



Time 00: 45 Hour

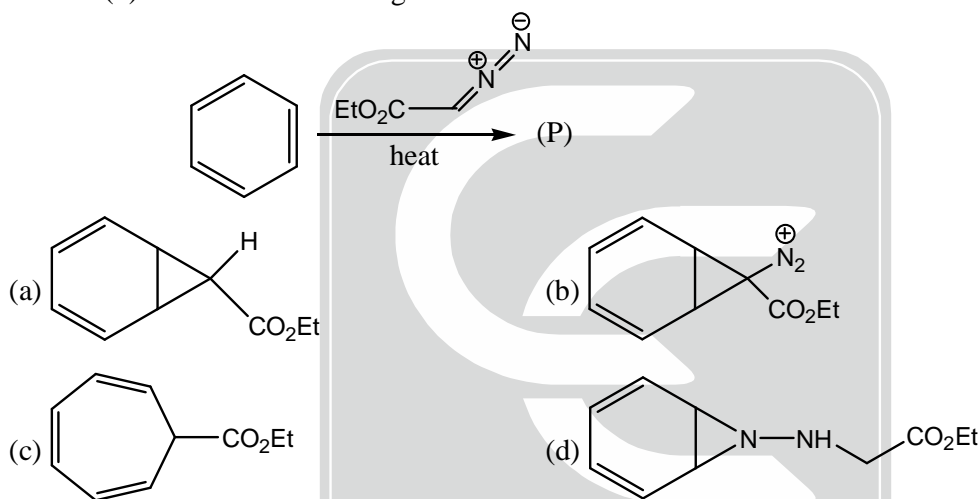
Date : 29-09-2017
M.M. : 60

INSTRUCTION :

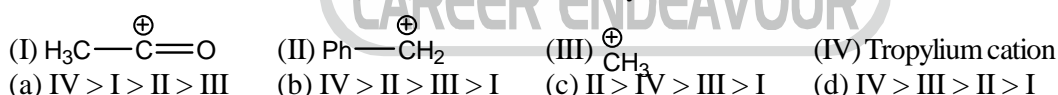
- There are Two Parts. Part-A contains 10 objective type questions, each question carry 2 marks and Part-B contains 10 objective type questions, each question carry 4 marks.
- There is negative marking, @ 25% will be deducted for each wrong answer.
- Attempt all the questions, use of calculator is not allowed.

PART - A

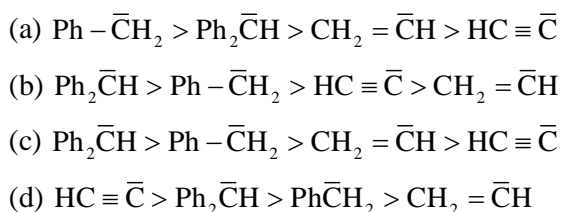
1. Product (P) formed in the following reaction



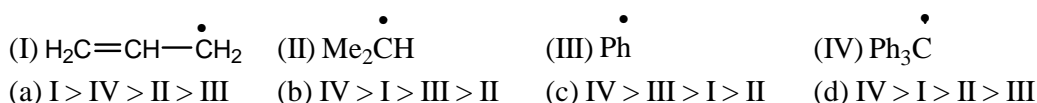
2. Correct order of carbocations (I-IV) in terms of stability is

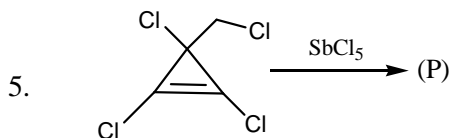


3. Correct order of stability of carbanion is

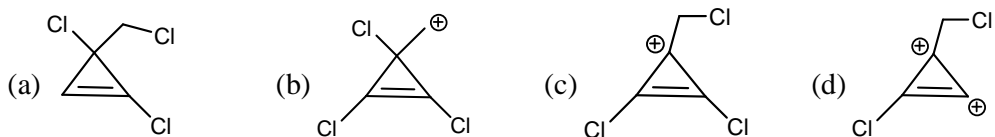


4. Correct order of stability of free radicals (I-IV) is



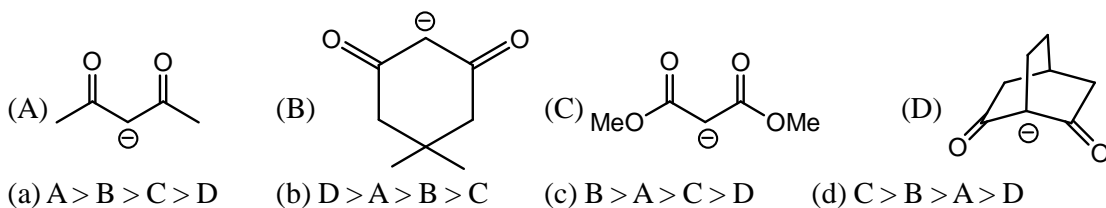


The major product (P) in the above reaction is

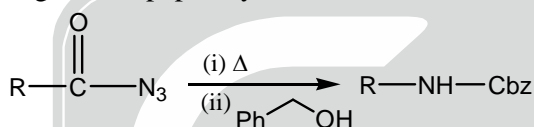


6. Spin trapping technique is used for detection of
(a) carbonium ion (b) Free radical (c) Benzyne (d) Carbanion

7. The correct order of the stability of carbanion is



8. The given reaction/rearrangement is popularly known as

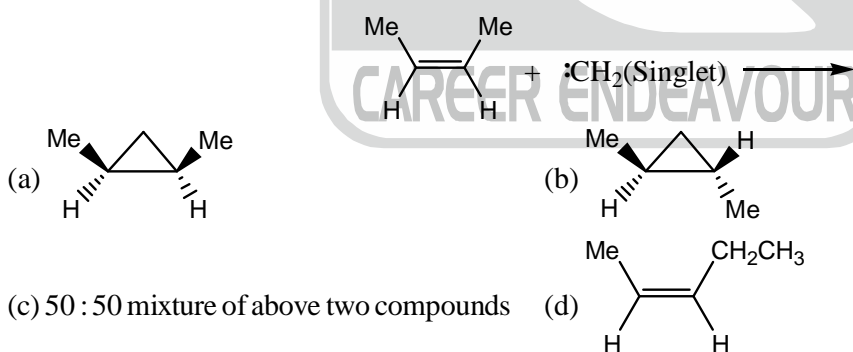


(a) Lossen rearrangement (b) Curtius rearrangement
(c) Hofmann rearrangement (d) Wolf rearrangement

9. Which of the following radicals have pyramidal shape

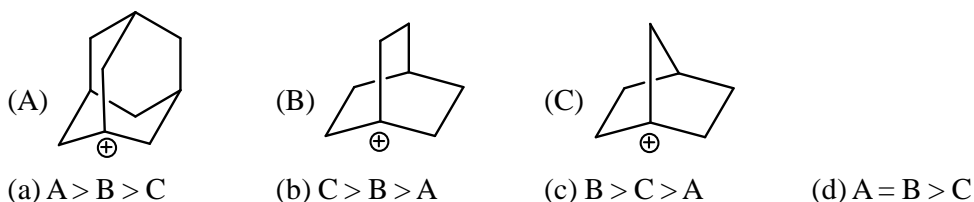


10. The major product formed in the following reaction is

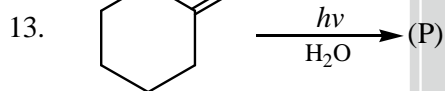
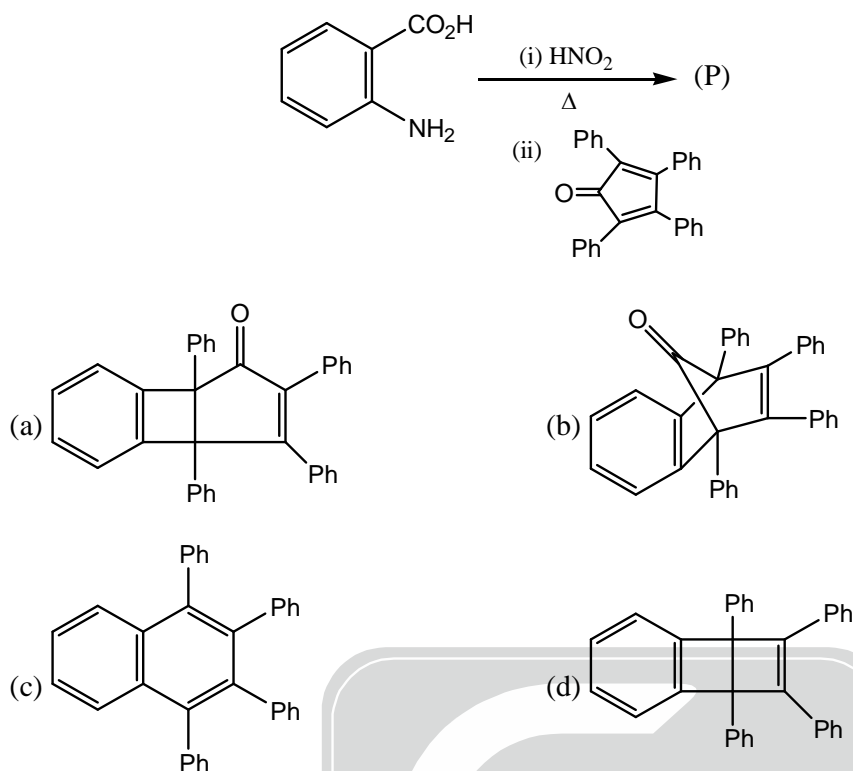


PART - B

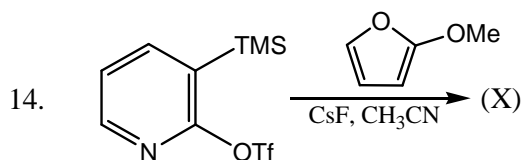
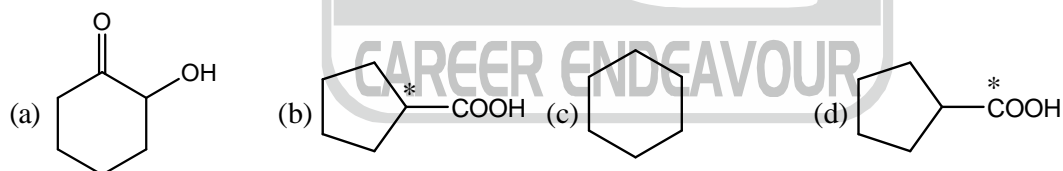
11. The correct order of stability of carbocation is



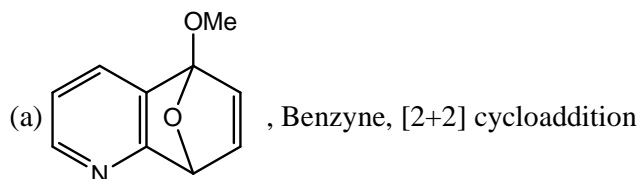
12. Product (P) in the following reaction is

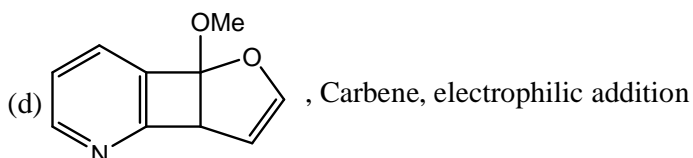
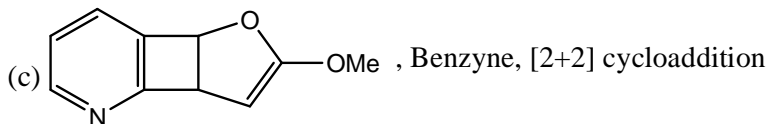
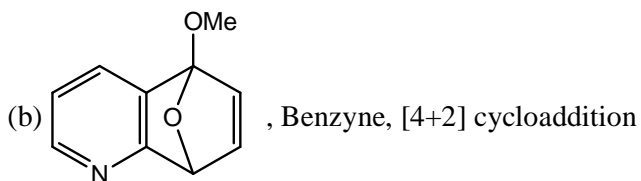


The major product (P) in the above reaction is

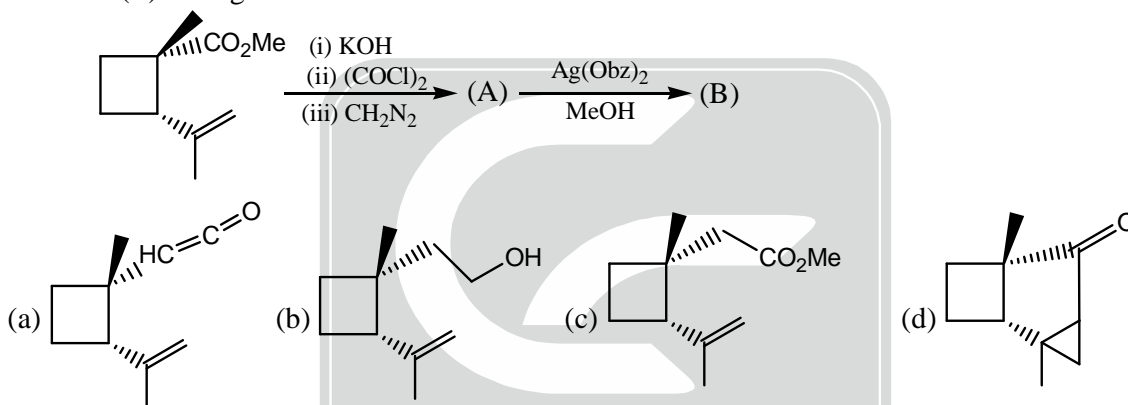


The major product, intermediate and mechanism involve in the above synthetic transformation are

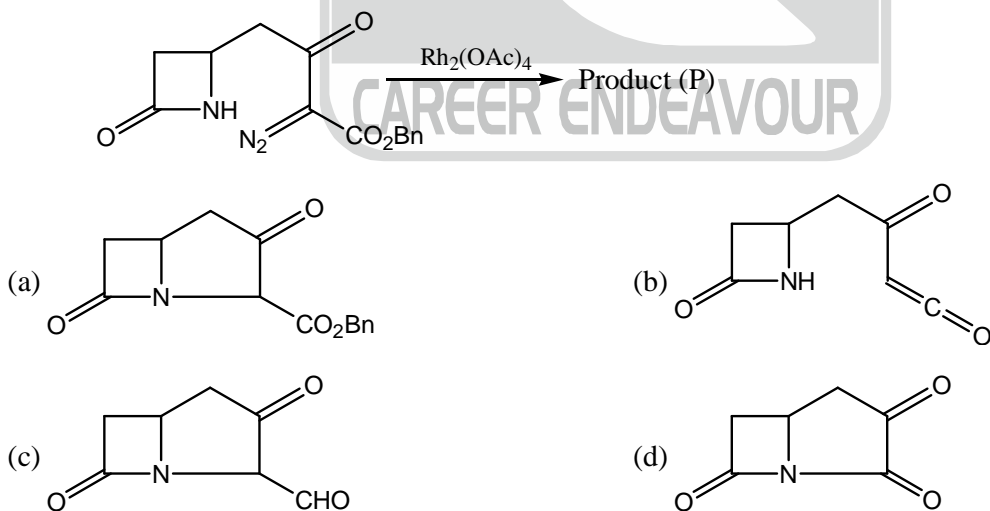




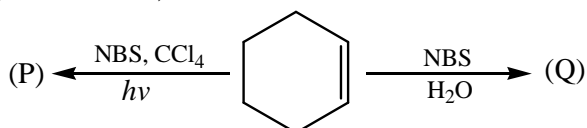
15. Products (B) in the given reaction is



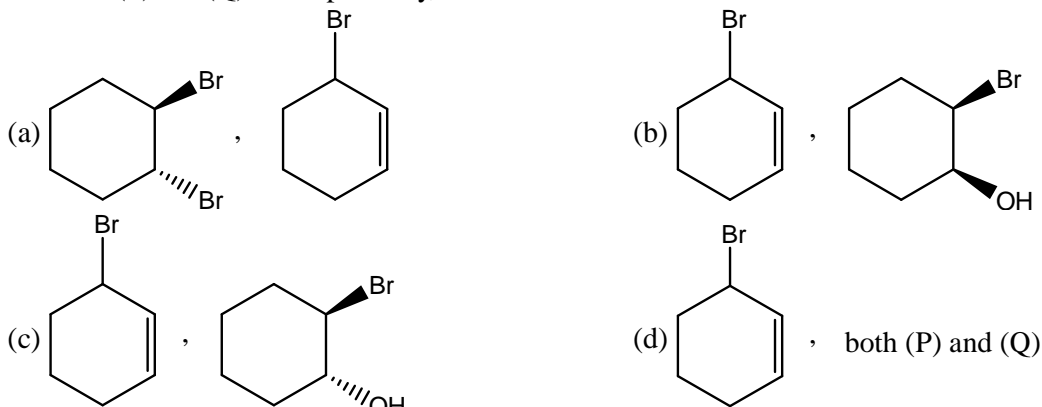
16. Products (P) in the following reaction is



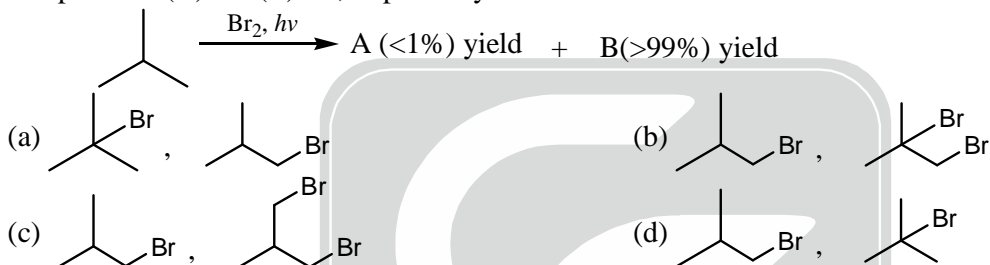
17. In the given reactions,



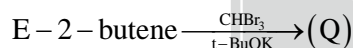
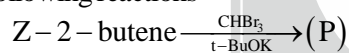
Products (P) and (Q) are respectively,



18. The products (A) and (B) are, respectively



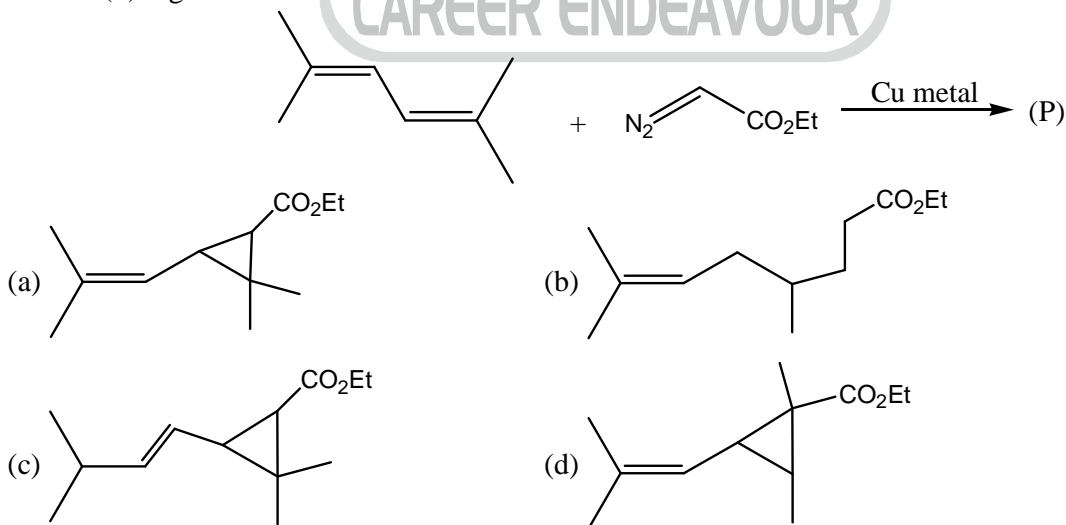
19. In the following reactions



The correct statement(s) about products (P) and (Q) is/are

- (I) P and Q, both are identical (II) P and Q are diastereomers
 (III) P is chiral and Q is achiral (IV) P is achiral and Q is chiral
 (a) I and IV (b) II and III (c) I, III and IV (d) II and IV only

20. Product (P) in given reaction





CAREER ENDEAVOUR

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Date : 29-09-2017

[ANSWERS]

PART-A

- | | | | | | | |
|--------|--------|---------|--------|--------|--------|--------|
| 1. (c) | 2. (a) | 3. (b) | 4. (b) | 5. (c) | 6. (b) | 7. (c) |
| 8. (b) | 9. (d) | 10. (a) | | | | |

PART-B

- | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|
| 11. (a) | 12. (c) | 13. (d) | 14. (b) | 15. (c) | 16. (a) | 17. (c) |
| 18. (d) | 19. (d) | 20. (a) | | | | |

