

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
GENERAL NURSING DEPARTMENT
MAIN EXAMINATION, MAY, 2006

COURSE TITLE: PHARMACOLOGY

COURSE CODE: NUR 203

TIME: 2 HOURS

TOTAL MARKS: 75

INSTRUCTIONS:

1. Section A, question one is calculations and is compulsory
2. Do not use a calculator!!!!!!!!!!!!!!
3. Choose five questions of your choice from section B
4. All your answers should be written on the answer sheet provided
5. Marks allocation is half a point for a fact and one point for explanations

DO NOT OPEN THE QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO.

SECTION A

QUESTION ONE

- a) The doctor orders 60mg Phenobarbital elixir at bed time daily for your patient. The drug is available only as a 20mg/5ml.

How many teaspoons should you give? (3)

- b) The doctor prescribes 100,000 units of penicillin. The available vial only holds 1000 000 units of penicillin. The drug label says to add 4.5 ml of normal saline solution to yield 1 million units/5ml.

How much solution should you administer after reconstitution? (3)

- c) You have U 100 Lente insulin. The doctor ordered 10 units. How many minims will you give? (3)

- d) In the narcotics box the morphine is labeled M. S. gr. $\frac{1}{4}$ per 1 cc. The physician ordered M. S. gr. $\frac{1}{6}$.

i) How many cc would you give (to the nearest tenth)? (3)

ii) Before you begin this problem can you tell if you would give more or less than 1 cc? (2)

- e) The doctor ordered 75 ml to infuse in 45 min. The drop factor is 10.

How many gtt/min would you give? (3)

f) The question will refer to the table below

Table one: BSA method

Kilograms	pounds	Surface area sq. metres	% of adult dose
1.9	4	0.15	9
2.7	6	0.20	12
4.5	10	0.24	14
6.8	15	0.36	21
9.1	20	0.42	25
11.4	25	0.52	31
13.6	30	0.60	35
18.2	40	0.70	42
22.7	50	0.84	50
27.3	60	0.98	58
31.8	70	1.10	65
36.4	80	1.20	71
40.9	90	1.32	78
45.5	100	1.40	82

Using the BSA method and chart above:

i) The average adult dose of Panamycin Phosphate is 500mg. q. 6h. p. o.
How many mg. would you give a child weighing 50 lb ? (4)

ii) The doctor orders gentamycin sulfate I.V. piggyback 7.5mg/kg/day divided into three doses. The child weighs 30 lb. Available is gentamycin 80 mg/2ml. Using the BSA method and the chart,

- How many total mg. of gentamycin will the child receive per day? (2)
- How many mg. in each dose? (1)
- How many ml in each dose? (1)

Total 25 points

SECTION B

Question two

Mr Matse came in having been cut by an axe on the ankle. He is in severe pain and the doctor orders Morphine sulfate 4 mg q.4h.

- a) What is morphine (2)
- b) Describe the action of morphine (5)
- c) Describe the effect of morphine on the pupils (3) (10)

Question three

Discuss the nursing management of a patient receiving Digoxin (10)

Question Four

- a) How do antimicrobial drugs exact their actions? (4)
- b) Describe the pharmacokinetics of Sulfonamides (6)

Question five

Discuss Grisofulvin under the following headings

- a) Therapeutic uses (2)
- b) Pharmacokinetics (2)
- c) Interactions (2)
- d) Adverse effects (4) (10)

Question six

Describe the nursing considerations when administering cimetidine to a 70 year old man with duodenal ulcers (10)

Question seven

A man is admitted in you ward and is diagnosed with rheumatic arthritis.

- a) Name one of the drugs that can be ordered (2)

Describe the drug of your choice under the following headings

- b) Action (3)
- c) Adverse effects (5)