

Research Tool

Section A

Demographic Data:

1. Age:
2. Gender:
 - a) Male
 - b) Female
3. Years of experience:
4. Qualification:
5. Designation:
6. When calculating drug doses, is it necessary to double-check your own calculations?

Section B

Conversion of metric unit

1. Convert 5mg into microgram:
 - a) 2000 mcg
 - b) 500 mcg
 - c) 5000 mcg
 - d) 5500 mcg
2. 8 mL of a drug solution contains how many microliters?
 - a) 8 microlitre
 - b) 80 microlitre
 - c) 800 microlitre
 - d) 8000 microlitre
3. 1 teaspoon is how much ml?
 - a) 10 ml
 - b) 15 ml
 - c) 5 ml
 - d) 30 ml
4. 1oz is how much ml?
 - a) 10 ml
 - b) 15 ml
 - c) 5 ml
 - d) 30 ml
5. Convert 1 tablespoon into ml
 - a) 10 ml
 - b) 15 ml
 - c) 5 ml

d) 30 ml

Section C

Dilution and strengths of solutions.

1. How much sodium (in grams) is there in 500 ml of solution of sodium chloride 0.9% of solution:
 - a) 2.5 gram
 - b) 9 gram
 - c) 4.5 gram
 - d) 1.5 gram
2. 10 ml ampoule of adrenaline 1 in 1000, how much adrenaline in milligrams does the ampoule contains:
 - a) 10 mg
 - b) 30 mg
 - c) 40 mg
 - d) 50 mg
3. A 80kg patient is planned for suture. Maximum dose of lignocaine administered is 3mg/kg what is the maximum safe volume in ml of 2% lignocaine solution that can be given:
 - a) 14 ml
 - b) 12 ml
 - c) 10 ml
 - d) 8 ml
4. Sodium hypochlorite solution is available as 10% solution in 1 litre. How much water can be added to make its concentration 2%:
 - a) 4000 ml
 - b) 3000 ml
 - c) 2000 ml
 - d) 1000 ml
5. Atropine is available as 1mg in 10ml. How much mg/ml it forms?
 - a) 0.01 mg/ml
 - b) 0.1 mg/ml
 - c) 1 mg/ml
 - d) 10 mg/ml
6. 1% of dopexamine is available in 5ml ampoule. How many milligrams of dopexamine does that ampoule contains?
 - a) 20 mg
 - b) 30 mg
 - c) 40 mg
 - d) 50 mg

Section D

Drug dose calculation for measuring oral and intravenous medication.

1. A 45 kg female client arrives in emergency department with symptomatic bradycardia. Drug of choice is Atropine 20 microgram/kg which is given intravenously. How much atropine is required if 10ml contains 1 mg?
 - a) 3 ml
 - b) 6 ml
 - c) 9 ml
 - d) 12 ml
2. 375 mg of cefuroxime is prescribed however the drug is available in 750 mg dose. If diluted in 10 ml sterile water how much can be administered?
 - a) 5 ml
 - b) 7 ml
 - c) 6 ml
 - d) 8 ml
3. 130 mg of Paracetamol syrup is to be administered to a paediatric patient. The available dose is 250 mg per 5 ml. How much ml will you administer?
 - a) 1.6 ml
 - b) 2.6 ml
 - c) 3.6 ml
 - d) 4.6 ml
4. 125 microgram digoxin is prescribed orally. Available is digoxin elixir 50 microgram/ml with a pipette dropper. How many ml is required for this patient?
 - a) 1 ml
 - b) 1.5 ml
 - c) 2 ml
 - d) 2.5 ml
5. 1 gram of erythromycin orally is ordered. Available suspension is 250 mg in 5 ml. How many ml will you administer?
 - a) 20 ml
 - b) 30 ml
 - c) 40 ml
 - d) 50 ml
6. Gentamycin injection is available in 40mg/ml in 2ml ampoule. Prescribed dose is 4mg/kg for 60 kg patient. How many ampoules will be required?
 - a) 6 ampoules
 - b) 8 ampoules
 - c) 10 ampoules
 - d) 12 ampoules