

FACULTY OF HEALTH SCIENCES DEPARTMENT OF NURSING SCIENCE

PROGRAMME	:	BASIC PHARMACOLOGY
<u>SUBJECT</u>	:	MODULE 2: BASIC PHARMACOLOGY IN NURSING SPECIFIC DRUGS PART 2
<u>CODE</u>	:	FAV0002
DATE	:	NOVEMBER EXAMINATION 2017
DURATION	:	2 HOURS
<u>WEIGHT</u>	:	50:50
TOTAL MARKS	:	80
EXAMINER	:	MRS P ZIBI
MODERATOR	:	MR BS MATLALA
NUMBER OF PAGES	:	THIS PAPER CONSISTS OF THREE (3) PAGES
INSTRUCTIONS:		ANSWER ALL QUESTIONS. (1) MARK PER FACT UNLESS OTHERWISE INDICATED

INSTRUCTIONS TO CANDIDATES: This examination paper remains the property of the University of Johannesburg and may not be removed from the examination room.

QUESTION 1

Match the drug in **Column A** to the mode of action in **Column B**. For example, if you are of the opinion that a nurse upholds the principle of autonomy when she admits that she forgot to record a patient's blood pressure, you would write in your answer script: **1.3 (a)**. ***[10]**

COL	UMN A	COLUMN B
1.1	Levodopa	a) Inhibits the decarboxylation of levodopa in the intestines and
		periphery making more levodopa available to the CNS
1.2	Entacapone	b) Dopamine agonist that activates dopamine receptors in the striatum
		to release dopamine
1.3	Ropinirole	c) Causes selective, irreversible inhibition of MAO-B and prevents
		inactivation of Dopamine in the striatum
1.4	Selegiline	d) Selective D ₂ receptor agonist making Dopamine more available in
		the striatum
1.5	Bromocriptine	e) A selective inhibitor of COMPT that inhibits decarboxylation of
		Levodopa in the periphery and intestines making increasing the
		availability of levodopa in the striatum
1.6	Carbidopa	f) Enters the brain via active transport to cross the blood brain barrier
		and is converted to active Dopamine in the brain
1.7	Amantadine	g) inhibit Dopamine uptake, stimulates dopamine release, blockade of
		cholinergic and glutamate receptors
1.8	Phenytoin	h) Suppress high-frequency neuronal firing, blocks Na channels,
		suppresses calcium channels and potentiates GABA
1.9	Carbamazepine	i) Suppresses high-frequency neuronal firing by delaying recovery of
		sodium channels from their inactive states
1.10	Valproic Acid	j) selective inhibition of the recovery of sodium channels back to the
		active state therefore action potential is suppressed

QUESTION 2

2.1 **Explain in detail** the Extra Pyramidal Symptoms as a result of the side effects of the typical antipsychotic drugs. ***[10]**

QUESTION 3

Use the following table to answer the questions below. Fill in the rest of the table with the correct answers: ***[20]**

NAME OF DRUG	PHARMACOLOGICAL ACTION [2] marks per
	drug
1. Fluoxetine	
2. Phenobarbital	
3. Venlafaxine	
4.Setraline	
5 Selegeline	
6. Amytriptiline	
7. imipramine	
8. Sumatriptan	
9. Ergotamine	
10. Felbamate	

QUESTION 4

4.1 Based on your understanding of the HIV replication cycle, **explain** how the different drug classes of ARTs' will reduce the viral load and increase the CD4 count and give one example of one drug from each class. ***[20]**

QUESTION 5

5.1 Biguanides and Sulfonylureas are both oral hypoglycaemic drugs given to patients with Type
2 Diabetes. In a table form display the different ways in which these drugs reduce blood sugar levels.
*[10]

QUESTION 6

6.1 Propose to the patient who is on antibiotics an effective way to take his treatment. ***[10]**

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