

**QUESTION 1 – Foam**

Define the following terms in relation to firefighting foam.

A. Expansion ratio

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B. Produced foam

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C. Fire tetrahedron

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D. Foam concentrate

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E. Aspirated

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F. Foam proportion rate

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G. Foam solution

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H. Pre-treat

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I. Scrubbing

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J. Slugging

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## QUESTION 2 – Knots and Lines

- 2.1 List and explain the construction of a rescue line, its components and the purpose of those components. **(5 marks)**

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- 2.2 What is the test regime for a rescue line? List the tests and detail them. **(5 marks)**

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- 2.3 What are two knots/methods used to connect 2 lines together? **(2 marks)**

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- 2.4 Using an illustration, detail and explain an improvised anchor point using Hydrant keys, a long crow bar, sledgehammer, general purpose line or bucket line and rescue line.  
**(8 marks)**

### QUESTION 3 - Pumps

- a) As portable pump operator operating from static supply, you notice your compound gauge is indicating an increase in vacuum. List three likely reasons for this and detail how you would correct the problem. **(12 marks)**

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2. ....  
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3. ....  
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- b) When conducting a vacuum test on a Millenium pump, the primer must not be operated for more than 'x' seconds. **(2 marks)**

What value is 'x'?  
.....

- c) When conducting a vacuum test on an appliance pump, the primer must not be operated for more than 'x' seconds. **(2 marks)**

What value is 'x'?  
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- d) List the Personal Protective Equipment that a pump operator should use during pumping operations. **(4 marks)**

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## QUESTION 4 – Testing

4.1 Detail the procedure for testing Fire Service low pressure delivery hose.

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4.2 Detail ONE of the following standard tests:

a) The alternative procedure for weights testing the 10.5 metre wooden trussed (medium extension) ladder.

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OR

b) The visual and weights tests for a gas cartridge dry powder extinguisher.

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## QUESTION 5 – Vehicle Accidents – Tool Selection and Usage

### 5.1 Glass Management

List the tools that may be used for glass management at a motor vehicle crash, when dealing with:

a) Laminated glass

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b) Tempered glass

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5.2 The *Firefighter Training Notes Station Reference Manual volume 2 section 35 (Vehicle Accidents)* lists five non-traffic hazards that may be encountered at a roadway incident. For each heading, list the Fire Service tools and equipment suitable for ensuring members of your brigade and members of the public are kept safe.

Biohazards (blood and body fluids)

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Fire hazards

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Electrical hazards

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Stability of vehicle hazards

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## QUESTION 6 – Breathing Apparatus

6.1 List the duties of the Entry Control Officer.

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6.2 In the event of an emergency, the Incident Controller may call for the evacuation of all teams. The following actions are to be taken.

*Complete the following sentences with the correct words.*

- (a) ..... are to account for all personnel.
- (b) Sound all ..... continuously.
- (c) All teams will exit the incident via the ..... and report to the ECO who is holding their tallies.
- (d) Evacuation signal may only cease on the .....

6.3 When Stage two breathing apparatus control is established, a BACO (Breathing Apparatus Control Officer) is appointed. The BACO has three duties when one of the Entry Control Officers reports an overdue team. Detail these duties.

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2. ....  
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3. ....  
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