

higher education & training

Department:

Higher Education and Training REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE CHEMISTRY N5

(15040015)

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

Drawing instruments may be used.

This question paper consists of 7 pages and 1 periodic table.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
CHEMISTRY N5
TIME: 3 HOURS
MARKS: 100

INSTRUCTIONS AND INFORMATION

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

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QUESTION 1

1.1 Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (1.1.1–1.1.5) in the ANSWER BOOK. Give a reason for the answer.



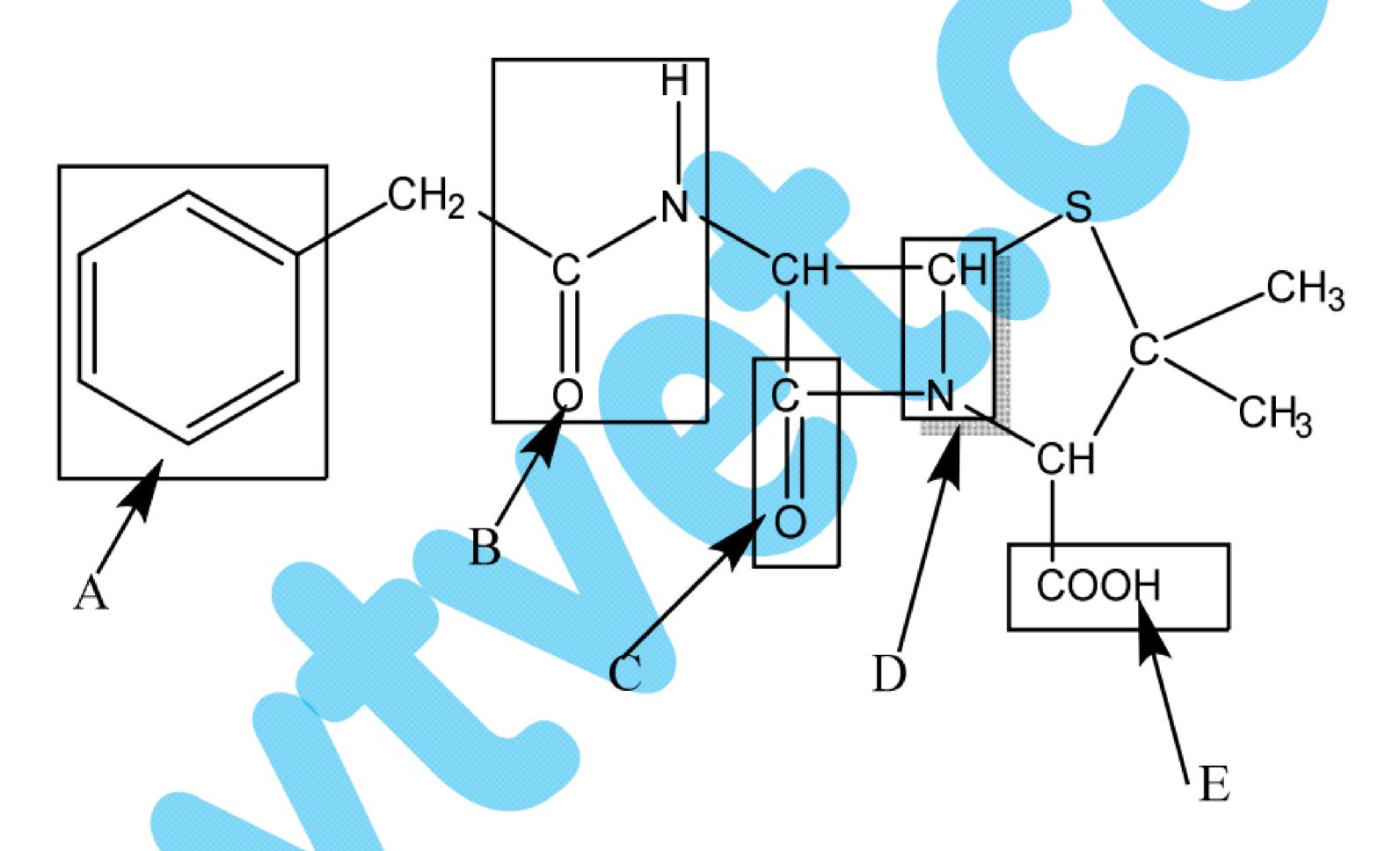
1.1.1 Propyne is classified as a saturated compound.



- 1.1.2 Acyclic compounds are organic compounds in which the carbon atoms are arranged in ring structures.
- 1.1.3 The carbon atom in methane has undergone a sp³ hybridisation.
- 1.1.4 Acetone and propanal are isomers with molecular formula C₃H₆O.
- 1.1.5 Pentane has a higher boiling point than ethane.

 (5×2) (10)

1.2 Given below is the molecular structure of penicillin (an antibiotic).



Penicillin

Identify the indicated functional groups by writing only the functional group next to the letter (A–E) in the ANSWER BOOK (e.g. F: Alcohol).

(5) [**15**]



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