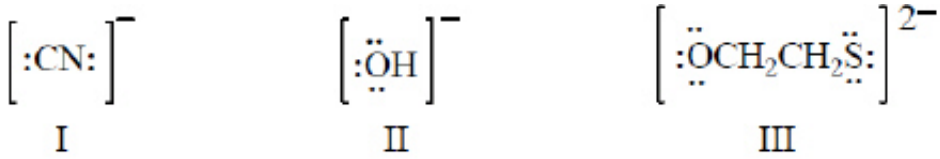
Started on	Thursday, 2 June 2022, 11:20 AM
State	Finished
Completed on	Thursday, 2 June 2022, 11:54 AM
Time taken	34 mins 32 secs
Grade	**45.00** out of 100.00

Question 1

Correct Mark 5.00 out of 5.00

Ambident nucleophiles are ones which can react with a substrate at either of two nucleophilic sites. Which of the following is not an ambident nucleophile?



I II III

IV V

Select one:

- a. I
- b. III
- c. IV
- d. II ✓ Doğru
- e. V

The correct answer is: II

Question 2 Incorrect Mark 0.00 out of 5.00

Arrange the following amines in order of increasing basicity (least to most) in the gas phase:

NH_3	$CH_3CH_2CH_2NH_2$	$(CH_3CH_2CH_2)_2NH$	$(CH_3CH_2CH_2)_3N$
I	II	III	IV

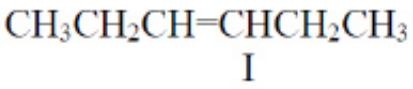
Select one:

- a. II < III < I < IV
- b. I < IV < II < III ✗ Yanlış
- c. I < II < III < IV
- d. III < I < II < IV
- e. IV < III < II < I

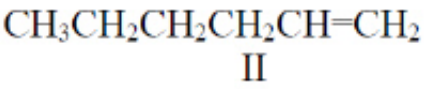
The correct answer is: I < II < III < IV

Question 3 Incorrect Mark 0.00 out of 5.00

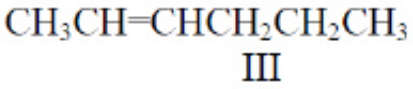
Consider the following:



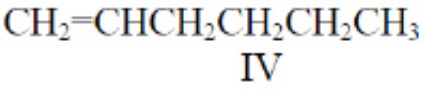
I



II



III



IV

Which two structures represent the same compound?

Select one:

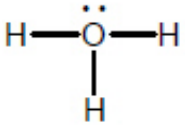
- a. II and III
- b. I and III
- c. II and IV
- d. I and II
- e. None of these choices.

✗ Yanlış

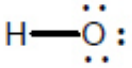
The correct answer is: II and IV

Question 4 Correct Mark 5.00 out of 5.00

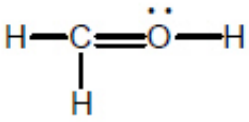
In which structure(s) below does the oxygen have a formal charge of +1?



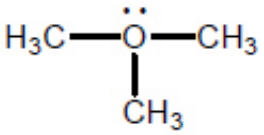
I



II



III



IV

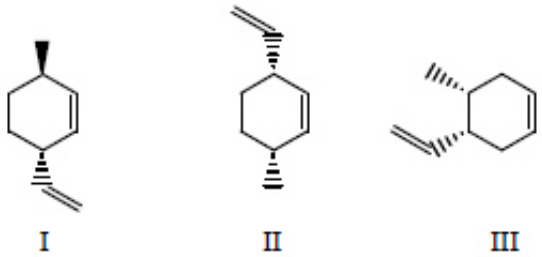
Select one:

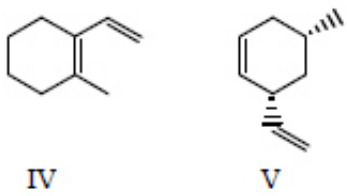
- a. I, III, and IV ✓ Doğru
- b. I only
- c. II only
- d. I and IV
- e. I and III

The correct answer is: I, III, and IV

Question 5 Correct Mark 5.00 out of 5.00

Select the structure for cis-3-methyl-6-vinylcyclohexene.





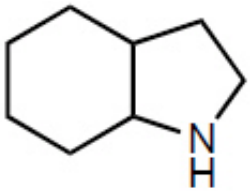
Select one:

- a. V
- b. I
- c. IV
- d. III
- e. II ✓ Doğru

The correct answer is: II

Question 6 Correct Mark 5.00 out of 5.00

What functional group is present in the following compound?



Select one:

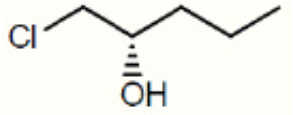
- a. 1◦ alkyl bromide
- b. 2◦ amine ✓ Doğru
- c. nitrile
- d. 1◦ amine
- e. 3◦ amine

The correct answer is: 2◦ amine

Question 7

Correct Mark 5.00 out of 5.00

What functional group(s) is/are present in the following compound?



Select one:

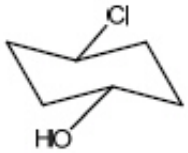
- a. Primary alkyl chloride and primary alcohol
- b. Ether and primary alcohol
- c. Primary alkyl chloride and secondary alcohol ✓ Doğru
- d. Primary alcohol and secondaryalkyl chloride
- e. Ether and secondary alcohol

The correct answer is: Primary alkyl chloride and secondary alcohol

Question 8

Not answered Marked out of 5.00

What is the IUPAC name of the following compound?



Select one:

- a. trans-1-chlorocyclohexan-3-ol
- b. trans-4-chlorocyclohexanol
- c. cis-4-chlorocyclohexanol
- d. cis-1-chlorocyclohexan-4-ol
- e. trans-3-chlorocyclohexan-1-ol

The correct answer is: trans-4-chlorocyclohexanol

Question 9 Correct Mark 5.00 out of 5.00

Which molecule would have a dipole moment greater than zero?

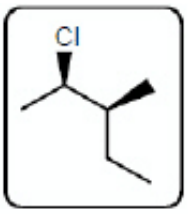
Select one:

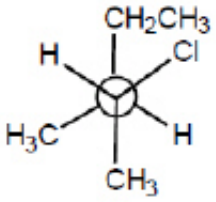
- a. BCl_3
- b. H_2O ✓ Doğru
- c. CCl_4
- d. CO_2
- e. $BeCl_2$

The correct answer is: H_2O

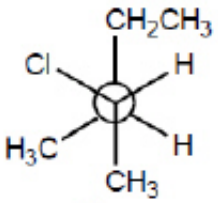
Question 10 Not answered Marked out of 5.00

Which staggered Newman projection(s), looking down the C-2? -C-3 bond (C-2 in front and-3 in back), illustrates the following boxed compound?

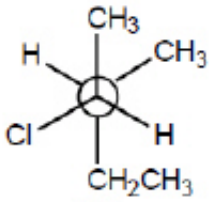




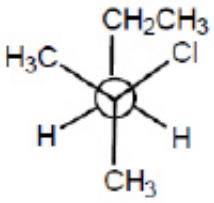
I



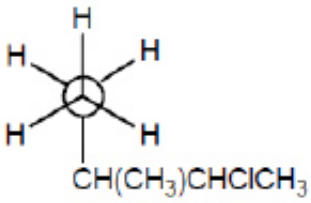
II



III



IV



V

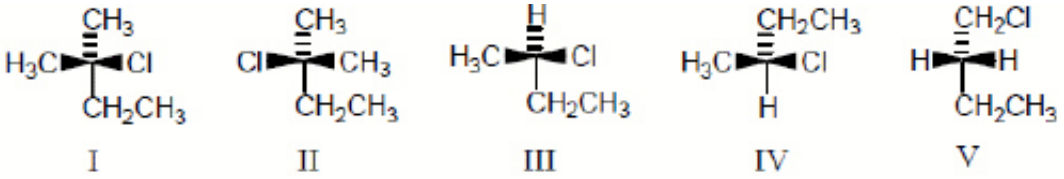
Select one:

- a. I, II and III
- b. None of these choices.
- c. II and V
- d. I and II
- e. V only

The correct answer is: None of these choices.

Question 11 Correct Mark 5.00 out of 5.00

(R) -2-Chlorobutane is represented by:



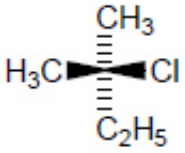
Select one:

- a. II
- b. V
- c. IV
- d. III ✓ Doğru
- e. I

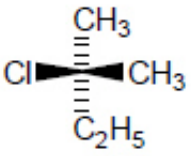
The correct answer is: III

Question 12 Correct Mark 5.00 out of 5.00

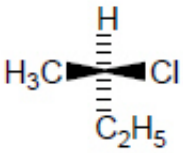
Chiral molecules are represented by:



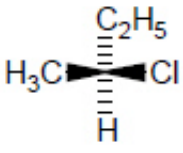
I



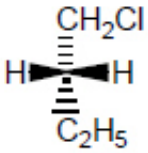
II



III



IV



V

Select one:

- a. IV alone
- b. I, II, III, IV and V
- c. I and II
- d. I, II, III and IV
- e. III and IV ✓ Doğru

The correct answer is: III and IV

Question 13 Incorrect Mark 0.00 out of 5.00

For the generalized structure $BrCH_2CHClCH_2CHClCH_2Br$ there exists what number of
stereoisomers?

Select one:

- a. 8
- b. 2
- c. 6
- d. 3
- e. 4 ✗ Yanlış

The correct answer is: 3

Question 14 Correct Mark 5.00 out of 5.00

Hexane and 3-methylpentane are examples of:

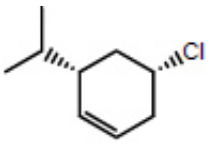
Select one:

- a. diastereomers.
- b. enantiomers.
- c. constitutional isomers. ✓ Doğru
- d. stereoisomers.
- e. None of these choices.

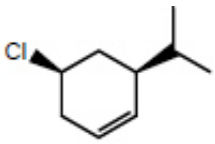
The correct answer is: constitutional isomers.

Question 15 Not answered Marked out of 5.00

I and II are:



I



II

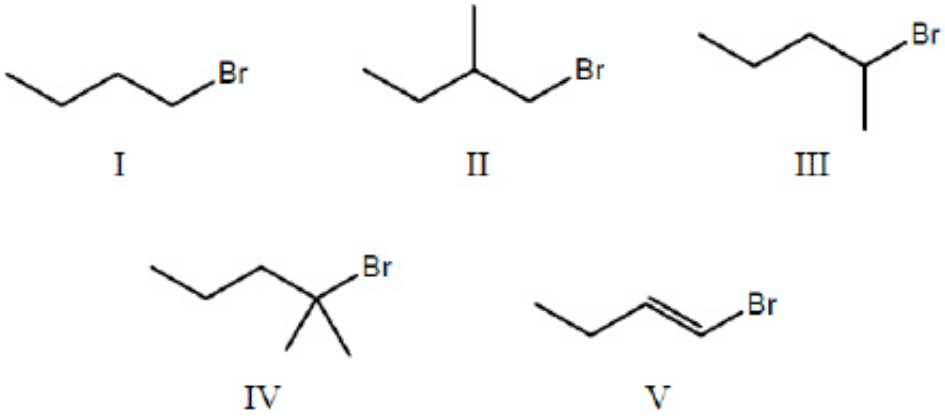
Select one:

- a. constitutional isomers.
- b. identical.
- c. diastereomers.
- d. enantiomers.
- e. not isomeric.

The correct answer is: identical.

Question 16 Not answered Marked out of 5.00

Which alkyl halide would be most reactive in an S_N1 reaction?



Select one:

- a. I
- b. IV
- c. V
- d. III
- e. II

The correct answer is: IV

Question 17 Not answered Marked out of 5.00

Which of the following alkyl bromide isomers would most readily undergo an S_N2 reaction?

Select one:

- a. 4-bromo-1-butene
- b. All will react at the same rate.
- c. 3-bromo-1-butene
- d. bromocyclobutane
- e. 1-bromo-1-butene

The correct answer is: 4-bromo-1-butene

Question 18 Not answered Marked out of 5.00

Which of the following reactions proceeds with inversion of configuration at the carbon
bearing the leaving group?

Select one:

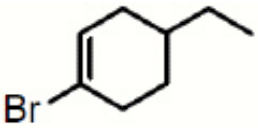
- a. E2
- b. All of these answer choices are correct.
- c. S_N2
- d. S_N1
- e. E1

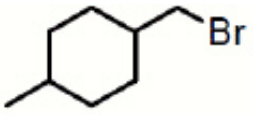
The correct answer is: S_N2

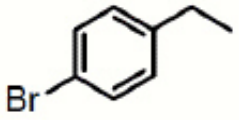
Question 19 Not answered Marked out of 5.00

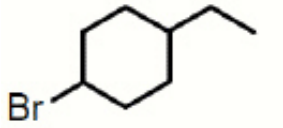
Which of the following would be most reactive in an S_N2 reaction?

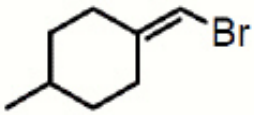
Select one:

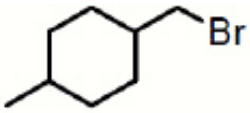
a. 

b. 

c. 

d. 

e. 

The correct answer is: 

Question 20 Not answered Marked out of 5.00

The reaction between which combination of substances below cannot be classified as a
Bronsted-Lowry acid-base reaction?

Select one:

- a. two of these choices
- b. $H_2SO_4 + CH_3CO_2Na$
- c. $BF_3 + NH_3$
- d. $H_3O^+ + CH_3NH^-$
- e. $CH_3Li + C_2H_5OH$

The correct answer is: $BF_3 + NH_3$