



PROGRAMME : POST BASIC PHARMACOLOGY FOR NURSING SCIENCE

**SUBJECT**: MODULE 2: SPECIFIC DRUGS PART 2

CODE : FAR02B2/FAR9X01

DATE : SUPPLEMENTARY EXAMINATION JANUARY 2018

**DURATION** : 3 HOURS

TOTAL MARKS : 100

**EXAMINER** : MS PS ZIBI

MODERATOR/S : MR BS MATLALA (UJ)

NUMBER OF PAGES: THIS PAPER CONSISTS OF FOUR (4) 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)**.

COLUMN 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 <sub>2</sub> 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

WODULE 2. SPECIFIC DRUGS. FART 2

### **QUESTION 2**

# Fill in the missing words in the table below

\*[20]

DRUG CLASS	NAME OF DRUG	MODE OF ACTION	SIDE EFFECT
1 <sup>st</sup> Generation			
Antipsychotic drug high			
potency			
2 <sup>nd</sup> Generation			
Antipsychotic			
Drug that potentiate			
GABA			
Drug that inhibit			
Glutamate			
Selective Serotonin			
Inhibitor			

## **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 Discuss the four (4) commonly used TB drugs for a patient who has not yet developed drug resistance. (10)
- 4.2 Explain the health education you would give to the patient to prevent drug resistance. (10)
  \*[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

#### **QUESTION 6**

- 6.1 Explain the general mechanism of action of antibiotics. (5)
- 6.2 Explain the mode of action of Penicillin. (5)
- 6.3 Propose to the patient who is on antibiotics an effective way to take his treatment. (10)

\*[20]

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