyperglycemia
 b) Hypertension
 c) Flushing
 d) Polyuria
 (xiii) Identify bacterium that can cause urinary tract infections and is often associated with indwelling catheters?
 a) Escherichia coli
 b) Staphylococcus aureus
 c) Clostridium difficile
 d) Cryptococcus neoformans
 (xiv) Indicate the viral infection that can spread rapidly in healthcare settings and primarily affects the respiratory system?
 a) Norovirus
 b) Influenza Virus
 c) Respiratory Syncytial Virus (RSV)
 d) Staphylococcus aureus
 (xv) The BCG vaccine is administered for immunity against
 a) Malaria
 b) Tuberculosis
 c) Jaundice
 d) Hepatitis

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Name three sedatives. Enumerate two indications of sedatives (3)
3. Explain the mechanism of Valproic acid. (3)
4. Name two diuretics and their adverse effects. (3)
5. Define nosocomial infections. (3)
6. Justify the statement "Death in HIV occurs most often due to opportunistic infections" (3)

OR

Justify the statement "Chloroquine should be used with caution in patients with cardiac disease". (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain the pharmacology of adrenergic blockers. (5)
8. Define Nosocomial infection. Enumerate the various nosocomial infections commonly observed in a critical care unit. (5)
9. Classify antihypertensive drugs into various categories based on their mechanism of action while citing an example of each category of drug. (5)
10. Distinguish nosocomial GIT infections while highlighting the various pathogens responsible for same while drawing an association between their mucosal invasion & severity of illness. (5)
11. State the difference between the pharmacology of barbiturates and benzodiazepines. (5)
12. Classify bronchodilator drugs & cite an example of each category. (5)

OR

Analyze the various processes involved in sterilization & disinfection as a part of infection control. (5)