MEDICINES MANAGEMENT ASSESSMENT - a recruitment and selection tool.

Candidate Name:	
Assessment date :	

INSTRUCTIONS TO CANDIDATES
• **You have 45 minutes to complete the assessment** • **Please show your calculations/working out in the space provided** • **Read the questions carefully and take time to check your answers after completion** • **Please note – Calculators are NOT permitted and no conferring allowed.** • **For the purpose of this assessment, the date is 01.01.2010 therefore any medication in the drug cupboard with an expiry date before this date, should not be used and should be highlighted as 'drug expired'.** • **A minimum score of 80% is required to enable you to proceed with your job application. This also applies to existing staff members.** • **If you achieve between 80% - 99%, you will undertake an educational package and demonstrate competence if you are employed, before unsupervised drug administration.**

CALCULATIONS GUIDANCE

The following may assist you with your calculations :

Strength required x volume = dose (what you want x what it is in
Strength in stock what you have got

Infusion rate calculations -

Volume (mls) = infusion rate in mls per hour
Time (hours)

Guidance for % concentration question.

The concentration of some drug solutions is expressed as a percentage weight in Volume (%w/v)
This expresses the weight of the drug per 100 ml of solution.

E.g – 1% = 1g/100ml
5% = 5g/100 ml

Worked example –

One litre (1000 ml) of 0.9 % normal saline, contains 9g of sodium chloride.

0.9 % = 0.9g in 100 ml
Multiply by 10 to make 1000ml
= 9g in 1000 ml.

Questions . Please refer to the 'virtual' drug cupboard and the example formulae.
For the purpose of this assessment the date is 01/01/2010

Q1. A patient is prescribed Tramadol 100 mg 3 times daily. How many tablets are required?

Answer and calculation.

1. **Per dose**

2 tablets

2. **In 24 hours**

6 tablets

2 marks

Q2. A patient is prescribed Benzylpenicillin 1.2g IV injection, Calculate the amount of vials required.

Answer and calculation. 1.2g = 1200mg

2 vials

1 mark

Q3. A patient is prescribed digoxin 0.5 mg.
How many tablets would you administer?

Answer and calculation. 0.5mg = 500 micrograms

2 tablets

1 mark

Q4. A patient is prescribed Cefotaxime 1g IV injection..
How many vials are needed to make up the dose prescribed?

Answer and calculation. 1g = 1000 mg 2 vials **1 mark**

Q5. Convert the following to micrograms -

1) **1.50 mg**
2) **1.75 mg**
3) **2.5g**

Answers and calculations. 1. 1500 micrograms ⟩ These are reasonable conversions 2. 1750 micrograms ⟩ 3. 2,500,000 micrograms ↑ we will NOT set a question like this. **3 marks**

Q6. How many grams of chloral hydrate are there in 100 mls of a 4 % solution?

Answer and calculation 1% = 1g in 100mls 4 grams **1 mark**

Q7. A patient is prescribed an infusion of 0.9% sodium chloride, 1 litre over 12 Hours.
What is the hourly infusion rate in mls using an infusion pump?

Answer and calculation. 83 mls/hr **1 mark**

$$\text{Rate} = \frac{V\ (\text{mls})}{T\ (\text{hrs})} = \frac{1000}{12} = 83.33$$

Q.8
A patient has been prescribed 300mg of Ibuprofen oral suspension
How much liquid would you administer?

Answer and calculation.
15 ml
1 mark

Q. 9
List the main actions you would take if you made a drug error.

Answer
1.
2 Not my area, sorry!
3.
4.
4 marks

Q.10

Prior to the administration of a controlled drug, e.g. diamorphine, name 3 of the main checking procedures before administering.

Answer
1.
2. Not my area!
3. **3 marks**

Q.11
When administering prescribed medication, what must be checked in relation to the drug? ('5 Rights')

Answer .
1.
2. Not my area.
3.
4.
5. **5 marks**

Q.12
A patient has been prescribed 335 mg of Paracetamol suspension. How many mls would you administer?

Answer and calculation $\frac{335}{250} \times \frac{5}{1}$
6.7 mls **1 mark**

$\frac{67}{50}\ \cancel{\frac{335}{250}} \times \frac{5}{1} = \frac{335}{50} = \frac{67}{10} = 6.7\text{ mls}$ — cancel again

Or - on calculator

$(335 \div 250) \times 5 = 6.7$ mls

Q.13

Look at the insulin prescription below.

Intravenous insulin sliding scale prescription

Test Stick Glucose (mmols per litre)	Sliding scale units/mls per hour (50 units/50 mls)
<3.9	0.5
4-6.9	1
7-9.9	2
10-14.9	3
15-19.9	4
>20	5

What rate would you set a patient sliding scale insulin pump if the blood sugar record was 7 .2 mmols per litre?

Answer
1 mark

Q.14 Why is it important to have the patient's weight on the drug chart?

Answer.
1 mark

Q 15
List the main actions you would take if you made a drug error.

Answer
1.
2
3. not my area
4. **4 marks**

Q.16
If a prescribed drug is unavailable out of hours, name 2 things you would do.

Answer
1. not my area.
2. **2 marks**