



**higher education  
& training**

Department:  
Higher Education and Training  
**REPUBLIC OF SOUTH AFRICA**

# **MARKING GUIDELINE**

**NATIONAL CERTIFICATE (VOCATIONAL)**

**NOVEMBER EXAMINATION 2011**

**PLUMBING  
NQF LEVEL 3**

**21 NOVEMBER 2011**

**This marking guideline consists of 5 pages.**

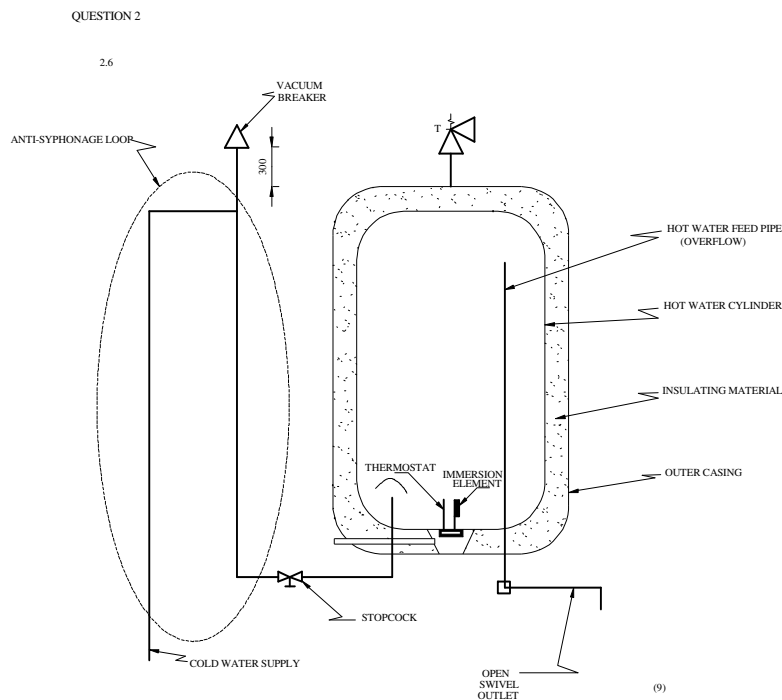
**QUESTION 1: GENERAL**

1.1.1	TRUE	(1)
1.1.2	FALSE	(1)
1.1.3	TRUE	(1)
1.1.4	TRUE	(1)
1.1.5	TRUE	(1)
1.1.6	FALSE	(1)
1.1.7	TRUE	(1)
1.1.8	TRUE	(1)
1.1.9	TRUE	(1)
1.1.10	FALSE	(1)
		<b>[10]</b>

**QUESTION 2: HOT WATER RETICULATION**

2.1	2.1.1	Select the correct diameter pipe <b>Question confusing award marks to candidate</b>	(2)
	2.1.2	Select the correct type of materials	(2)
2.2	2.2.1	To reduce more pressure	(2)
	2.2.2	To balance the pressure <b>Question confusing award marks to candidate</b>	(2)
2.3	2.3.1	Thermal insulation	(2)
	2.3.2	Expansion and contraction of the pipe work (Any one)	(2)
2.4		During winter conditions pipes can be protected from freezing by covering them with the thermal insulator called lagging.	(2)
2.5	2.5.1	Cold water supply	(1)
	2.5.2	Stop cock / <b>isolating valve</b>	(1)
	2.5.3	Pressure control and relief valve	(1)
	2.5.4	Vacuum breaker	(1)

- 2.5.5 Cold water feed to tap-off points **Cold water tee off / balance pressure** (1)
- 2.5.6 Drain cock (1)
- 2.5.7 TP safety valve (1)
- 2.5.8 Vacuum breaker (on hot water side) (1)
- 2.5.9 Hot water feed to tap-off points (1)
- 2.6 See the sketch



Correct drawing 5 marks any 4 correct labels 4 marks = 9

(9)  
[32]

**QUESTION 3: ABOVE GROUND DRAINAGE SYSTEM**

- 3.1 3.1.1 'Soil water'- is the water used to catch and flush away human waste from toilets and urinals (2)
- 3.1.2 'Waste water'- is water we have used for washing ourselves and dishes (2)
- 3.2 This is to prevent smelly or foul air entering the building (2)

3.3	3.3.1	P-trap		(2)	
	3.3.2	S-trap	}	(2)	
	3.3.3	Bottle-trap		(2)	
	3.3.4	Flexi tap		any three	(2)
3.4	3.4.1	The one pipe system			(2)
	3.4.2	The two pipe system		(2)	
		Question confusing award marks to candidate			
3.5	3.5.1	It is too expensive to install		(2)	
	3.5.2	More labour is required		(2)	
				<b>[20]</b>	

**QUESTION 4: SANITARY INSTALLATION**

4.1	4.1.1	They must be hygienic		(2)
	4.1.2	They must be smooth/ rust free		(2)
	4.1.3	They must be easy to clean		(2)
4.2	4.2.1	Bidet		(1)
	4.2.2	Ground level		(1)
	4.2.3	Manhole		(1)
	4.2.4	Water closet		(1)
				<b>[10]</b>

**QUESTION 5: RAIN WATER SYSTEM**

5.1	5.1.1	Unplasticised polyvinyl chloride (upvc)		(2)
	5.1.2	Galvanised mild steel (GMS)		(2)
	5.1.3	Aluminium		(2)
5.2	5.2.1	They are corrosion resistant		(1)
	5.2.2	They are light weight		(1)
				<b>[8]</b>

