*Date: Candidate Name:*

*Basic Maths Assessment Test*

You have 60 minutes to complete this paper.

This test is designed to review basic ability in the application of fundamental mathematics. 30 short answer questions will be designed to assess your ability to meet the minimum requirements.

The test will comprise of various scenarios and circumstances that require the candidate to perform basic maths accurately and solve problems that involve mathematic principles.

During this assessment, if you have any concerns or any special needs, please discuss your needs with the trainer before proceeding.

1. There are a total of **30 questions** in this assessment.
2. Attempt **ALL** Questions.
3. Each question is of equal value ( **1 Mark**).
4. Read each question carefully before answering.

You will be required to achieve a minimum of 80% correct answers to successfully pass the assessment.

If the required points are not achieved, the St John Ambulance appeals process can be activated. Please discuss this with the Trainer if you wish to appeal your result.

Total Mark Achieved: /30

PASS/FAIL:

Section A

1. What is 25% of 2000
2. 17 + ………………..= 56
3. 85-17 =
4. 25% of 800 =
5. You are at an accident scene with multiple injured people. You have three colleagues with you. If there are 12 injured people and you each treat an equal number of people, how many people will you treat yourself?
6. A patient is dehydrated and needs fluid. You have an order to give 1 litre of fluid over 2 hours. How many millilitres of fluid will you give per hour?
7. **Subtract** 200 from 700
8. **Divide** 100 by 5
9. A patient needs to take 2 antibiotic tablets in the morning and two in the evening for 5 days. How many tablets do they need to take **in total?**
10. **Calculate** 200 + 100 x 3

Section B

The following section involves calculating a patient’s weight. You will also need to calculate the total medication the patient requires after you correctly calculate the patient weight.

1. Using the formula **Weight in Kilograms =** **Age x 2 + 8**, what is the weight of a **six-year-old** patient in kg? Please show your working out of the calculation.
2. How much medication will the above patient need if the patient requires 2 **mgs** of medication per kilo?
3. If a patient weighs 9,000 grams, how many kilograms do they weigh?
4. How much medication will the above patient need if the patient requires **3 units** of medication per kilogram?
5. Using the formula **Weight in Kilograms = Age x 4**, what is the weight of a **seven-year-old** patient? Please show your working out of the calculation.
6. How many mls will the patient need if the patient requires **5ml** of fluid per kilo?
7. Using the formula **Weight in kilograms = Age x 4** what is the weight of a **nine-year-old** patient? Please show your working out of the calculation.
8. The above patient requires 5ml of fluid per kilogram. How many mls of fluid do they need?
9. A patient weighing 50kg is ordered 2mg of medication per kilogram, per day. How many mgs would the patient need per day?
10. A patient weighs half of 100 kilograms. This patient needs 3 units of medication per kilogram. How many units of medication do they need?

Section C

1. You attend an accident scene with one critical patient and five stable patients. You are going to transport the critical patient and you call for back-up. If each ambulance can take three stable patients, how many more ambulances will you need?
2. If a patient drinks three 300ml bottles of water in two hours, how many litres of water do they drink in total?
3. You are required to administer 2mg of medication every 5 minutes. If you are treating the patient one hour, **how many mg in total** will the patient receive from you?
4. You are required to give a medication to a patient at **2ml per kilo**. Your patient is **55kg**. How much medication will the patient need from you?
5. You are asked to count a patient’s pulse rate. If a patient’s pulse rate is 40 beats in 30 seconds, what is it over a minute?
6. A patient has already received **900mls** of fluid over the last hour. The patient needs to receive a total of **30ml per kilo** in total. The patient is 90kg. How many more additional fluids (in mls) needs to be given to the patient?
7. A normal respiratory rate is 12 – 20 breaths per minute. Your patient take 15 breaths in 30 seconds. Is this a normal or abnormal respiratory rate?
8. If you are charging a patient **100 kina** for transport to the hospital, the patient states they are entitled to a **25% discount**, how much would need to be charged for the transport?
9. You are asked to count the patient respiratory rate. To calculate the respiratory rate, you need to count the patient breaths over 1 minute. If you count **5 breathes in 15 seconds, what is the patient’s respiratory rate?**
10. You are asked to count a patient’s pulse rate. You count 25 beats in 20 seconds. What is the rate per minute?