

# NATIONAL CERTIFICATE CHEMICAL PLANT OPERATION N5

(8050015)

24 November 2022 (X-paper) 09:00–12:00

Drawing instruments and nonprogrammable calculators may be used.

This question paper consists of 5 pages, 1 periodic table, 1steam table and 2 information sheets.

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# DEPARTMENT OF HIGHER EDUCATION AND TRAINING REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
CHEMICAL PLANT OPERATION N5
TIME: 3 HOURS
MARKS: 100

#### **INSTRUCTIONS AND INFORMATION**

- Answer all the questions.
- 2. Read all the questions carefully.
- Number the answers according to the numbering system used in this question paper.
- 4. Start each question on a new page.
- 5. Use only a black or blue pen.
- 6. Write neatly and legibly.

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### **QUESTION 1**

Give ONE word/term for each of the following descriptions. Write only the word/term next to the question number (1.1–1.5) in the ANSWER BOOK.



- 1.1 Energy possessed because of movement (velocity) of matter.
- 1.2 A turbine in which the energy is received from an external source.
- 1.3 A material of necessity inert or unreactive which passes through a system from a single input stream to a single output stream and remains completely unchanged during the process.
- 1.4 The reaction from SO<sub>2</sub> to SO<sub>3</sub>.
- 1.5 A mixer for light powders such as insecticides.



[5]

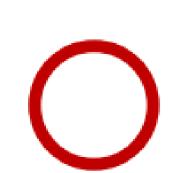


## **QUESTION 2**

Choose a/an word/item from COLUMN B that matches a description in COLUMN A. Write only the letter (A–H) next to the question number (2.1–2.5) in the ANSWER BOOK.

	COLUMN A		COLUMN B
2.1	Energy due to motion	Α	heat
2.2	Mixer for heavy, stiff or gummy materials	В	fishtail blade
		С	oxygen
2.3	It is also called a double naben blade	D	nitrogen
2.4	Can be used in food processing industries  It is colourless, odourless and tasteless gas with 79% of air by volume	Ε	hydrochloric acid
		F	potential energy
		G	bunbury mixer
		Н	ribbon mixer

(5 × 1) [5



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