



UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF DEGREE OF
BACHELOR OF SCIENCE IN NURSING
THIRD SEMESTER, 2023/2024
(SUPPLEMENTARY EXAM)**

NUR 131: BASICS OF PHARMACOLOGY

**STREAM: Y1S3
DAY: TUESDAY, 9.00AM-12.00PM**

**TIME: 3 HOURS
DATE: 23/07/2024**

INSTRUCTIONS

1. Do not write anything on this question paper.

SECTION A: ANSWER ALL THE QUESTIONS (30 MARKS)

1. Pharmacodynamics involves the study of following EXCEPT:
 - a) Biological and therapeutic effects of drugs
 - b) Absorption and distribution of drugs
 - c) Mechanisms of drug action
 - d) Drug interactions
2. What does the term "q.a.m" mean?
 - a) Every other day
 - b) Every morning
 - c) Every bedtime
 - d) Every evening

3. First -pass effect is most likely seen in which route of drug administration?

- a) Sublingual
- b) Oral
- c) Intravenous
- d) Intramuscular

4. Chemotherapy is defined as:

- a) The use of drugs in infectious diseases and neoplasm to destroy microorganisms, without damaging the host cells/tissues.
- b) Use of drugs in infectious diseases only to destroy microorganisms, without damaging the host cells/tissues.
- c) The proper selection and use of drugs for the prevention and treatment of disease
- d) The evaluation of the pharmacological action of drug preferred route of administration and safe dosage range in human.

5. Idiosyncratic reaction of a drug is:

- a) A type of hypersensitivity reaction
- b) A type of drug antagonism
- c) Unpredictable, inherent, qualitatively abnormal reaction to a drug
- d) Quantitatively exaggerated response

6. In the treatment of tuberculosis, Isoniazid induced neuropathy is prevented using which of the following medicine?

- a) Nicotinic acid
- b) Riboflavin
- c) Vitamin B6
- d) Ascorbic acid

7. Bactericidal effect is:

- a) Inhibition of bacterial cell division
- b) Inhibition of young bacterial cell growth
- c) Destroying of bacterial cells
- d) Formation of bacterial L-form

8. Which is a monobactams?

- a) Aztreonam
- b) Amoxicillin
- c) Imipenem
- d) Tigemonam

9. Identify a drug that belongs to 5th generation cephalosporins:

- a) Cefuroxime
- b) Cefaclor
- c) Ceftaroline
- d) Ceftriaxone

10. Aminoglycosides have the following unwanted effects:

- a) Pancytopenia
- b) Anaemia
- c) Nephrotoxicity
- d) Irritation of gastrointestinal mucosa.

11. Which drugs is used in the treatment of dermatomycosis?

- a) Nystatin
- b) Griseofulvin
- c) Amphotericin B
- d) Vancomycin

12. All the following antibiotics have bacteriostatic antibacterial effects except?

- a) Chloramphenicol
- b) Macrolides
- c) Tetracyclines
- d) Aminoglycosides

13. Tick the amebicide drug for used in the treatment of ~~an asymptomatic intestinal form of amebiasis:—~~*Entamoeba histolytica* chronic cyst passers

- a) Chloroquine
- b) Diloxanide furoate
- c) Emetine
- d) Doxycycline

14. A 12-year-old girl has undergone a bone marrow transplant for the treatment of acute lymphoblastic leukemia (ALL). Five days later, she develops fever, and positive blood cultures for *Candida albicans* ~~in her blood~~. Which is the choice antifungal?

- (A) Nystatin
- (B) Miconazole
- (C) Clotrimazole
- (D) Ketoconazole
- (E) Amphotericin

15. Which statement best describes a lead compound?

- a) A compound that contains the element lead.
- b) A compound from the research laboratory that is chosen to go forward for preclinical and clinical trials
- c) A molecule that shows some activity or property of interest and serves as the starting point for the development of a drug.
- d) The first compound of a structural class of compounds to reach the market.

16. All the following are parenteral routes of drug administration except:

- a) Subcutaneous
- b) Intramuscular
- c) Intra rectal
- d) Intravenous

17. Which statement is true regarding pharmacy and poisons board?

- a) It regulates the manufacture registration advertisement and importation and exportation of drugs.
- b) Controls the possession and trafficking of narcotic drugs and psychotropic substances.
- c) Regulates the cultivating, possession, importation, exportation and distribution of addictive drugs like the opiates.
- d) It ensures that drugs meant for medicinal use do not end up in illicit narcotic trade.

18. Identify the drug of choice for cestodes

- a) Pyrantel pamoate
- b) Ivermectin
- c) Praziquantel
- d) Diethylcarbamazine

19. What does the term “antibiotics” mean:

- a) Non-organic or synthetic substances that selectively kill or inhibit the growth of other microorganisms
- b) Substances produced by some microorganisms and their synthetic analogues that selectively kill or inhibit the growth of other microorganisms
- c) Substances produced by some microorganisms and their synthetic analogues that inhibit the growth of organism cells
- d) Synthetic analogues of natural substances that kill protozoa and helminths

20. Therapeutic index (TI) is:

- a) A ratio used to evaluate the safety and usefulness of a drug for indication
- b) A ratio used to evaluate the effectiveness of a drug
- c) A ratio used to evaluate the bioavailability of a drug
- d) A ratio used to evaluate the elimination of a drug

SECTION B: ANSWER ALL THE QUESTIONS (40 MARKS)

QUESTION ONE

State the two significance of pharmacology in nursing. (2 marks)

QUESTION TWO

Indicate the meaning of the following abbreviations as used in pharmacology.

- a) P.O. (1 mark)
- b) ad lib. (1 mark)
- c) sig. (1 mark)
- d) q1-3 (1 mark)
- e. p.r.n. (1 mark)

QUESTION THREE

Define the following terms.

- a) Synergism (1 mark)
- b) Pharmacogenomics (1 mark)
- c) Chemotherapy (1 mark)
- d) Tolerance (1 mark)
- e. Therapeutic effect (1 mark)

QUESTION FOUR

Enlist the five sequential steps of nursing process as a role of the nurse. (5 marks)

QUESTION FIVE

Describe Drug logistics. (6 marks)

QUESTION SIX

Write short notes on CAP 244-Pharmacy and poisons. (3 marks)

QUESTON SEVEN

During drug Prescription, there are five key stages of the consultation. list them in sequentially. (5marks)

QUESTION EIGHT

Distinguish between the following terms

- i) Efficacy and potency (1 mark)
- ii) Complementary medicine and Alternative medicine (1 mark)
- iii) Adverse drug reaction and Adverse event (1 mark)

QUESTION NINE

List the six drug administration rights in nursing (3 marks)

QUESTION TEN

List three (3) classes of antimalarial and give an example in each? (3 marks)

SECTION C: CHOOSE ANY TWO QUESTIONS (40 MARKS)

QUESTION ELEVEN

- (a) State four (4) ways in which antimicrobials exert their action. (4 marks)
- (b) Outline the six (6) classes of antiretroviral agents with an example in each (6 marks)
- (c) Describe the basic types of drug action. (10marks)

QUESTION TWELVE

Citing with appropriate examples discuss:

- (i) The pharmacological classification of Drugs by Legal Definition (10marks)
- (ii) the cephalosporins classification (10 marks)

QUESTION THIRTEEN

Describe the Drug development process citing relevant examples where applicable. (20 marks)

