

Chemistry 2541, Fall 2015

Quiz 6

(30 points)

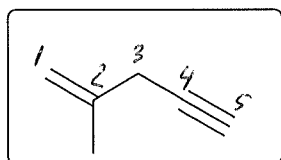
Key

Important notes:

- Please use the provided Scantron form for your answers; you can keep the sheet with the questions and can use it as scratch paper
- Do not forget to write your name on the Scantron form
- You will not receive credit for unmarked answers or for more than one mark on answer line
- Your scores will be posted on eGradebook; graded Scantron forms will not be returned to students.

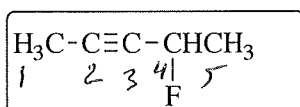
Questions 1-10: Please mark the appropriate box on the front of the Scantron form (3 pts each).

1. What is the **IUPAC name** for the compound shown in the box?



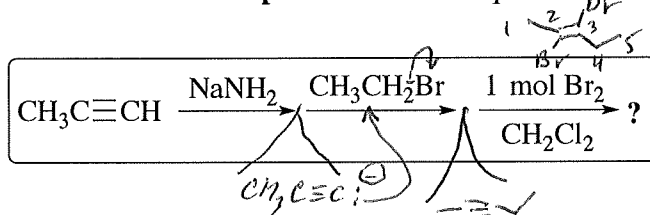
- A) (Z)-2-methyl-5-pentyn-1-ene B) 2-methyl-1-hexen-4-yne
 C) 2-methyl-1-penten-4-yne D) 4-methyl-1-hexyn-4-ene

2. What is the **IUPAC name** for the compound in the box?



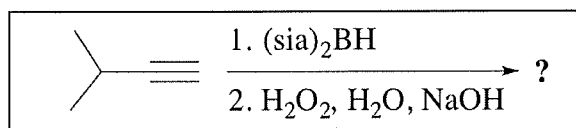
- A) 5-fluoro-4-methyl-2-pentyne B) 4-fluoro-2-pentyne
 C) 1-fluoro-2-methyl-3-pentyne D) 2-fluoroethyl-3-pentyne

3. What is the **main product** of the sequence of reactions shown in the box?

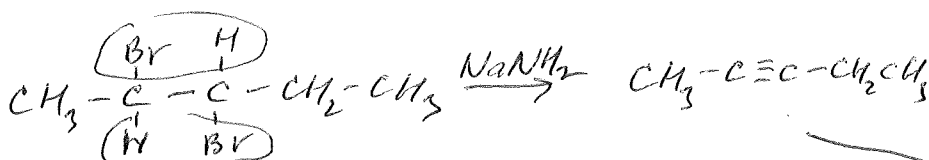


- A) (Z)-2,3-dibromo-2-pentene B) 2,3-dibromopentane
 C) (E)-2,3-dibromo-2-pentene D) 3,3-dibromopentane

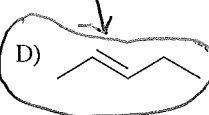
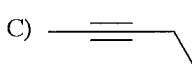
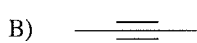
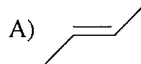
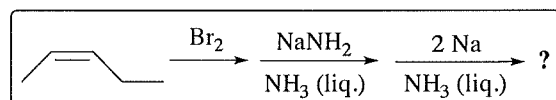
4. What is the **main product** of the reaction shown in the box?



- A) B)
 C) D)



5. What is the **main product** of the reaction shown in the box?



6. What is the common name of **trichloromethane**?

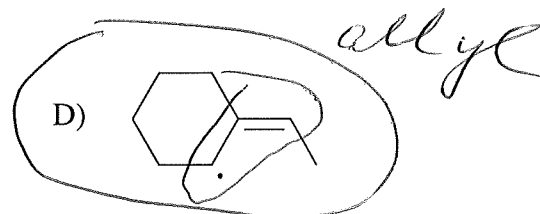
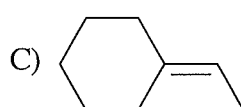
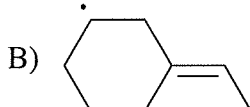
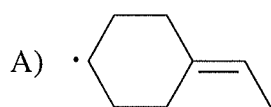
A) methylene chloride

B) vinyl chloride

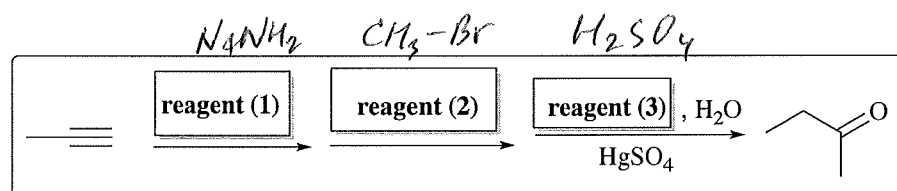
C) carbon trichloride

D) chloroform

7. Which is the most stable **radical**?



8. Which sequence of **reagents** can be used for the reaction shown in the box?



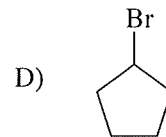
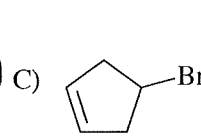
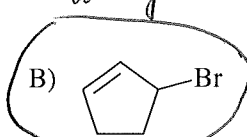
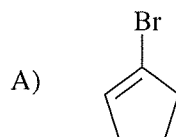
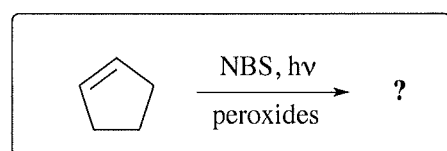
A) (1) Na, (2) C₂H₅Br, (3) H₂SO₄

B) (1) Br₂, (2) CH₃Br, (3) (sia)₂BH

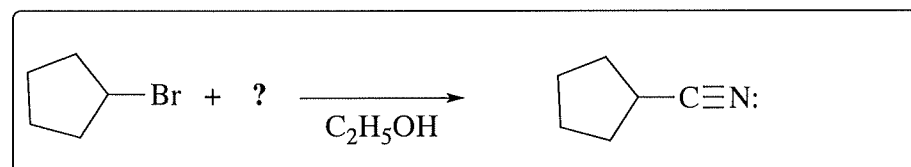
C) (1) Br₂, (2) NaNH₂, (3) (sia)₂BH

D) (1) NaNH₂, (2) CH₃Br, (3) H₂SO₄

9. What is the **main product** of the reaction shown in the box?



10. Which **reactant** is missing in the reaction shown in the box?



A) NaCN

B) CH₃NH₂

C) NaN₃

D) H₃C-C≡N: