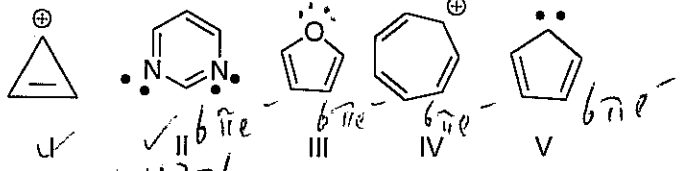
Instructor: Desmond Kwan
CH222
Exam 3A
Name: (Print)_____

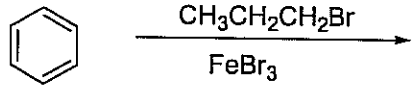
Multiple choices (100 pts): Each question has only one correct answer. Mark your answer on a scantron sheet. Only seventeen out of twenty five questions will counted.

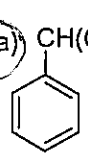
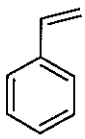
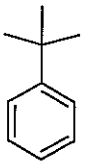
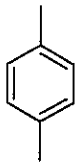
1. Which of these compounds are aromatic?



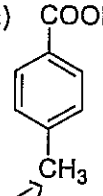
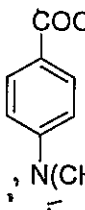
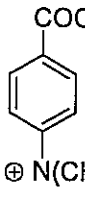
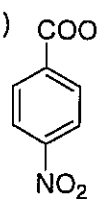
(a) I, II, and III (b) I, III, and IV (c) I, III, and V (d) I, II, III, IV, and V (e) none of these answers

2. What would be the rearrangement product of this reaction?

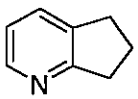
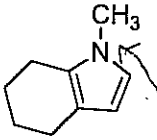
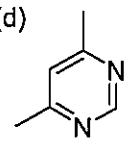


(a)  (b)  (c)  (d)  (e) none of these answers

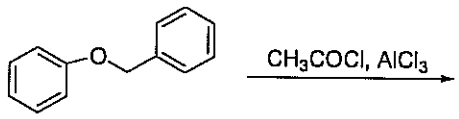
3. Which is the weakest acid?

(a)  (b)  (c)  (d)  (e) none of these answers

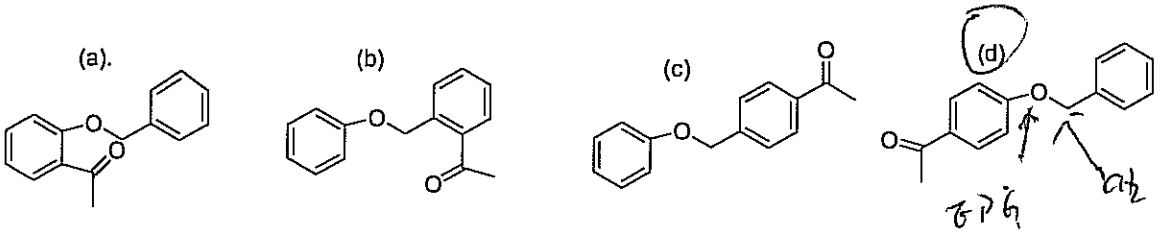
4. Which is the weakest base?

(a)  (b) $N(CH_3)_3$ (c)  (d)  (e) none of these answers

5. Which would be the major product(s) of this reaction?



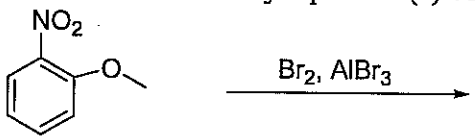
Will Not be on the exam -



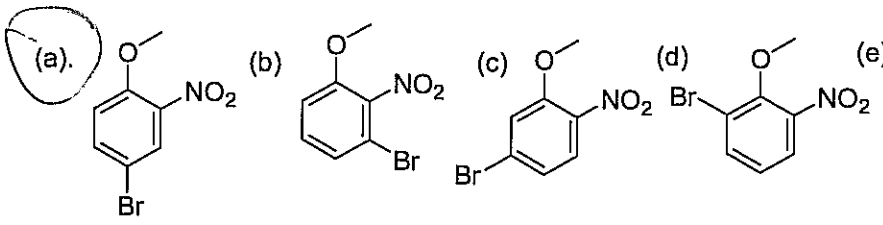
EDG by Resonance (stronger EDG) EDG by Inductive effect

(e) none of these answers

6. Which would be the major product(s) of this reaction?

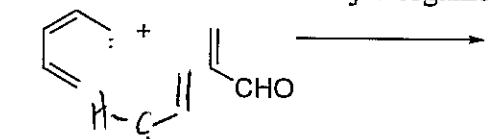


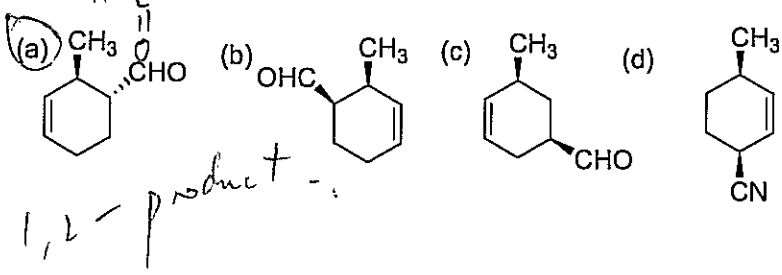
Will Not be on the exam -



(e) none of these answers

7. Which would be the major organic product of this reaction?

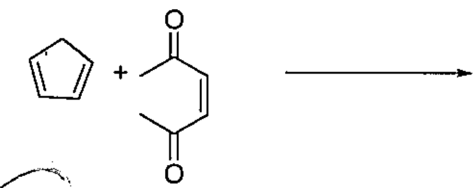




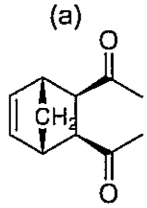
(e) none of these answers

1,2 - product -

8. Which would be the major organic product of this reaction?



(a)



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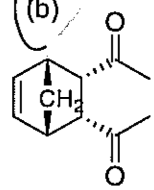
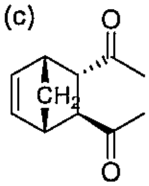


(c)



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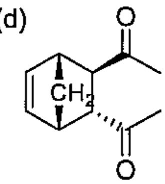
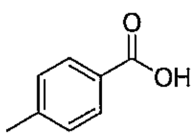


(e) none of these answers

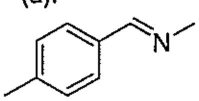
9. Which would be the major organic product of this multi-synthesis?



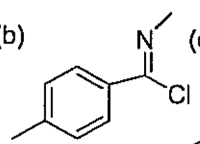
1. $SOCl_2$
2. $HN(CH_3)_2$
3. $LiAlH_4$
4. H_3O^+/H_2O

Will Not be on the 3rd Exam..

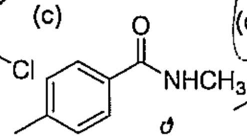
(a).



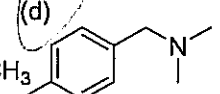
(b)



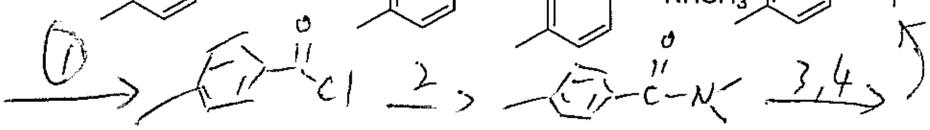
(c)



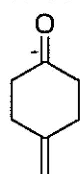
(d)



(e) none of these answers



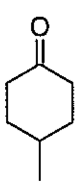
10. Which would be the major organic product of this reaction?



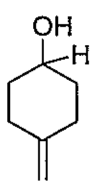
$NaBH_4$

CH_3OH

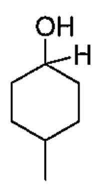
(a)



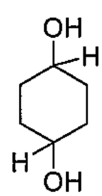
(b)



(c)

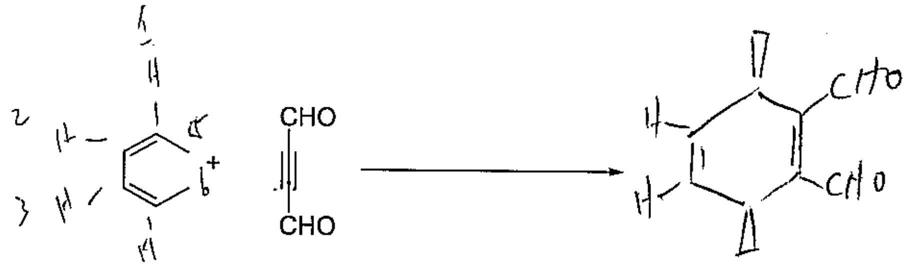


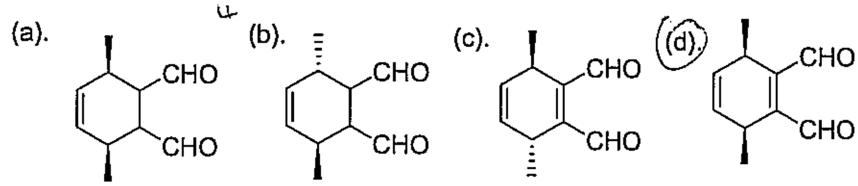
(d)



(e) none of these answers

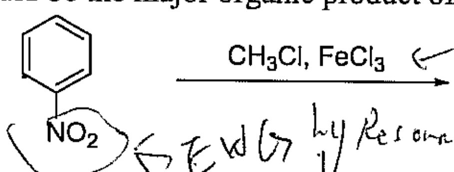
11. Which would be the major organic product of this reaction?





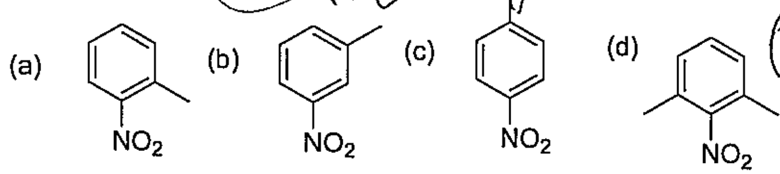
(e) none of these answers

12. Which would be the major organic product of this reaction?



Fridel Cratt Rxn does not work on Deactivated system.

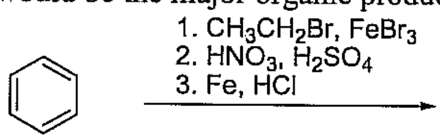
EWG by Resonance.



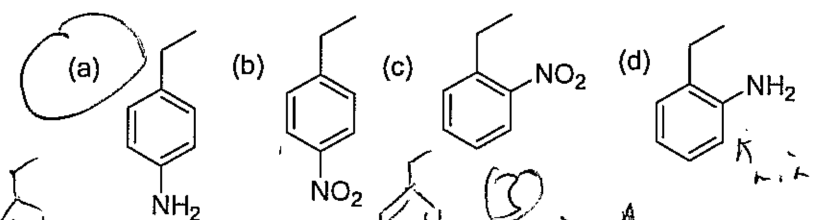
(e) none of these answers

Will Not be on the 3rd Exam.

13. Which would be the major organic product of this reaction?

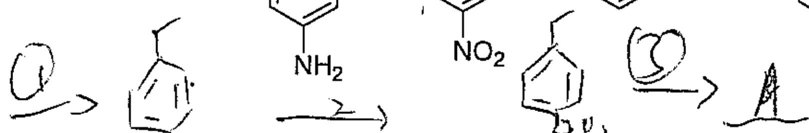


Will Not be on the 3rd Exam.

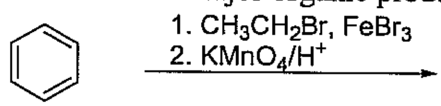


(e) none of these answers

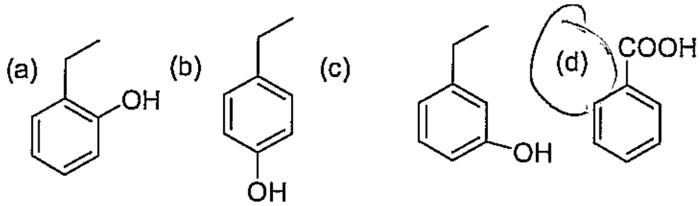
minor product.



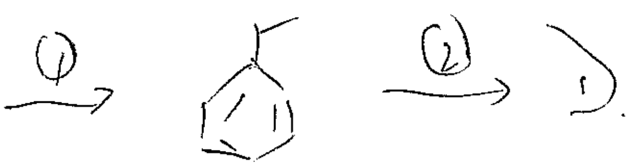
14. Which would be the major organic product of this reaction?



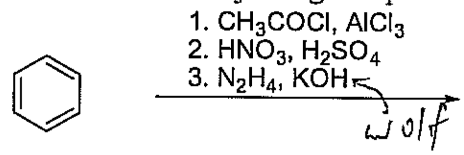
Will Not be on the 3rd Exam.



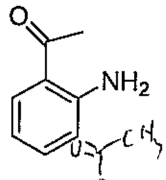
(e) none of these answers

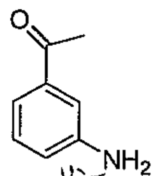


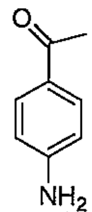
15. Which would be the major organic product of this reaction? Will Not be on the 3rd. exam.

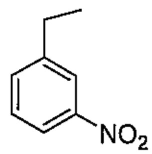


Wolf Kinsner Reduction.

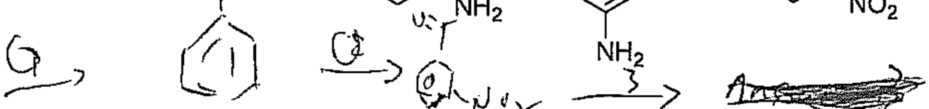
(a) 

(b) 

(c) 

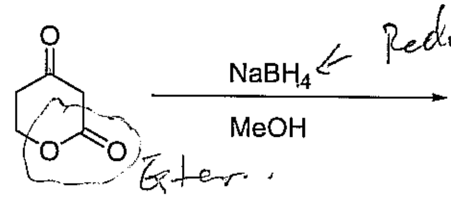
(d) 

(e) none of these answers



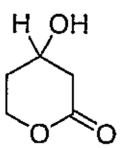
Answer. D

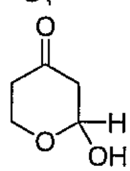
16. Which would be the major organic product of this reaction?

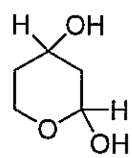


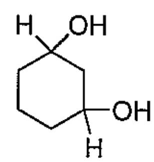
Reduce ketones and/or Aldehyde Not ester.

Ester.

(a) 

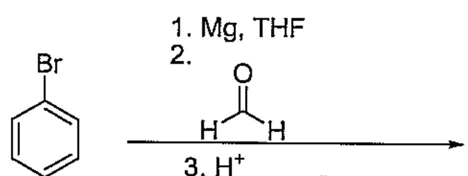
(b) 

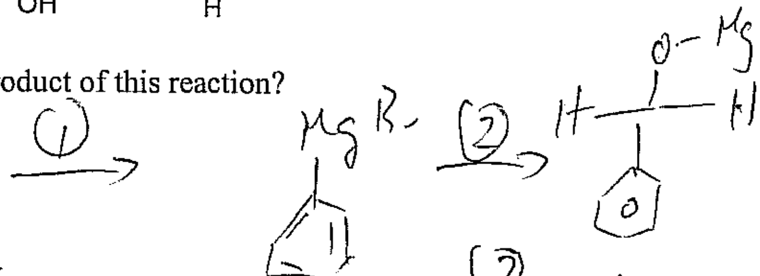
(c) 

(d) 

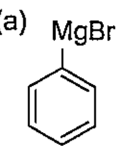
(e) none of these answers

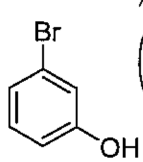
17. Which would be the major organic product of this reaction?

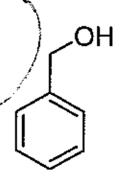


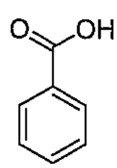


Answer C

(a) 

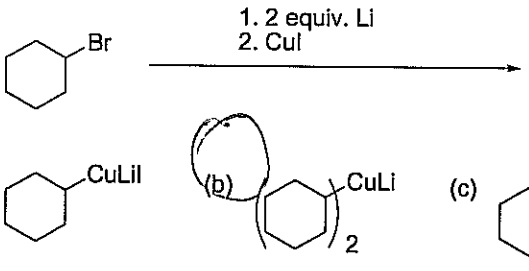
(b) 

(c) 

(d) 

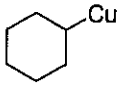
(e) none of these answers

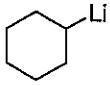
18. What is the major product of this reaction?



(a)

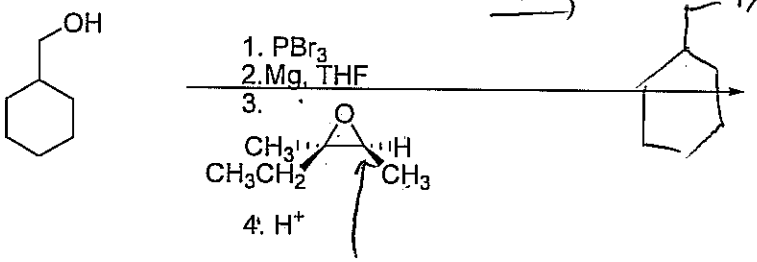
(b)

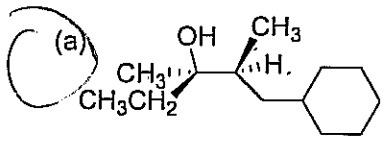
(c) 

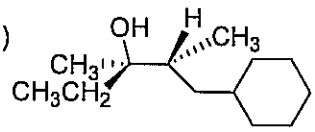
(d) 

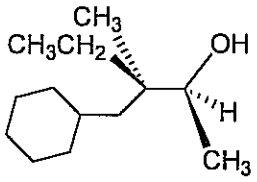
(e) none of these answers

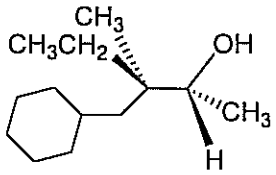
19. Which would be the major organic product of this reaction?



(a) 

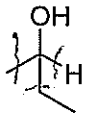
(b) 

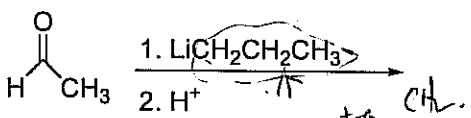
(c) 

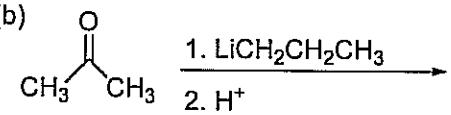
(d) 

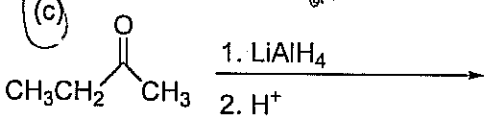
(e) none of these answers

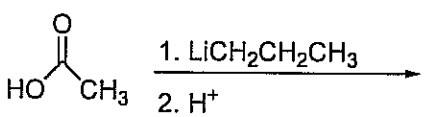
20. Which reagent or set of reagents will best used for producing the synthetic target shown?



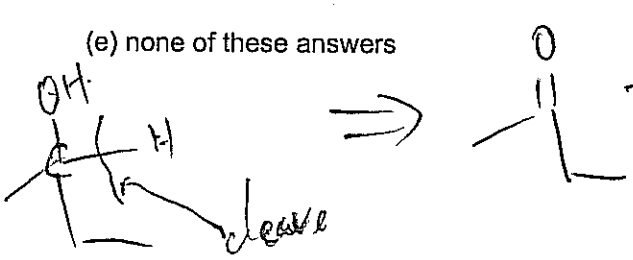
(a) 

(b) 

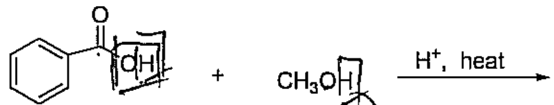
(c) 

(d) 

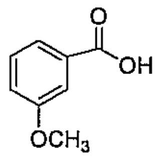
(e) none of these answers

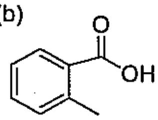


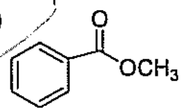
21. Predict the major organic product for the reaction shown below:

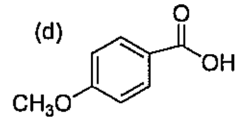


Fischer Esterification

(a) 

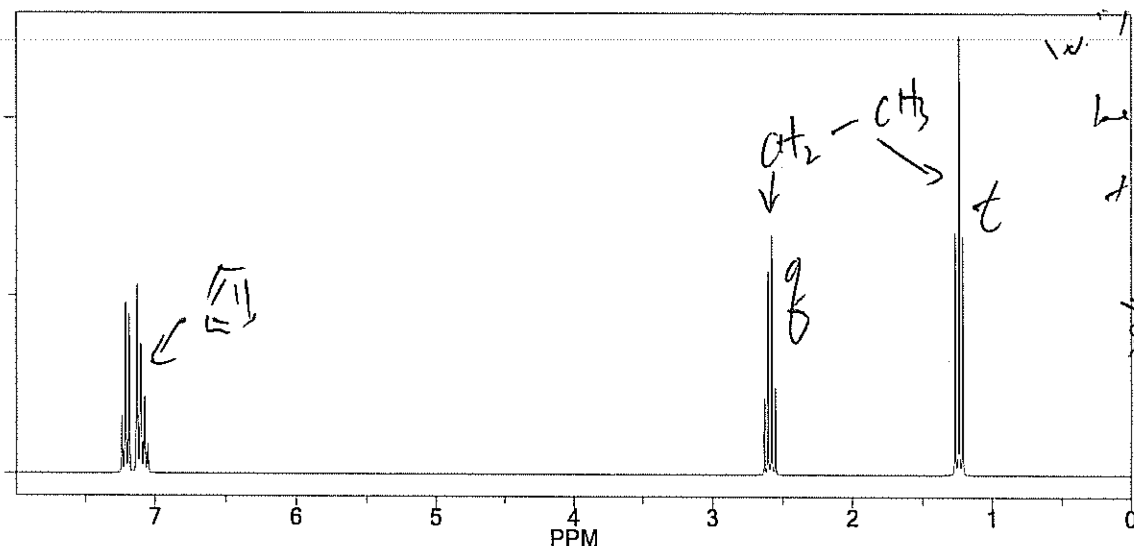
(b) 

(c) 

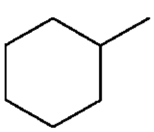
(d) 

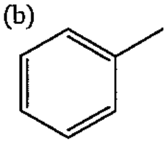
(e) none of these answers

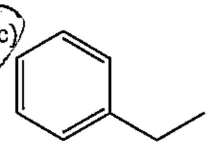
22. Which structure is consistent with this ^{1}H NMR spectrum?

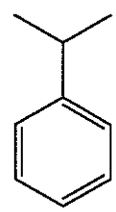


will Not be on the exam 3rd

(a) 

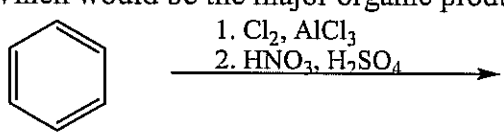
(b) 

(c) 

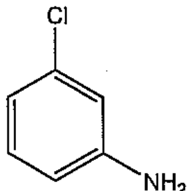
(d) 

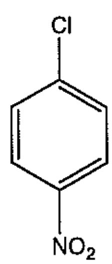
(e) none of these answers

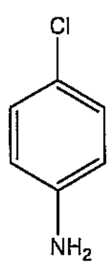
23. Which would be the major organic product of this reaction?

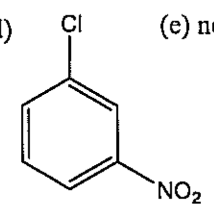


will Not be on the 3rd exam.

(a) 

(b) 

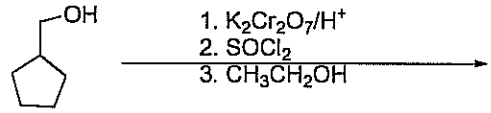
(c) 

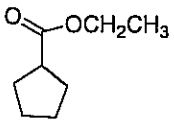
(d) 

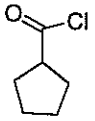
(e) none of these answers

answer B.

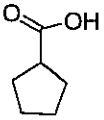
24. Which would be the major organic product of this reaction?



(a) 

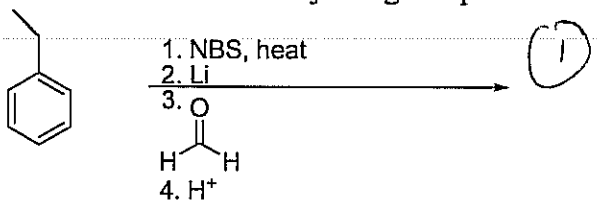
(b) 

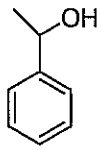
(c) CH_3CH_2Cl

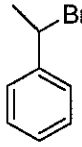
(d) 

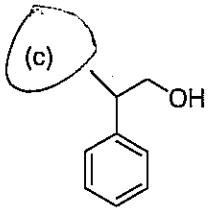
(e) none pf these answers

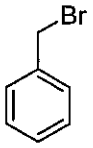
25. Which would be the major organic product of this reaction?



(a) 

(b) 

(c) 

(d) 

(e) none of these answers