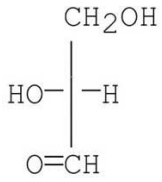
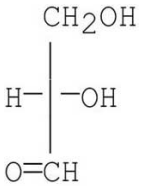
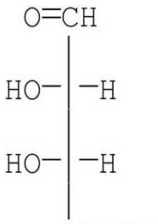
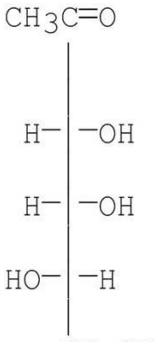
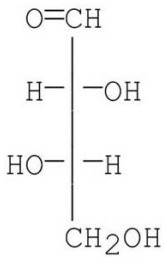
1) Quale composto è un monosaccaride appartenente alla serie sterica D?

A.


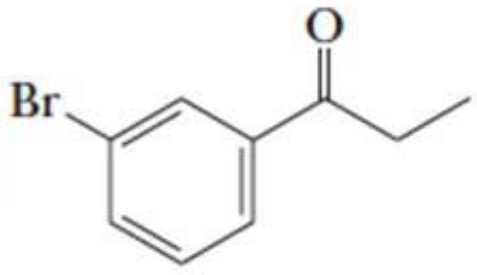
B.


C.


D.


E.


2) Quali sono i reagenti attraverso i quali l'1-fenil-1-propanone può essere convertito nel seguente composto?

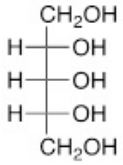


A. NBS/perossidi
B. Br_2/H_2O
C. Br_2/CH_3COOH

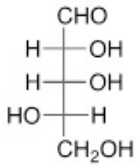
D. $Br_2/FeBr_3$
E. Br_2/OH^-

3) Qual è la proiezione di Fischer corretta per il D-ribosio?

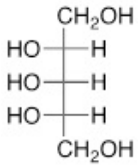
A.



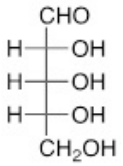
B.



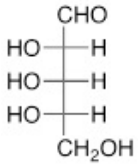
C.



D.



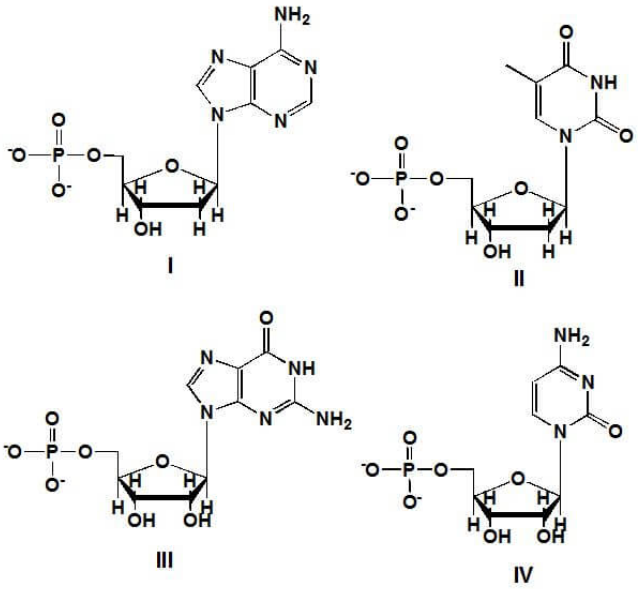
E.



4) Calcolare il numero di insaturazioni per il composto di formula molecolare C_4H_4S

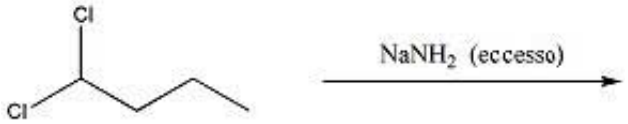
A. 3
B. 4
C. 2
D. 0
E. 1

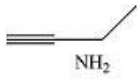
5) Quali dei seguenti composti sono acetali?

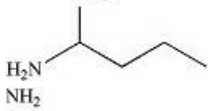


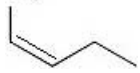
A. II, III. IV
B. I, II, III
C. I, II, III, IV
D. II, III, IV
E. II, IV

6) Qual è il principale prodotto della reazione?

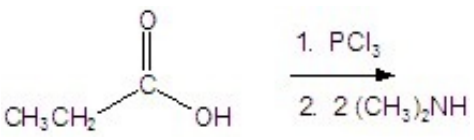


A. Non avviene alcuna reazione
B. 

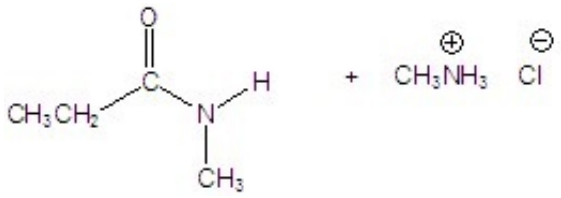
C. 

D. 
E. 

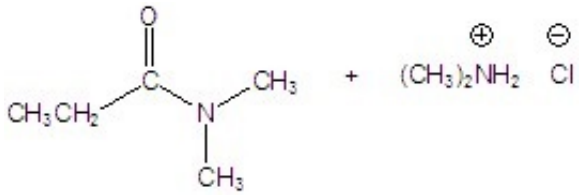
7) Indicare il prodotto della reazione:



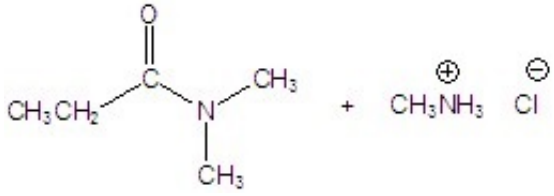
A.



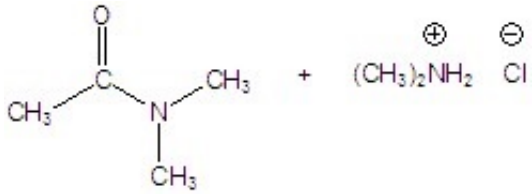
B.



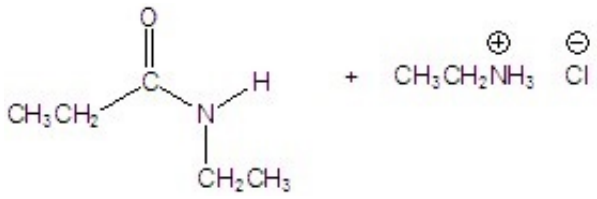
C.



D.



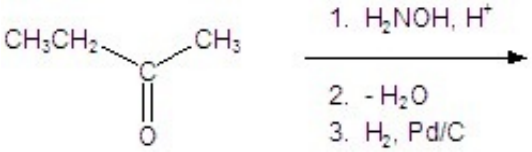
E.



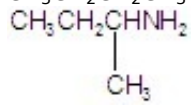
8) A parità del gruppo R, ordinare i seguenti composti in ordine di punto di ebollizione crescente:
1) RCOOH;
2) ROH;
3)RH;
4)RX

A. 3,2,4,1
B. 4,3,2,1
C. 2,1,3,4
D. 3,4,2,1
E. 1,2,3,4

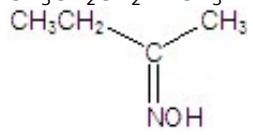
9) Qual è il prodotto della reazione?

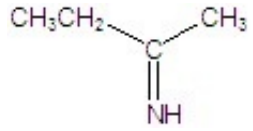


A. $CH_3CH_2CH_2CH_3$

B. 

C. $CH_3CH_2CH_2NHCH_3$

D. 

E. 

10) Quanti prodotti si ottengono per reazione del benzene con il Br_2 in presenza di $FeCl_3$?

A. 1
B. 2
C. 4
D. 5
E. 3

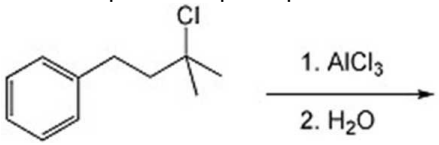
11) La ciclizzazione dei monosaccaridi porta alla formazione di quale gruppo funzionale?

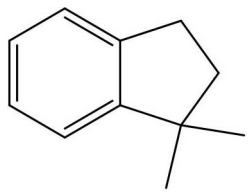
A. Aldeide
B. Chetone
C. Acido Carbossilico
D. Emiacetale
E. Acetale

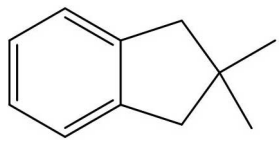
12) La nitrazione diretta dell'anilina fornisce:

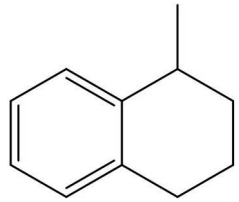
A. *o*-nitroanilina, *m*-nitroanilina, *p*-nitroanilina e prodotti di ossidazione dell'anilina
B. *o*-nitroanilina e *p*-nitroanilina
C. *o*-nitroanilina e *m*-nitroanilina
D. *p*-nitroanilina
E. *o*-nitroanilina

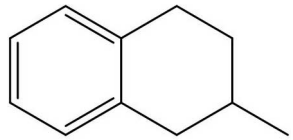
13) Qual è il prodotto principale della seguente reazione?

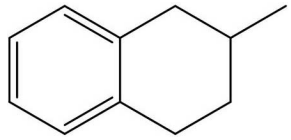


A. 

B. 

C. 

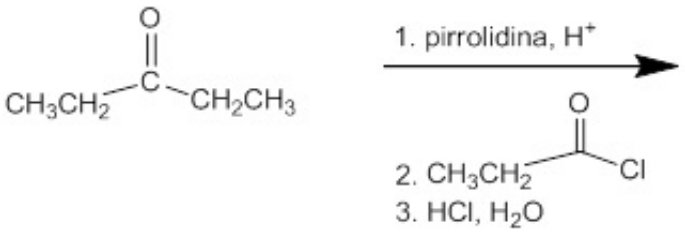
D. 

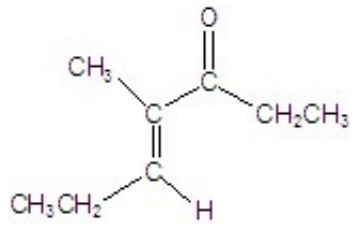
E. 

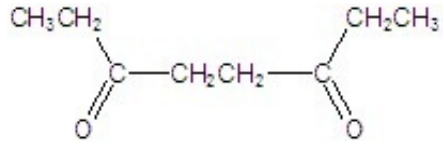
14) Quale composto ha il più basso pK_a?

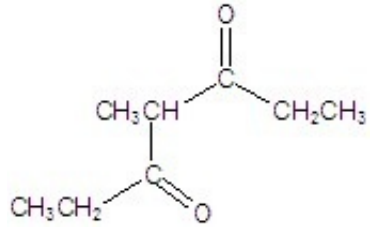
A. $CH_3CH_2O_2CCH_2CHO$
B. $(CH_3CH_2O_2C)_2CH_2$
C. $CH_3CH_2COCH_2CHO$
D. $(NC)_2CH_2$
E. $PhCOCH_2COCH_3$

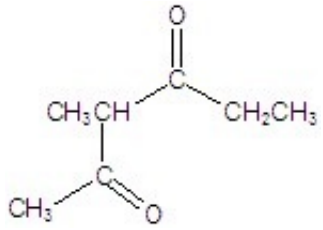
15) Indicare il prodotto principale della seguente reazione:

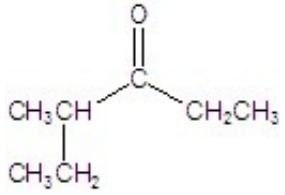


A. 

B. 

C. 

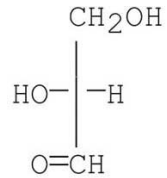
D. 

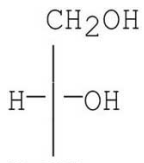
E. 

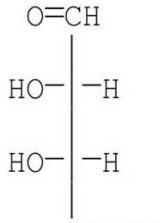
RISPOSTE CORRETTE

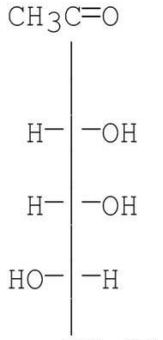
1) A
2) D
3) D
4) A
5) C
6) B
7) B
8) D
9) B
10) A
11) D
12) A
13) A
14) C
15) C

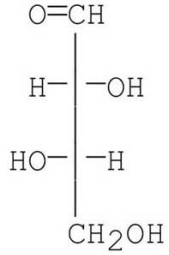
1) Quale composto è un monosaccaride appartenente alla serie sterica D?

A. 

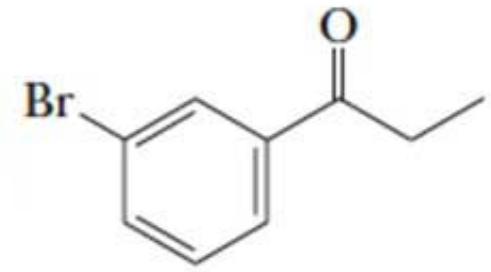
B. 

C. 

D. 

E. 

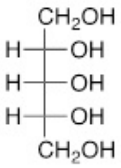
2) Quali sono i reagenti attraverso i quali l'1-fenil-1-propanone può essere convertito nel seguente composto?



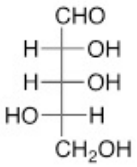
A. NBS/perossidi
B. Br_2/H_2O
C. Br_2/CH_3COOH
D. $Br_2/FeBr_3$
E. Br_2/OH^-

3) Qual è la proiezione di Fischer corretta per il D-ribosio?

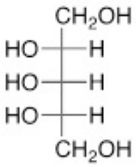
A.



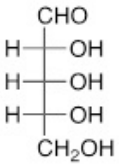
B.



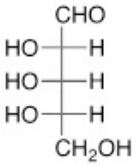
C.



D.



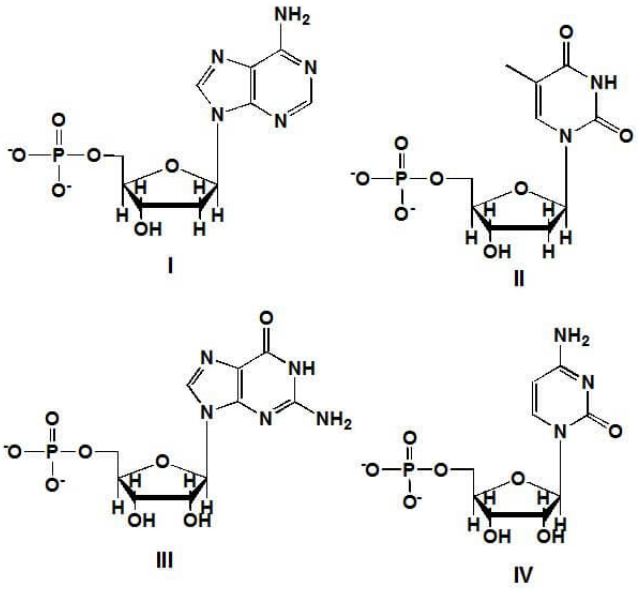
E.



4) Calcolare il numero di insaturazioni per il composto di formula molecolare C_4H_4S

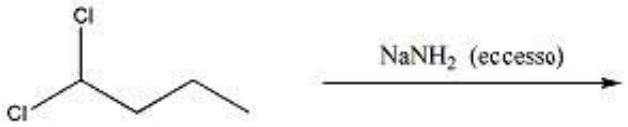
A. 3
B. 4
C. 2
D. 0
E. 1

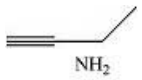
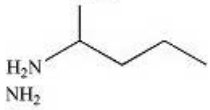
5) Quali dei seguenti composti sono acetali?

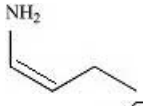


A. II, III. IV
B. I, II, III
C. I, II, III, IV
D. II, III, IV
E. II, IV

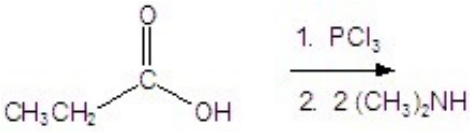
6) Qual è il principale prodotto della reazione?



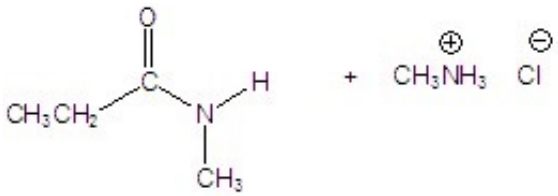
A. Non avviene alcuna reazione
B. 
C. 

D. 
E. 

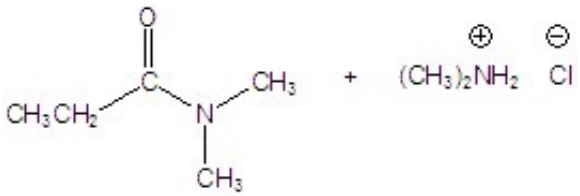
7) Indicare il prodotto della reazione:



A.



B.



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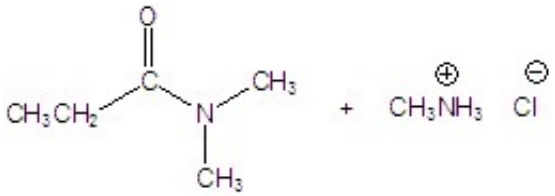

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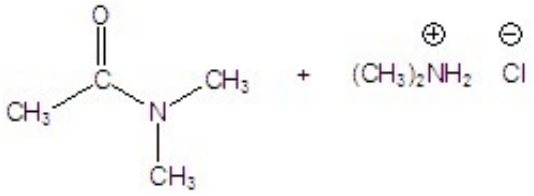

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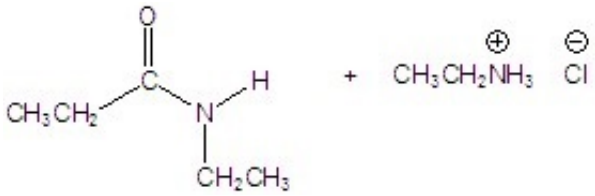
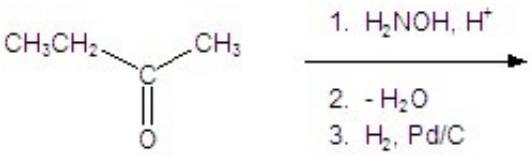


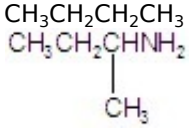
8) A parità del gruppo R, ordinare i seguenti composti in ordine di punto di ebollizione crescente:
1) RCOOH;
2) ROH;
3)RH;
4)RX

A. 3,2,4,1
B. 4,3,2,1
C. 2,1,3,4
D. 3,4,2,1
E. 1,2,3,4

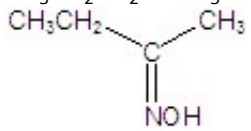
9) Qual è il prodotto della reazione?

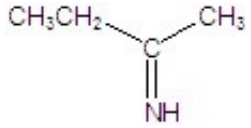


A. $CH_3CH_2CH_2CH_3$

B. 

C. $CH_3CH_2CH_2NHCH_3$

D. 

E. 

10) Quanti prodotti si ottengono per reazione del benzene con il Br_2 in presenza di $FeCl_3$?

A. 1
B. 2
C. 4
D. 5
E. 3

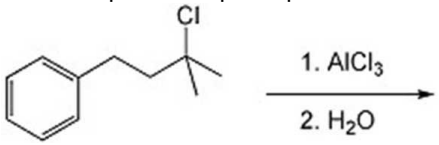
11) La ciclizzazione dei monosaccaridi porta alla formazione di quale gruppo funzionale?

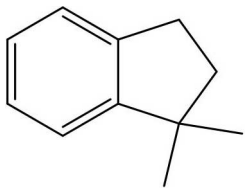
A. Aldeide
B. Chetone
C. Acido Carbossilico
D. Emiacetale
E. Acetale

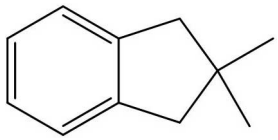
12) La nitrazione diretta dell'anilina fornisce:

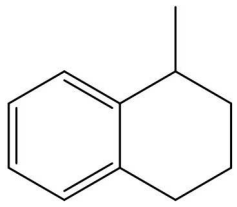
A. *o*-nitroanilina, *m*-nitroanilina, *p*-nitroanilina e prodotti di ossidazione dell'anilina
B. *o*-nitroanilina e *p*-nitroanilina
C. *o*-nitroanilina e *m*-nitroanilina
D. *p*-nitroanilina
E. *o*-nitroanilina

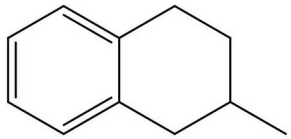
13) Qual è il prodotto principale della seguente reazione?

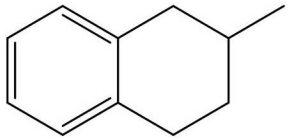


A. 

B. 

C. 

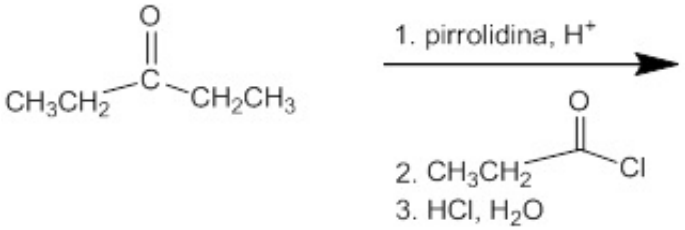
D. 

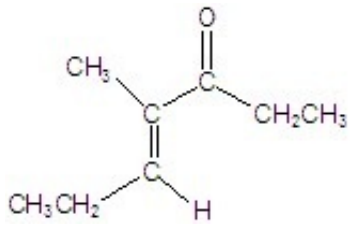
E. 

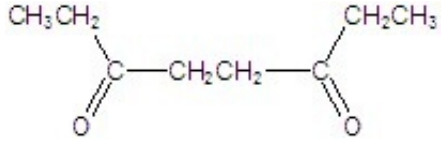
14) Quale composto ha il più basso pK_a?

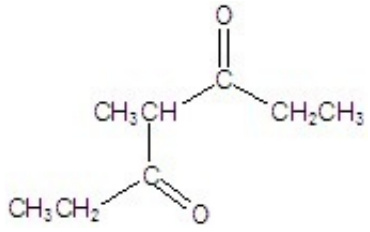
A. $CH_3CH_2O_2CCH_2CHO$
B. $(CH_3CH_2O_2C)_2CH_2$
C. $CH_3CH_2COCH_2CHO$
D. $(NC)_2CH_2$
E. $PhCOCH_2COCH_3$

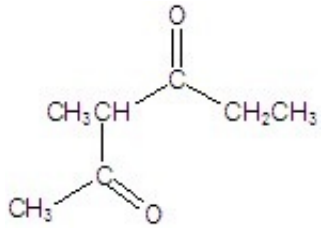
15) Indicare il prodotto principale della seguente reazione:

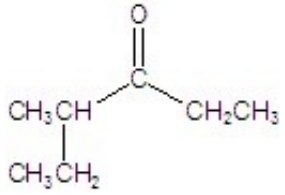


A. 

B. 

C. 

D. 

E. 

RISPOSTE CORRETTE

1) A
2) D
3) D
4) A
5) C
6) B
7) B
8) D
9) B
10) A
11) D
12) A
13) A
14) C
15) C