1305/314
PLUMBING CRAFT THEORY
June/July 2021
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN PLUMBING

PLUMBING CRAFT THEORY

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;

Drawing instruments;

Mathematical tables/calculator.

Answer any FIVE of the following EIGHT questions.

All questions carry equal marks.

Maximum marks for each part of a question are as indicated.

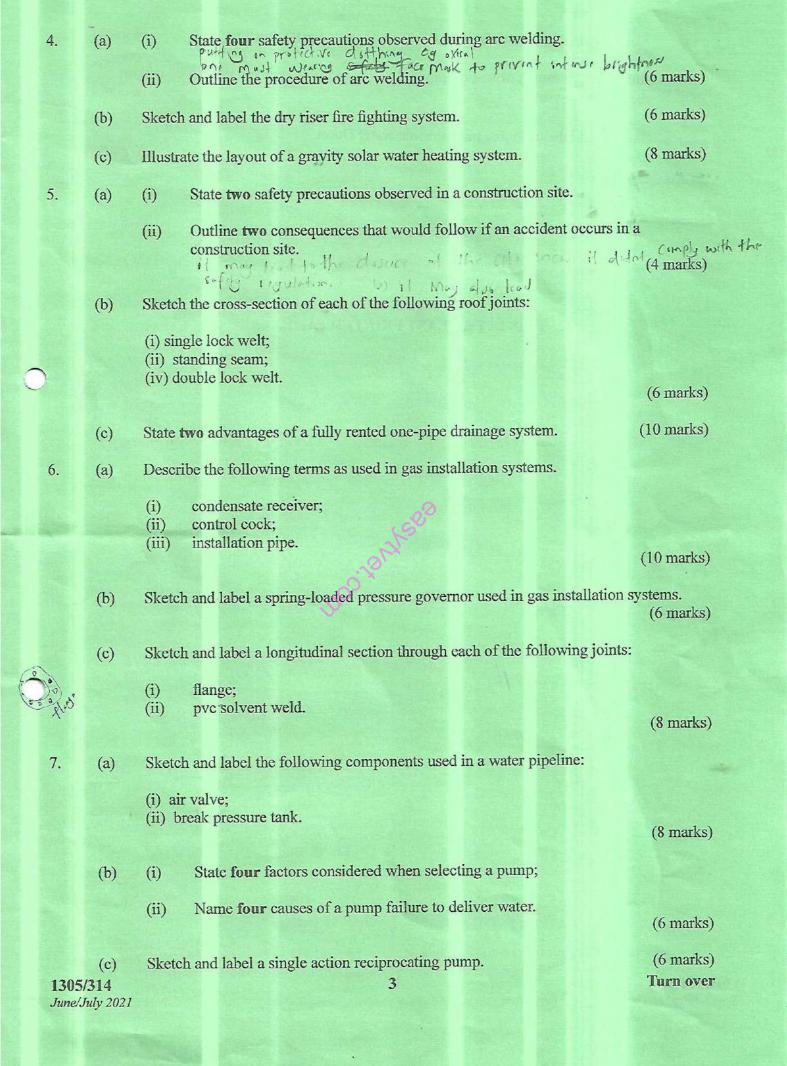
Candidates should answer the questions in English.

This paper consists of 4 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

Turn over

1.	(a)	(i) 1	Name three sources of water. Rair River	(3 marks)
		(ii) S	State the sources of water associated with each of the following water	
		7. T.	qualities:	
			I) wholesome;	
		0	II) suspicious;	
		(III) dangerous.	(3 marks)
				(S mans)
	(b)	Evolain	the following water treatment processes:	
	(b)	LAplam	ine tonowing water weathers.	
		(i) :	sterilisation;	
		And the second s	coagulation.	
				(6 marks)
				(8 marks)
	(c)	Sketch	and label a slow sand filter and explain its operation.	(o marks)
2.	(a)	Sketch	and label a crydon ballvalve.	(5 marks)
۷.	(4)	DROWN		
	(b)	Sketch	and label the following tools:	
		0.000	pipe vice;	
		(ii)	adjustable spanner.	(6 marks)
			The second secon	(0 11111110)
	(0)	(i)	State two design factors of indirect cold water supply system for a d	lomestic
	(c)		dwelling.	
		(ii)	State two advantages of indirect cold water supply systems.	
		(iii)	Sketch and label an indirect cold water supply system.	(9 marks)
				() marks)
2	(a)	Stratah	and label the combined underground drainage system.	(7 marks)
3.	(a)	SKCICII	and tabel the combined underground armings system	
	(b)	Sketch	and label a cistern type water heater.	(7 marks)
				16 1 1
	(c)	Outline	e the process of smelting iron ore in a blast furnace.	(6 marks)



- 8. (a) Sketch and label a direct hot water system for a domestic dwelling. (6 marks)
 - (b) Illustrate two causes of loss of trap seal associated with pressure difference within the drainage system. (8 marks)
 - (c) Sketch and label a double trap siphonic water closet.

(6 marks)



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