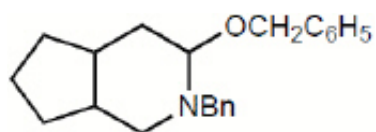


Question 2

Correct

Mark 1.00 out of 1.00

What common group is attached to both the ether and 3^o amine in the following molecule?



Select one:

- ☐ a. ethyl
- ☐ b. azide
- ☐ c. phenyl
- ☐ d. heptyl
- ☒ e. benzyl

✓ Doğru

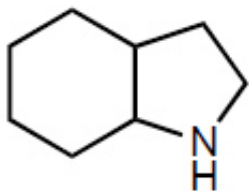
The correct answer is: benzyl

Question 3

Correct

Mark 1.00 out of 1.00

What functional group is present in the following compound?



Select one:

- ☐ a. 1° alkyl bromide
- ☒ b. 2° amine
- ☐ c. nitrile
- ☐ d. 3° amine
- ☐ e. 1° amine

✓ Doğru

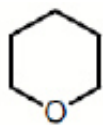
The correct answer is: 2° amine

Question 4

Correct

Mark 1.00 out of 1.00

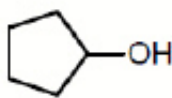
Which compound would have the lowest boiling point?



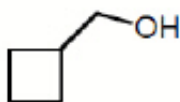
I



II



III



IV



V

Select one:

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

✓ Doğru

The correct answer is: I

Question 5

Correct

Mark 1.00 out of 1.00

Which compound would you expect to have the highest boiling point?

Select one:

- ☐ a. ethene
- ☒ b. bromoethane
- ☐ c. ethane
- ☐ d. methane
- ☐ e. ethyne



Doğru

The correct answer is: bromoethane

Question 6

Correct

Mark 1.00 out of 1.00

Which of the following organic compounds is the strongest acid?

Select one:

- ☐ a. C_6H_{12} $\text{pK}_a = 52$
- ☐ b. $\text{CH}_3\text{CH}_2\text{OH}$ $\text{pK}_a = 18$
- ☒ c. $\text{CF}_3\text{CO}_2\text{H}$ $\text{pK}_a = 0$
- ☐ d. $\text{CH}_3\text{CO}_2\text{H}$ $\text{pK}_a = 5$
- ☐ e. CH_3CH_3 $\text{pK}_a = 50$



Doğru

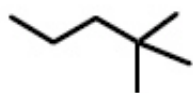
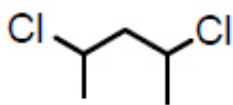
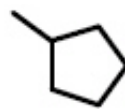
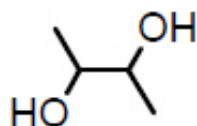
The correct answer is: $\text{CF}_3\text{CO}_2\text{H}$ $\text{pK}_a = 0$

Question 7

Correct

Mark 1.00 out of 1.00

A tertiary carbon atom is present in which of these compounds?

**I****II****III****IV****V**

Select one:

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

✓ Doğru

The correct answer is: III and V

Question 8

Correct

Mark 1.00 out of 1.00

For a molecule to possess a dipole moment, which following condition is necessary but not sufficient?

Select one:

- ☐ a. three or more atoms in the molecule
- ☒ b. presence of one or more polar bonds
- ☐ c. absence of a carbon-carbon double or triple bond
- ☐ d. presence of oxygen or fluorine
- ☐ e. a non-linear structure



Doğru

The correct answer is: presence of one or more polar bonds

Question 9

Correct

Mark 1.00 out of 1.00

Which of these is not a true statement?

Select one:

- ☐ a. All Lewis acids are electron deficient.
- ☐ b. All Bronsted-Lowry acids contain hydrogen.
- ☐ c. All Lewis bases are also Bronsted-Lowry bases.
- ☒ d. All Lewis acids contain hydrogen.
- ☐ e. According to the Bronsted-Lowry theory, water is both an acid and a base.



Doğru

The correct answer is: All Lewis acids contain hydrogen.

Question 10

Correct

Mark 1.00 out of 1.00

A conjugate base of sulfuric acid is:

Select one:

- ☐ a. H_2SO_3
- ☐ b. H_3SO_4^+
- ☐ c. SO_3
- ☒ d. HSO_4^-
- ☐ e. HSO_3^-



Doğru

The correct answer is: HSO_4^-