

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF SCIENCE AND ENGINEERING
DEPARTMENT OF OPTOMETRY
BACHELOR OF SCIENCE HONOURS DEGREE IN OPTOMETRY

CANDIDATE NUMBER:

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OPTC 311: DIAGNOSTIC AND OCULAR THERAPEUTICS I

DURATION: 3 HOURS

(150 MARKS)

INSTRUCTIONS

Attempt ALL questions.

NOV 2024

SECTION A: Attempt ALL Questions (140 MARKS).

1. Discuss the patient care process. [25]
2. Using a diagrammatic illustration, give an account of the components of the medical process. [25]
3. Discuss the classes of anti-glaucoma drugs, giving drug examples in each case. [25]
4. What are antibiotics? Classify antibiotics, write their mechanism of action and give drug examples in each case. [25]
5. Discuss in detail about ocular anti-inflammatory drugs. [10]
6. Classify Diuretics and name the osmotic diuretic drugs in ocular use. [10]
7. List adverse effects of corticosteroids. [10]
8. Name four immunosuppressants. [4]
9. Name the agents used in ocular diagnosis. [5]
10. Which of the anti-tubercular drugs can cause ocular toxicity? [1]

SECTION B: Attempt the following medical case (10 MARKS)

Mr Phiri, a 35-year-old man, is overweight and has a blood pressure of 178/114 mmHg. He smokes 25 cigarettes daily and drinks 28 units of alcohol per week. He has a sedentary occupation. He eats excessive quantities of saturated fat and salt.

Questions:

1. How should this patient be managed? [3]
2. What pharmacological treatment for blood pressure would be appropriate if non-pharmacological treatment was unsuccessful? [3]
3. Mr Phiri subsequently stopped smoking and lost some weight but remained hypertensive. He was treated with atenolol 50 mg daily. His blood pressure fell to 136/84 mmHg but he developed tiredness and bradycardia and complained of erectile impotence. What are the treatment options for Mr Phiri? [4]

END OF PAPER